Magic Mirror/Smart Mirror Setup Guide©

Updated 1/22/24
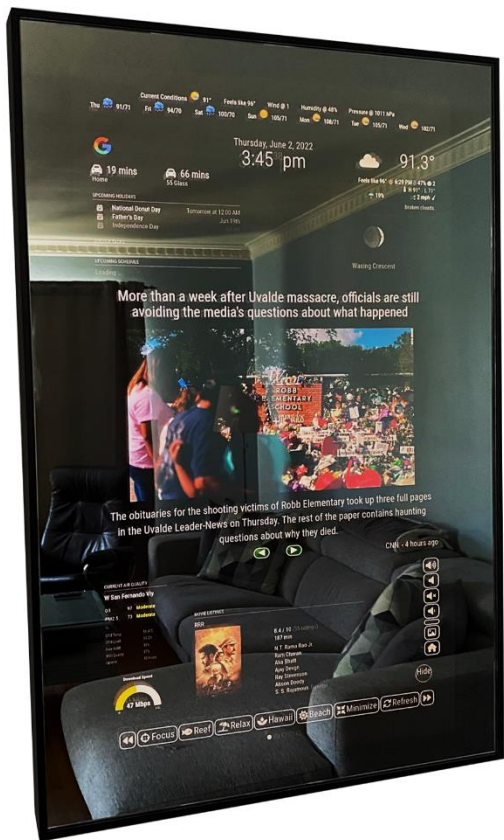
Contact Email: sean@smartymirrors.com
Website: www.smartymirrors.com
Facebook: https://www.facebook.com/SmartyMirrors
Instagram: https://www.instagram.com/electrotherapydresch
YouTube: https://www.youtube.com/user/electrotherapydesign/videos

Table of Contents

Getting Started – Connecting to Wifi (~1 Minute):

*****Move your hand in front of top front sensor to wake smart mirror****
- Using the included Bluetooth keyboard and mouse, select "Ctrl" & "m" to minimize the Magic Mirror window (currently being displayed in the background)

- In the upper right of the toolbar, select your WIFI connection ↑↓ and enter your WIFI password

If some modules are not loading or you have a blank display, wait roughly 5 minutes and then select "Ctrl" & "q" from your keyboard and the Magic Mirror display will automatically restart/reload.

Pi Credentials (for VNC and SSH)
User: pi
Password: mirror

PLEASE READ THIS BEFORE CONTINUING

Modules and API Keys

Not all modules in this setup guide require an API key and not all modules are required for setup.

- What's a module? Modules are very similar to live widgets that you would install on your smartphone (i.e. live weather, calendar, news, etc).

- What's an API key and why do I need it? An API is an application interface that allows modules to 'talk' to servers of the application creator. These keys prevent overuse of the API, which could slow down servers and also helps to prevent any malicious use. The key also securely connects your accounts (i.e Spotify, Google, etc.) with a module.

Every API key in this setup guide is free to use, secure, and private. The signup and steps for each API key vary for each module, so please carefully follow this step-by-step guide. If you have any questions or if you would like assistance, please contact us at admin@smartymirrors.com. Some API keys require a business name or phone number to setup and you can simply fill in a link such www.acme.com for a business and phone number 555-555-5555.

We realize that some setup steps in this guide can be challenging. Optionally and at your request, Smarty Mirrors can remotely log into your Smart Mirror to help with setup or fix any issues. This remote assistance is a free service. Follow the instructions on page 45 "Remote Support" and contact us at admin@smartymirrors.com if you would like to schedule a remote assistance session or if you have any questions.

Let's get started!

🍓 🍓 🍓 **BEGIN SETUP** 🍓 🍓 🍓

<mark>**You can access** this setup guide from your smart mirror - minimize the MagicMirror window (currently running in the background) by selecting "Ctrl" & "m" (no caps) on the keyboard to minimize the MagicMirror window. Then click the Chrome (globe) icon in the upper left of the Pi desktop 🌐 and click on the "Smart Mirror Setup" bookmark in the upper left of the task bar.</mark>

Device Module Placement and Use

Hand Motion/Swipe Sensor (changes the display pages and volume with handswipe motion)

Should be placed on the <u>front</u> of the glass where indicated by the small Velcro strip. The hand gestures can be [located here](#) on **page 8**.

Screen Motion Sensor (powers display on/off with motion)

Should be placed on <u>top</u> of the frame where indicated by the small Velcro strip. Timing can be adjusted by following [these instructions](#) page 48.
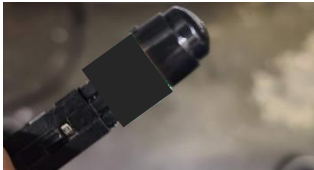
Optional Add-On RGB LED Backlight - Adjust IR Sensor Time and Sensitivity

If you purchased the RGB LED Backlight place on <u>top</u> of the smart mirror where indicated by the Velcro strip on top of the frame. The timer has been preset to turn off the RGB LEDs after no motion for ~10 minutes. The delay time can be adjusted here after removing the back case:

SENSOR RANGE:
≤110°, 0.33ft~22.96ft

Delay Time (Default setting):
5-25s (2-280 Seconds adjustable)
- Clock-wise adjust reduce delay time,
- Anticlockwise will increase

Sensor Distance (Sensitivety):
4M-7M (10cm-7M adjustable)
- Clock-wise adjust increase sensor distance,
- Anticlockwise will decrease.

Open the back to adjust delay time and sensor distance with a screwdriver.
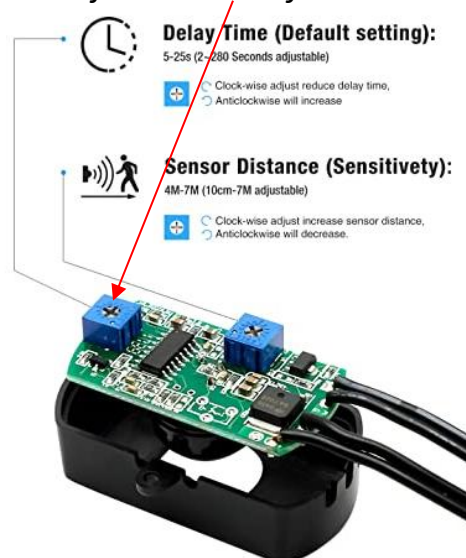
(OPTIONAL) Google Assistant Setup (MMM-GoogleAssistant) (~5 Minutes)

1. **Minimize the MagicMirror window (currently running in the background) by clicking on the background and selecting "Ctrl" & "m" (no caps) on the keyboard to minimize the MagicMirror window.**

2. **Click on the command prompt icon** 🖥️ **in the desktop toolbar (upper left of desktop)**

    3. **From the command prompt, enter or copy and paste the command below and hit enter:**

    cd MagicMirror/modules/MMM-GoogleAssistant

    4. **Next, from the command prompt enter: npm run token**

5. **The command above will attempt open the Pi's web browser. Once your web browser is open, enter the username and password you use to log in to your Google or Gmail account.**
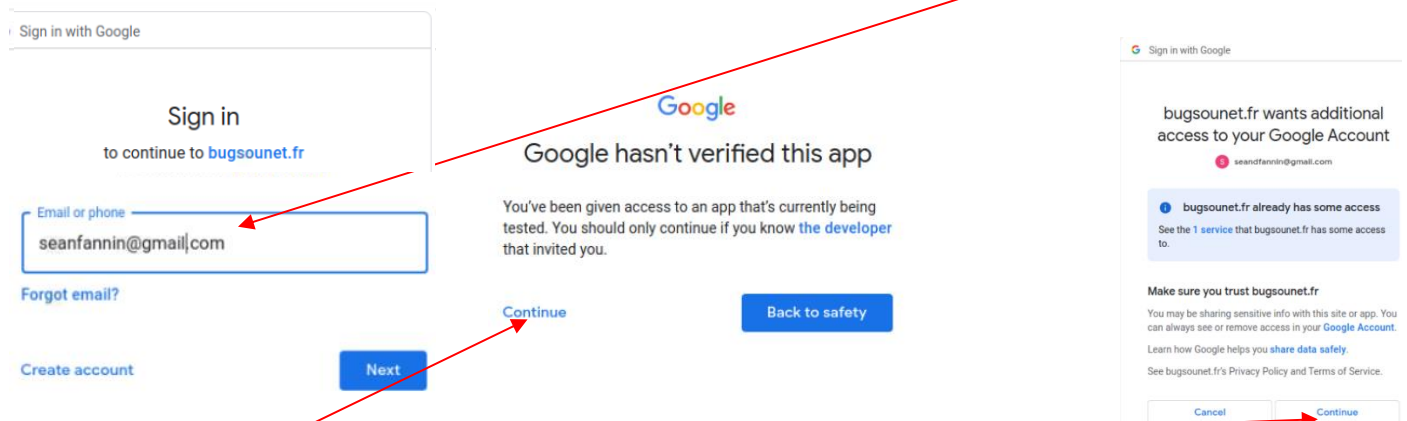
 6. **Select "Continue". Select "Continue" again**

7. **After confirmation, some code (i.e. 4/ABCD1234XXXXX....) will appear in the browser. Copy the code**
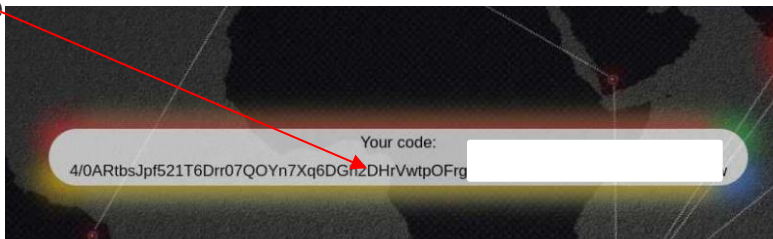
8. **Paste where requested in the Pi's command prompt - "Paste your code:"**

9. **Repeat steps for YouTube.**

10. **From the command prompt** 🖥️ **, enter or copy and paste this command and enter: cd MagicMirror/modules/EXT-YouTube**

    11. **From the command prompt enter: npm run token**

    12. **Next, click "Continue"**

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13. Next, click "Advanced" and then click on "Go to bugsounet.fr"

14 . Click "Continue"

After confirmation, some code (i.e. BCD1234XXXXX....) will appear in the browser. Copy the code and paste in the prompt
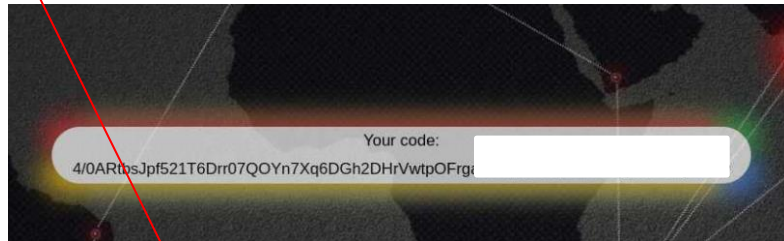
15. If you tried to paste in the code from the step above and it accidentally skips to the next token in the installation before you've entered the code, simply enter **npm run token** **at the command prompt again.**

16. After the smart mirror is loaded, you can now ask Google some questions using, the wake word <mark>"Jarvis".</mark>
<mark>**Wait until you hear a beep or see the text "Listening" before saying your command.**</mark>

- You can say things like "**Jarvis**" → "**Get directions to [location]**" and the assistant will send the directions directly to your smart phone.

- You can simply say things like "**Jarvis**" → "**I'm hungry**" and the assistant will recommend top rated eateries nearby.

- Control your lights and power sockets (see "**Using Google Home With Your Smart Mirror"** and separate smart home sockets required). Add enabled smart sockets to your Google Home app and simply ask **"Jarvis"** → **"Turn On Lights"** or **"Lock door"**…etc.

- Start a daily routine (set in the Google Home app - see "**Using Google Home With Your Smart Mirror"** (instructions below) by saying **"Jarvis"** → **"Good Morning"**

- You must use the word <mark>**"YouTube" to play YouTube videos**</mark> **i.e. - "Jarvis –<mark>YouTube</mark> of Paul Rudd"** To stop the video, simply say **"Jarvis** → **Stop Video"**

- Try other things like **"Jarvis, who is Elon Musk" and "How do I make spaghetti?"**

- <mark>**If you see that there is black screen and no response, simply say "Jarvis – stop"**</mark> and wait a few seconds and you will return to the display

KNOWN ISSUE There is a permission issue that is preventing adding items to Google calendar, shopping lists, and Google Tasks using voice commands from this module. We appreciate your patience and we'll notify everyone once we have a fix.

(OPTIONAL) Change Display Pages

Make changes to where modules are displayed on each display page-
In the config.js file (/home/pi/MagicMirror/config), scroll down to the module named "MMM-pages" (example below). You can rearrange modules to your preference to appear on page 1, 2, or all.

```
{
   disabled: false,
   module: 'MMM-pages',
   config: {
        modules:
          [[ "calendar", "compliments", "MMM-HTMLBox", "MMM-CalendarExt2", "MMM-quote-of-the-day", "MMM-
MoonPhase", "MMM-AirNow", "MMM-Events", "MMM-MovieListings", "MMM-MWWordOfTheDay"],//PAGE 1
           [ "MMM-AVStock", "mmm-hue-lights", "Smartthings", "MMM-SolarEdge", "MMM-Ecobee", "MMM-
SystemStats", "MMM-History"]],//PAGE 2
               fixed: ["clock", "newsfeed", "MMM-page-indicator", "MMM-BMW-CC", "MMM-Climacell-Hourly",
        "MMM-AlexaPi", "MMM-GroveGestures",
"MMM-Cursor", "MMM-temp-ds18b20", "MMM-Screencast", "MMM-connection-status", "MMM-Unsplash"],//APPEAR
ON ALL PAGES
       }
   },
```

Save the config.js file by clicking on "File" and "Save" (upper left in menu) and then "Ctrl" & "q" in the MagicMirror window for the changes to take effect.

(OPTIONAL) Smart Mirror Voice Controls - Wakeword "Jarvis" (Google Assistant Only)

Video Options: YouTube, as well as any other videos online. Also, the preset commands below can be used.

VIDEO PRESETS: "**Jarvis, start** [**getaway**, **escape**, **relaxation, calm, exercise, yoga-LANDSCAPE**] [**Hawaii, beach, waterfall, jungle-PORTRAIT**]"

To **stop** playing your video, say **"Jarvis, stop video"**

Other Video Commands:

"...**next video**" goes to the next video in the playlist

"...**previous video**": goes to the previous video in playlist

"...**stop video**": stops video playing and refreshes display

To play a video of something specific (i.e. "Thriller"):

"...play YouTube of [ANY SELECTION]"

Page/Display Change Options (screen wake commands)

"...**next page**" – Next display page

"...**previous page**" – Previous display page

"...**main page**" – Back to first display page

"...**camera**" – your live nest or CCTV feeds

"...**stocks**" – your stocks or any other page!

"...**shark tank**"- live streaming video of a shark tank

"...**photos**" - display a pre-selected Google Photo album

"...**calendar**"- displays your interactive calendar

-"...**news**" – displays your live newsfeed

News (MMM-News only-requires API Key)

"...**next article**" – go to next newsfeed article

"...**previous article**" – go to previous newsfeed article

Volume

"...**volume up**" – Increase volume by 10

"...**volume down**" – Decrease volume by 10

"...**mute**" – Mute volume

"...**unmute**" - Restores volume from mute

"...**volume 100**" – volume 100%

"...**volume 50**" – volume

Mirror Platform Functions

"...**refresh mirror**" –refreshes the screen display

"...**restart mirror**" –Reboots the MagicMirror

"...**stop**" – Stops MagicMirror

"...**reboot**" – Reboots the Pi

Display Functions

"...**sleep display**" – hides all modules

"...**wake display**" – wakes display from sleep

"...**hide all**" – hide all modules

"...**display all**" -display all modules

"...**turn off display**" – power off display

"...**turn on display**" – power on display

"...**display art**" / **"...hide art"** – turns your smart mirror into a digital art frame (must have Unsplash API key)

"...display wallpaper"/"hide wallpaper" – adds wallpaper to your smart mirror display (must have Unsplash API key)

Control Using Hand Swipe Gestures:

Hand Swipe Display Gestures:

RIGHT – Swipe right to switch to right display screen

LEFT – Switch to left display screen

LEFT-RIGHT – Refresh/restart MagicMirror display

RIGHT-LEFT – Refresh/restart MagicMirror display

DOWN-UP– Hide all modules (blank screen)

UP-DOWN – Show all modules

Hand Swipe Volume Gestures:

UP – Increase volume 10

DOWN – Decrease volume 10

UP-UP – Increase volume 100%

DOWN-DOWN – Mute

(OPTIONAL) Multi-Function Bluetooth Smart Mirror Air Mouse Remote

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Radio Stations
Play your favorite music straight from your smart mirror!
To start streaming your favorite genre, simply say… <mark>**"Jarvis, play…"**</mark>
To stop streaming your favorite genre, simply say… <mark>**"Jarvis, stop"**</mark>

Music Genres by Category		
Oldies	Hard Rock	**Relaxation/Meditation/Focus**
40s	Heavy Metal	Ambient
50s	Rock	Ambient Piano
60s	Rock Top 40	Calm
70s	**Country**	Chant
Beatles	80's Country	Choral
Classic Hits	90's Country	Lo-Fi
Showtunes	Bluegrass	Nature
80's Decade	Country	New Age
80's	Highway	Spa
80's Hairband	Kickin Country	Wind Chimes
80's light RnB	**Urban**	Zen
80's RnB	Funk	**Jazz**
Light 80's	HipHop	Acid Jazz
90's Decade	Jammin	BeBop Jazz
90's	Old School HipHop	Classical Jazz
90's Dance	Party	Fusion Jazz
90's light RnB	R&B	Jazz
90's RnB	Rap	Jazz Piano
Light 90's	Soul	Smooth Jazz
Star 90's	Urban	Trance Jazz
2000's Decade	**Classical**	**Easy Listening/World**
2000's	Ambient Classical	Blues
Pop	Classical	Celtic
K-Pop	Classical Guitar	Folk
Love Songs	KUSC	Hawaiian
The Mix	**Dance / Techno**	Latin
The Office	Chill Out	Mellow
The Point	Classic Energy	Reggae
The Vibe of Vegas	Dance	Relax
Top 40	Deep Lounge	The Breeze
UK Top 40	Drum and Base	World
News/Talk	Dubstep	Yacht Rock
BBC	EDM	**Holidays**
Comedy	Studio	Halloween
KCRW	Techno	Christmas
NPR	The Vibe of Vegas	Christmas Classics
Rock	Trance	Christmas Country
Alternative Rock	**Religious/Gospel**	Christmas Fun
Chloe	Christian	Christmas Rock
Classic Rock	Gospel	Christmas Soundtracks

(OPTIONAL) Google Tasks Setup (~5 Minutes)

1. From your **Pi's** command prompt (in the <u>upper left</u> of the toolbar in the Pi desktop), enter:

cd ~/MagicMirror/modules/MMM-GoogleTasks

2. Then enter: node authenticate.js

3. The command above will attempt open the Pi's web browser. Once your web browser is open, enter the username and password you use to log in to your Google or Gmail account.
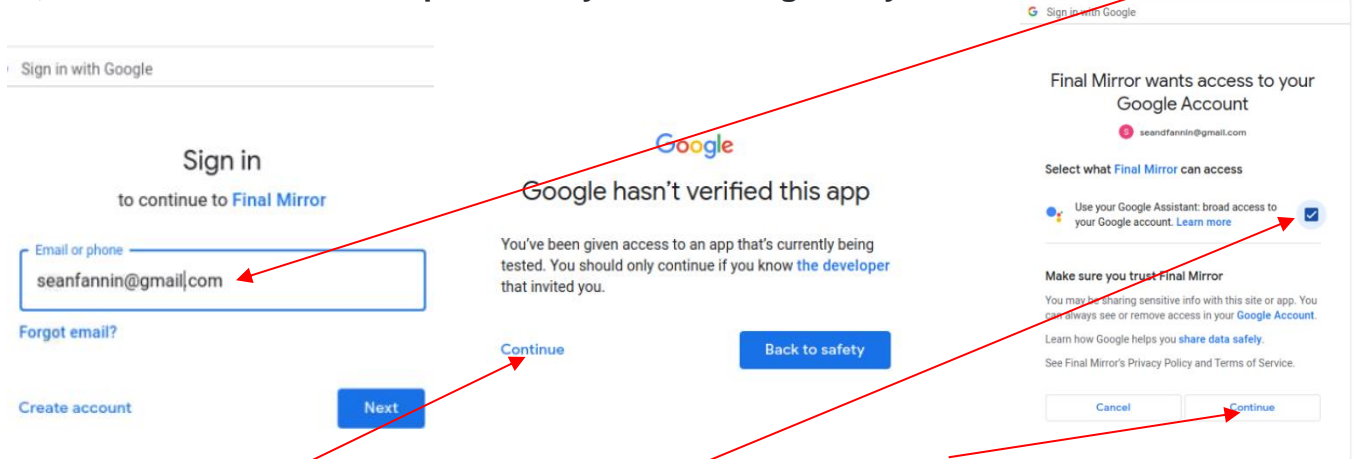
4. Select "Continue". Select the checkbox and "Continue" again

5. After confirmation, some code (i.e. 4/ABCD1234XXXXX....) will appear in the browser. Copy the code
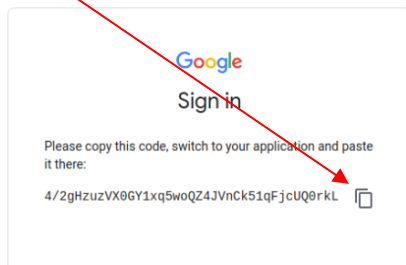
7. Open the command prompt window and paste your code where indicated

8. You'll then see your API key. Right click your mouse to copy and paste copy and paste your task list here (do not copy the parenthesis)

9. From the Pi desktop, navigate to "/home/pi/MagicMirror/config" (the files icon at the top left of the PI's desktop screen) and select the "config.js" file. Change "true" to "false"

10. Scroll down until you see the MMM-GoogleTasks module and paste your task list here.

```
        disabled: true,
      module: 'MMM-GoogleTasks',
      header: "Google Tasks",
          position: 'bottom_right',
      config: {
         listID: "INSERT_TASK LIST ID" // See Page 8 of Receipt Instructions - "Google Tasks Setup"
```

(OPTIONAL) Using Google Home With Your Smart Mirror <mark>(~10 Minutes)</mark>

1. Download the **Google <u>Home</u>** app to your smartphone
2. You can change the voice of your assistant by selecting "Settings"→"More Settings" → "Assistant" → "Assistant Voice"
3. You can set a routine for different parts of the day. Then say **"Smart Mirror"→ "Good Morning"**
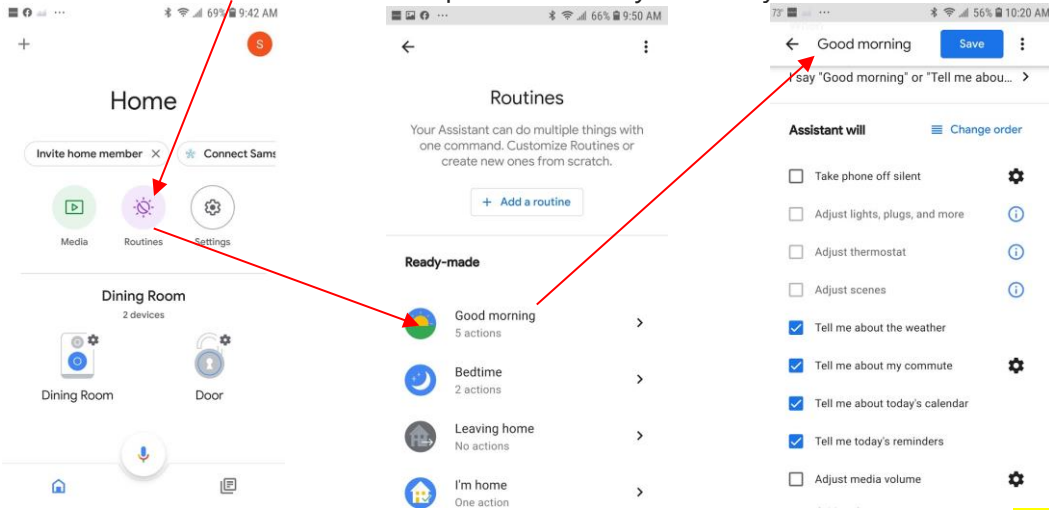
(OPTIONAL) Create Shopping Lists Using *Bring!* (MMM-Bring) <mark>(~10 Minutes)</mark>

Simplify the planning of your grocery shopping with others with the Bring! Shopping List Download the Bring! app for free and use it across all your devices. When adding to your list, you will say <mark>"Jarvis, add [ITEM] to <u>Home List</u>"</mark>:

1. Download and install the *Bring!* app in your smartphone. Use the **manual sign up** when signing up with your **Google account** email and password-**do not use the automated Google Account** link to sign up

2. Add to your "Home" shopping list in the smartphone app. You can add multiple shopping lists or change the name(s) of your shopping lists and invite others to join your list(s).

3. In the **Google <u>Home</u>** app on your smartphone, link the *Bring!* App:
   a. Open the Google Home app click "Settings":
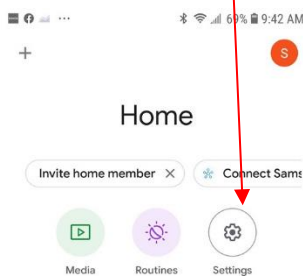
   b. Scroll down to the bottom and select "Notes and lists":
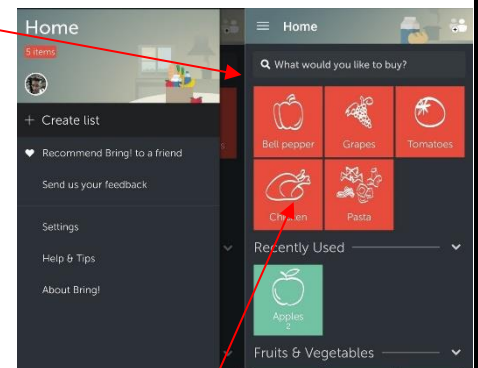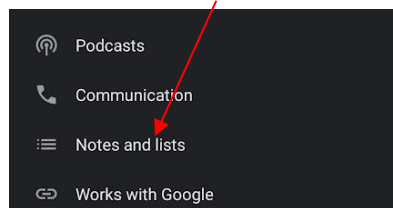
4. Select "Bring Shopping Lists"
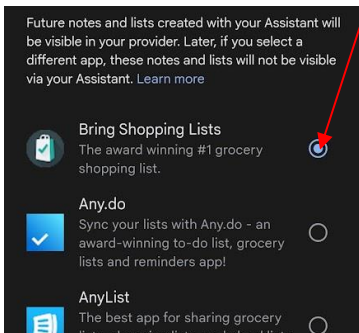
5. In the **config.js** file (in "/home/pi/MagicMirror/config"), search for "MMM-Bring". Change "true" to false and insert your *Bring!* email and password from step #1 above. Save the **config.js** file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the changes will take affect and the module will be displayed.
```
{
 disabled: true,
 classes: "hide",
 module: "MMM-Bring",
 position: "middle_center",
 config: {
      email: "INSERT_BRING_EMAIL",
      password: "INSERT_PASSWORD",
```
<mark>Double click on items to delete them</mark>

YouTube **(OPTIONAL) Cast YouTube Videos From Your Smart Phone (~1 minute)** – *Cast* *YouTube videos, pictures, or other videos from your smartphone to your smart mirror!*

- Select a YouTube video from your Apple or Android smartphone and select the cast button/icon in your YouTube app (upper right). You will see your Smart Mirror under "MagicMirror". Select it and your YouTube video will cast to your Smart Mirror.

-To stop casting, simply say "Jarvis" and "Stop"

(OPTIONAL) Adjusting the Wakeword Sensitivity- "Jarvis" (~1 Minute)
If you are getting too many wakeword false positives or if your Smart Mirror is having trouble waking up with the "Jarvis" wakeword, simply adjust the microphone input located in the top right of the desktop (by selecting "Ctrl" + "m" on your keyboard from the Magic Mirror window).

(REQUIRED) SETTING UP THE CONFIGURATION FILE (config.js)
In the config.js file you can add or remove modules or adjust any modules that appear on the MagicMirror screen (detailed links below). This is also where you will add the API keys outlined in the next sections.

If you would like to learn how to set up your own modules or make adjustments to the screen layout, visit the how to setup modules instructions for beginners *(don't forget to scroll down the page of each module to verify if there are any "npm install" dependencies)*:

https://forum.magicmirror.builders/topic/4231/how-to-add-modules-for-absolute-beginners

- **The cofig.js file is located here:**
- **/home/pi/MagicMirror/config**
- **Open "config.js"**

The full list of available modules can be located by clicking here: https://github.com/MichMich/MagicMirror/wiki/3rd-Party-Modules#3rd-party-modules

Not all modules require an API key and not all modules are required for setup. For modules that do require an API key, some API keys require entry of a business name or phone number and you can simply fill in a link such www.acme.com for a business and phone number, such as 555-555-5555.

(OPTIONAL) Video Chat/Conferencing Via Facebook Portal (~1 Minute)

Video Chat/Conferencing with Messenger, WhatsApp, or Zoom. Portal's Smart Camera automatically pans and zooms to keep up with the action and widens to include everyone.

- (Cords are labeled) – connect the power and HDMI cords

(OPTIONAL) Google Chromecast Add-On Setup (~5 Minutes)

If you have the optional Google Chromecast installed, simply open your Google Home app in your smartphone 🏠 and select "Set up 1 device" and follow the onscreen instructions.
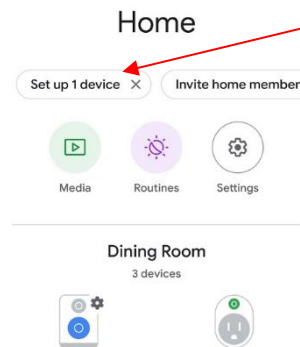
(OPTIONAL) WebView (MMM-WebView) (~1 Minute)

Displays any webpage on the MagicMirror display

1. Select "Ctrl" + "m" to minimize the MagicMirror display window.

2. Click on the files icon at the top left of the desktop screen 📁 and navigate to "**/home/pi/MagicMirror/config**" and double click the "config.js" file.

3. Once opened, scroll down in the **config.js** file until you find the **MMM-WebView** module. Replace with your webpage here, in between the quotes.

```
module: 'MMM-WebView',
      position: 'top_center',
      config: {
        url: 'https://www.google.com/',
        width: '1200px', //Portrait mode – use 2400px for landscape mode
        height: '2400px', //Portrait mode – use 1200px for landscape mode
      },
```

4. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Weather forecast API (MMM-BMW-OW) (~5 Minutes)

Displays your local weather forecast

Current Conditions	47°F	Feels like 47°F	Wind @ 12mph	Humidity @ 94%	
Sun 🌧 50/45	Mon 🌧 53/42	Tue 🌧 64/42	Wed 🌧 58/48	Thu 🌧 68/49	Fri 🌧 57/49 Sat 🌧 67/52
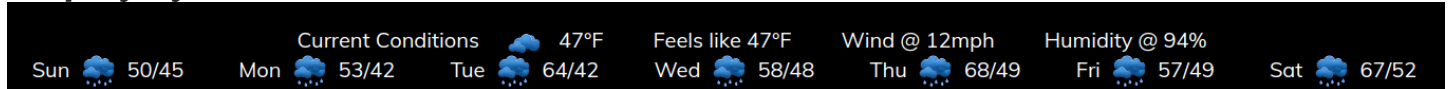
- Requires a free API Key
- Follow the instructions below to obtain your free API key:
- While holding down the "Ctrl" key, click this link: https://openweathermap.org/price

1. Sign up for a free account   2. Create a new account   3. Choose "Other" from drop

Free

Get API key

60 calls/minute
1,000,000 calls/month

Create New Account

Username

Enter email

Password   Repeat Password

We will use information you provided for management and administration purposes, and for keeping you informed by mail, telephone, email and SMS of other products and services from us and our partners. You can proactively manage your preferences or opt-out of communications with us at any time using Privacy Centre. You have the right to access your data held by us or to request your data to be deleted. For full details please see the OpenWeather Privacy Policy.

☐ I am 16 years old and over

☐ I agree with Privacy Policy, Terms and conditions of sale and Websites terms and conditions of use

How and where will you use our API?   X

Hi! We are doing some housekeeping around thousands of our customers. Your impact will be much appreciated. All you need to do is to choose in which exact area you use our services.

Company

* Purpose   Choose answer

Cancel   Save

Dear Customer!

Thank you for choosing OpenWeatherMap!

Please confirm your email address to help us ensure your account is always protected.

4. Check your junk email folder from OpenWeather to verify your email address

Verify your email

5. Select "API keys tab and copy your API key for the next step.

New Products   Services   API keys   Billing plans   Payments   Block

You can generate as many API keys as needed for your subscription. We accumulate th

For further technical questions and support, please contact us at info@openweathermap.org

We are looking forward to cooperating with you!

Key   **Name**

b55c3a77f787c1e1f00f   Default

6. Open the **config.js** file – click on the file cabinet icon at the top left of the desktop screen 🗂 and navigate to "**/home/pi/MagicMirror/config**" and double click the "config.js" file.

7. Once opened, scroll down in the **config.js** file until you find **MMM-BMW-OW** and **MMM-Weather** modules. If you do not wish to use this module, simply change "disabled: false" to "disabled: true". Paste your key from step #5 here, between the quotes (use the same key for both).

```
disabled: false,
 module: "MMM-BMW-OW",
position: "top_bar", //
 config: {
        api: "INSERT KEY HERE"
```

```
disabled: false,
module: "MMM-Weather",
  position: "top_right",
  configDeepMerge: true,
  config: {
    debug: false,
   updateInterval: "15m", // 15 minutes
   updateFadeSpeed: 500,
   api: {
     key: "INSERT_KEY",
```

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8. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Air quality (MMM-AQI) <mark>(~5 Minutes)</mark>

Displays the air quality in your area

1. Click on or go to: https://aqicn.org/data-platform/token/
   Provide your email and username

Air Quality Open Data Platform
API Token Request Form

First confirm you agree with the terms of service

☑ I agree with the Terms of Service

Then fill in your email and name

Enter your email address	Enter your name
✉ name@example.com ◉	👤 Full name

Submit

2. Go to your email and click on the activation link.

Almost done!

An email containing an activation link has been sent to:
Sdfannin@hotmail.com

Please click on the link to activate your request

If you do not receive the email within a few minutes, please check your spam folder for an email from:
emailer+1244385642@aqicn.org
or send email again

3. Copy the token provided

Air Quality Open Data Platform
API Token Confirmation

Congratulation, your registration already validated.

Your token is 0c0a8426b00641c

4. Click on the files icon at the top left of the desktop screen 📁 and navigate to "**/home/pi/MagicMirror/config**" and double click the "config.js" file.

5. Once opened, scroll down in the **config.js** file until you find the **MMM-AQI** module. Paste your key here, in between the quotes.

```
disabled: false,
        module: 'MMM-AQI',
        position: 'bottom_left',
        header: 'Air Quality Index (AQI)',
        config: {
                token: "",
                city: "here",
                iaqi: true,
```

7. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) AVS Stock Quote API Key (MMM-AVStock) (~1 Minute)
Displays your stock quotes in the center or your smart mirror

1. Open the **config.js** file. Scroll down in the **config.js** file until you find the **MMM-AVStock** module. Change the stock tickers to those you want to follow.

```
disabled: false,
  module: "MMM-AVStock",
  position: "middle_center",
  config: {
    apiKey : "INSERT KEY ", //See Page 12 of Initial Setup Instructions "AVS STOCK" OR GO TO
https://www.alphavantage.co/support/#api-key to sign up
    decimals: 2,
    symbols : ["LTC-USD", "SPY", "VTSAX", "TSLA", "PTON", "BYND"],
```

2. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, you will need to select "Ctrl" & "q" on the keyboard in the MagicMirror window in order for the changes to take affect and the module will be displayed.

Symbol	Cur.Price	Prev.Close	CHG	CHG%	Volume
LTC-USD	62.06	60.52	▲ 1.54	▲ 2.54%	1,449,387,694
SPY	302.51	312.86	▼ -10.35	▼ -3.31%	184,220,998
VTSAX	77.25	74.25	▲ 3.00	▲ 4.04%	0
TSLA	724.54	749.50	▼ -24.96	▼ -3.33%	10,786,638
LYFT	---	---	---	---	---
SONO	10.55	11.34	▼ -0.79	▼ -6.97%	3,076,086
PTON	27.10	27.25	▼ -0.15	▼ -0.55%	5,460,102
SDC	8.25	8.19	▲ 0.06	▲ 0.73%	9,271,846
BYND	---	---	---	---	---
DJIA	26121.28	27090.86	▼ -969.58	▼ -3.58%	477,366,307
					Last updated: 05-03 14:24
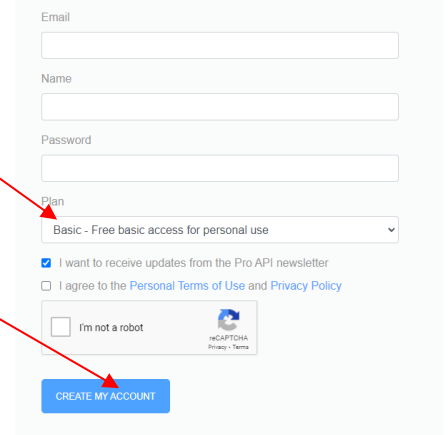
(OPTIONAL) Crypto Currency(MMM-cryptocurrency) (~1 Minute)
Displays all crypto prices
- Get your API key here: https://pro.coinmarketcap.com/
1. Click on "GET YOUR API KEY NOW"
2. Sign up for a free account by selecting Basic-Free Account, agree to terms, and select "CREATE MY ACCOUNT"
3. You will be emailed a verification code link, so be sure to check your spam folder.
4. Copy your API key
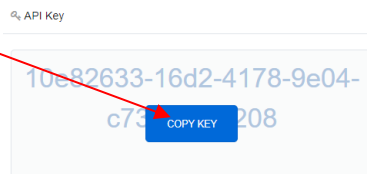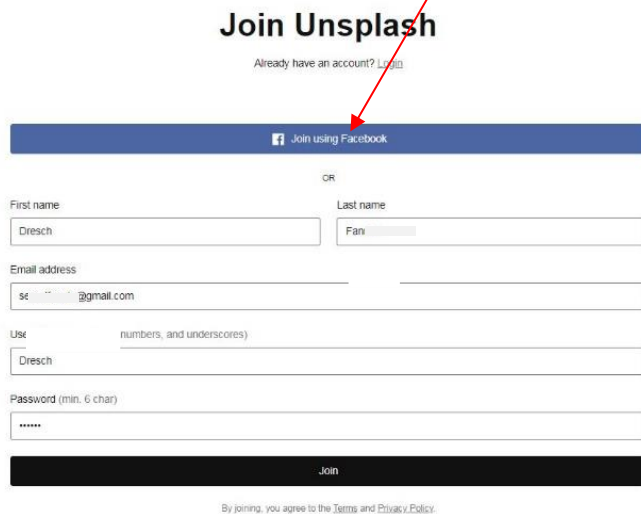
5. Find the **MMM-cryptocurrency** module by going to **/home/pi/MagicMirror/config** and double click the "config.js" file. Paste your API key and save the config.js file.

```
disabled: false,
module: "MMM-cryptocurrency",
position: "top_left",
        config: {
        apikey: 'INSERT_API_KEY',
```

(OPTIONAL) Unsplash Background Image (MMM-Unsplash) (~10 Minutes)
Rotate high-quality background images from an unlimited number of categories. You can toggle wallpaper by pressing the background button at the bottom right of the screen
1. To sign up go to: https://unsplash.com/join

2. After signing up, click this link to go to: https://unsplash.com/oauth/applications

3. Select "New Application" and accept all terms

Welcome, Dresch

We're excited to see what you'll build. Don't forget to apply for production once your application is ready.

Your applications

New Application

Demo	Demo apps are limited to **50 requests** per hour while in development mode.
Production	Apps in production have access to **5,000 requests** per hour as long as your application follows Unsplash's API Guidelines and Terms.
Enterprise	Need more than 5,000 requests per hour? Get in touch with our team.

| In review | Your application is being reviewed by our team. It can take between **5–10 business days**. |

API Use and Guidelines

Last updated May 21, 2018

☐ The API is to be used for non-automated, high-quality, and authentic experiences.
   More info & examples →

☐ You cannot replicate the core user experience of Unsplash (unofficial clients, wallpaper applications, etc.).
   More info & examples →

☐ Your Access Key and Secret Key must remain confidential.

☐ Do not abuse the API. Too many requests too quickly will get your access turned off.

These Unsplash API Terms of Use (these "**API Terms**") comprise a legal agreement between Unsplash, Inc. ("**Unsplash**," "**us**," "**we**," or "**our**") and you, and describe the rules developers must follow when accessing or using the Unsplash application programming interfaces (the "**APIs**") and related documentation made available by Unsplash through the Unsplash developer website currently located at https://unsplash.com/developers ("**Developer Site**"). Any application you integrate with the APIs is a "**Developer App**."

BY CLICKING "I AGREE" OR IMPLEMENTING OR OTHERWISE USING ANY UNSPLASH API, YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTAND AND AGREE TO BE BOUND BY THESE API TERMS.

1. Your Relationship with Unsplash.

- **Legal Agreement**. Your use of the APIs is subject to these API Terms. These API Terms, together with any other documents or terms incorporated into these API Terms or provided to you by

Decline   Accept terms

4. Indicate any application name and description you want and select "Create Application"
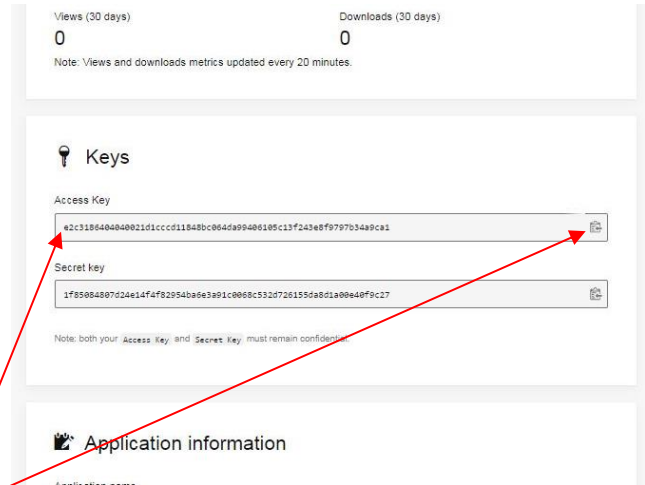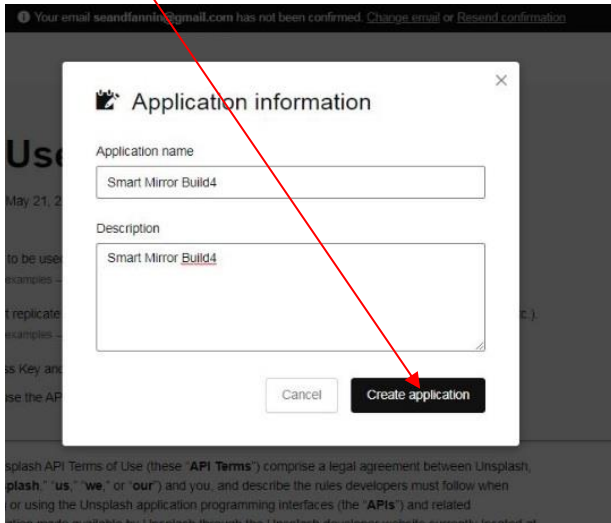
5. After creating the application, your Access key will be located about halfway down the page.

6. Copy your key and open the **config.js** file(**/home/pi/MagicMirror/config**). Scroll down in the **config.js** file until you find the **MMM-Unsplash** module. Paste your key here, in between the quotes. Include your favorite collections from Unsplash to use as background images. To learn how to create your own collections of the images, visit https://help.unsplash.com/en/articles/2534416-create-a-collection. Collection ID's are sets of 7-digit numbers that identify each collection (i.e. 'maui', 'shopping', etc) and appear in the Chrome address bar after searching and clicking on a collection (i.e. https://unsplash.com/collections/8998537/maui).

disabled: false,
 module: 'MMM-Unsplash',
 position: 'fullscreen_below',
 config: {
        opacity: .4,//This changes the opacity of the background image from "0"=Dark/No Image to ".9"-Full Image Brightness
        width: 1500,
        height: 2500,
        orientation: 'portrait',
        updateInterval: 120, //rotates image every 2-minutes
        collections: '8041221,1871795,1550989,4600943,6810006,4354938,2373141,**8998537**', //
        apiKey: 'Insert_Access_Key' // See Page 11 of Initial Setup Instructions "Unsplash"
        }

7. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Calendar Setup (~5 Minutes)
See upcoming events in your Outlook, Google, or iOS/Apple calendar

1. Click this link and sign in to your Google account: https://calendar.google.com

2a. How to find your **Google Calendar URL**

1. On the left side, <u>mouse over</u> the three dots next to your name and left click your mouse to open the options menu and select **"settings and sharing"**
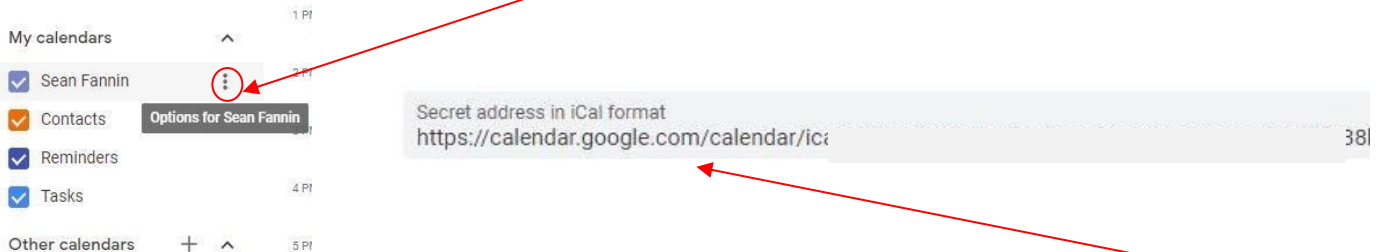
2. In the settings menu, scroll down to the bottom of the page until you see "**Secret address in iCal format**". Select the address and right click your mouse and select "Copy".

2b. How to find your **iCloud/Apple Calendar URL**
1. Log into iCloud and open the Calendar app.
2. Click on the grayed out "wireless" icon.
3. Select "Public Calendar".
4. Copy the given URL (it'll start with webcal://).
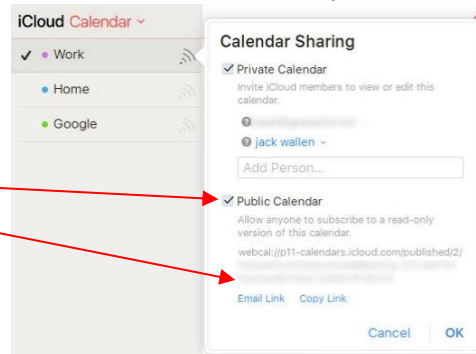
2c. . How to find your **Outlook Calendar URL**
1. Open your outlook calendar from any device: https://outlook.live.com/calendar
2. Click on the gear icon in the upper right
3. Then click on "View all outlook settings" at the <u>bottom</u> of the settings menu
4. Then click on "Shared calendars"
5. Then select "Calendar → Can view all details → Publish"
6. Copy the ICS link provided
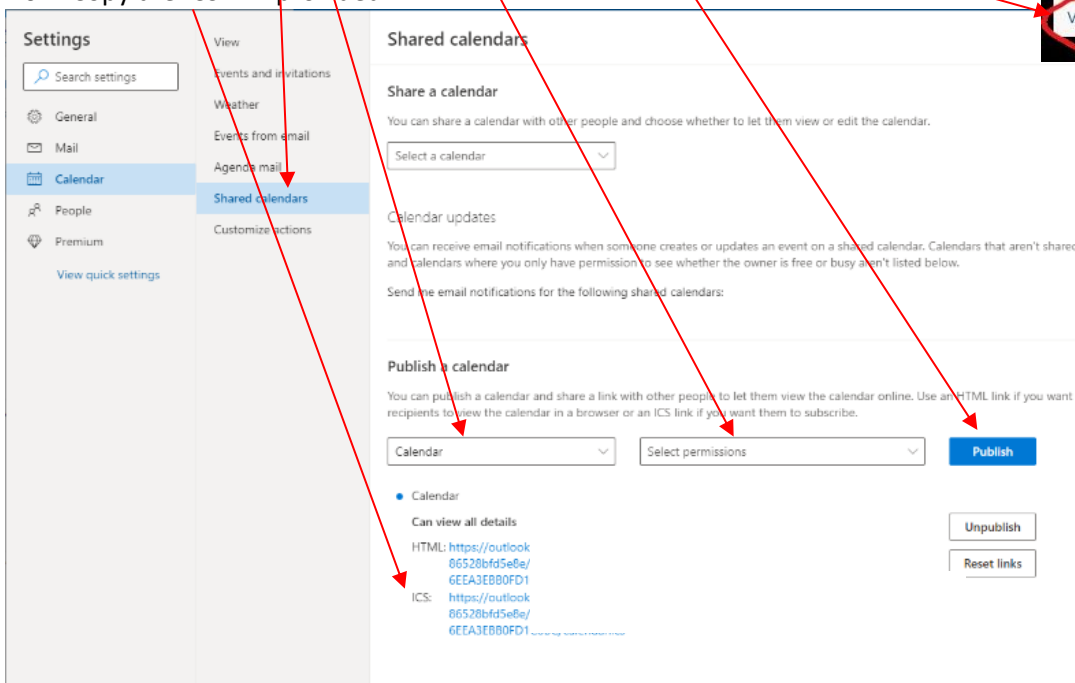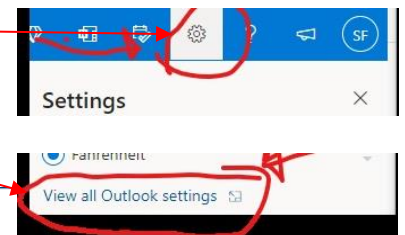
4. In the **config.js** file (**/home/pi/MagicMirror/config),** scroll down to the module named "calendar" (example below) or enter "Ctrl" & "f" from your keyboard and enter "calendar" to find the module.

5a. Once you've located the **Google Calendar** module, copy and paste your private calendar address from step #2 above in the highlighted section below. If you do not wish to use this module, change "disabled: false" to "disabled: true":

5b. **For iCloud/Apple:** after pasting your link in the location below, replace "**webcal://**" with "**https://**".

```
            disabled: false,
            module: "calendar",
            header: "Google Calendar",
            position: 'top_center',
        config: {              dateFormat: 'MMM Do',
                               fullDayEventDateFormat: 'MMM Do',
                               getRelative: 48,
                               maximumEntries: 3,
                               maximumNumberOfDays: 7,
                               calendars: [
                               {
                               symbol: 'calendar-check-o',
                               url: 'INSERT SECRET ICAL ADDRESS'
                               },
```

6. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Display Live Video Feeds (iFrame) (~5 Minutes)

Displays any live/streaming video feed in the center or your smart mirror! Select "Ctrl" + "m" on your keyboard

1. From the desktop, navigate to "/home/pi/MagicMirror/config" (using the file cabinet icon at the top left of the PI's desktop screen) 🗂 and select the "config.js" file.

2. Then scroll down and locate the "**iFrame**" module in the file and change the parameters highlighted below. To enable this module, change "disabled: true" to disabled: false" (example below). You can add as many streaming URLs as you like and they will rotate at any interval timing you set.

```
{
disabled: true,//*************CHANGE TO false TO SEE LIVE IMAGES OF DOWNTOWN CLAYTON**************
        module: iFrame',
        position: 'middle_center',        // This can be any of the regions.
        config: {
              // See 'Configuration options' for more information.
                  url:
["https://wwwcache.wral.com/asset/weather/2020/02/13/18951319/clayton_downtown-DMD1-5na0ylj0d-640x480.jpg"],  // as many URLs you want or you can just ["ENTER IN URL"] if single URL.
                  updateInterval: 5 * 60 * 1000, // update URL every 5 minutes
```

3. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Movie Listings API Key (MMM-MovieListings) (~10 Minutes)

Displays current movie listing ratings and descriptions

1. Sign up at https://themoviedb.org/account/signup

2. Check for and email from The Movie database and verify your account. Then you'll sign into your account.

3. Access the settings menu by clicking on your initial in the top menu
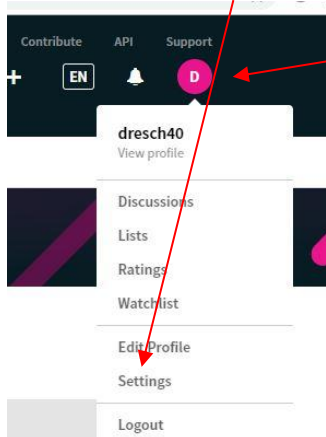
4. Click on API and then "click here"
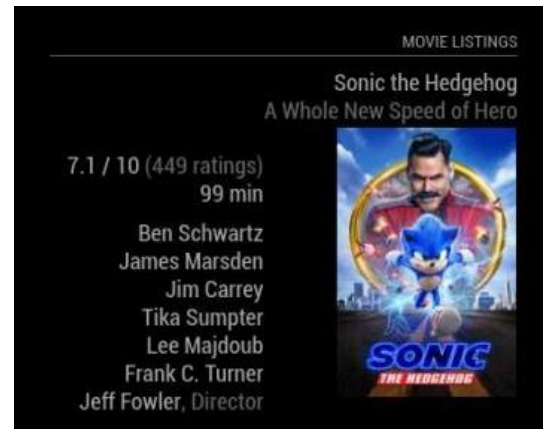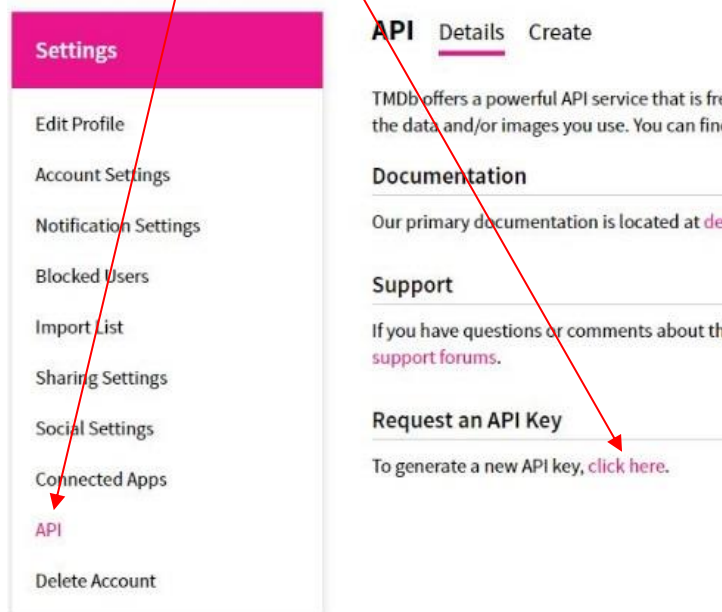
5. Click "Developer"

6. Accept the terms of use.

7. For "Type of Use" click "Personal". Use any application name, description, website address (i.e. www.acme1234.com) and any phone number (i.e. 5555555555). Fill out the rest and click "Submit"

8. Your API key will be located here.

9. Once you've copied your key, open the **config.js** file (**/home/pi/MagicMirror/config)**.

Scroll down in the **config.js** file until you find the **MMM-MovieListings** module. If you do not wish to use this module, change "disabled: false" to "disabled: true". Paste your key here.

```
{
 disabled: false,
 module: 'MMM-MovieListings',
 position: 'top_right',
        config: {
     apiKey: 'INSERT KEY',
```

10. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Monthly Calendar (MMM-CalendarExt2) (~5 Minutes)
See your monthly calendar with holidays and appointments for the month in the center of your screen.

Scroll down in the **config.js** file until you find the **MMM-CalendarExt2** module. Insert your Google Calendar private ical address here (see page 20 in this guide to get the link).

```
{
  disabled: false, //**********CHANGE true TO false FOR MONTHLY CALENDAR
  module: 'MMM-CalendarExt2',
     …
        {
     name : "Schedule",
     //icon: "noto-soccer-ball",
     url: "INSERT_YOUR_PRIVATE_iCal Address", // See Page 20 of Setup Instructions - "Google Calendar Setup"
        },
```
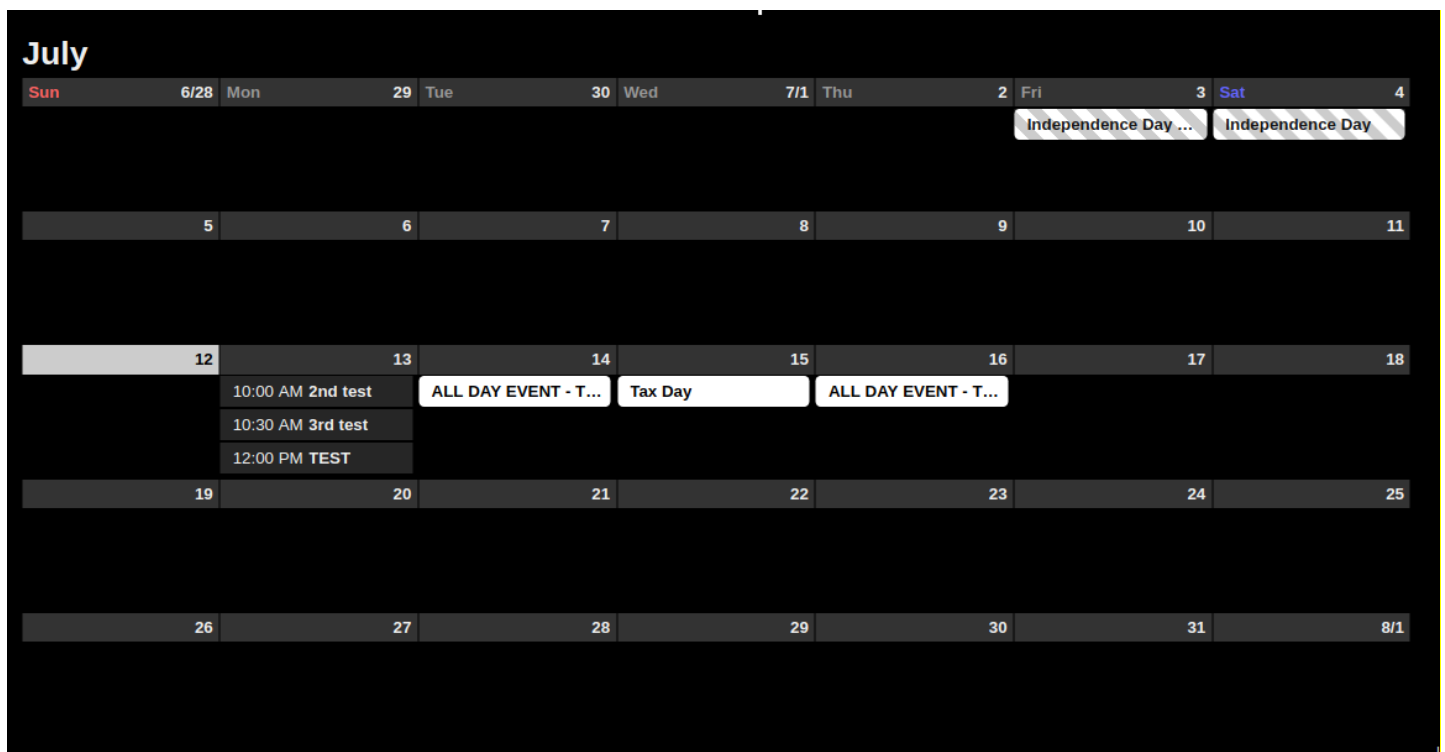
(OPTIONAL) Traffic Times (MMM-Traffic) (~5 Minutes)

- Displays travel time between two locations, using the Mapbox directions API to factor in current traffic conditions.

1. Create an account at Mapbox (https://account.mapbox.com/auth/signup/)
   - Fill in the signup form, agree to the terms, and select "Get started"

2. After submitting, check your email inbox (and spam folder) for the verification email from "Team Mapbox" and click on the "Verify my email" link

3. Confirm your password and then copy your access token on the next screen

Access tokens

+ Create a token

You need an API access token to configure Mapbox GL JS, Mobile, and Mapbox web services like routing and geocoding. Read more about API access tokens in our documentation.

Default public token   ↻ Refresh

pk.eyJ1Ijoic21hcnR5bW1ycm9yIi...   : 📋   Last modified: 6 minutes ago
dGozMG1pMG92ND1rZWwifQ.IXxRH9...   URLs: N/A

4. Open the **config.js** file (**/home/pi/MagicMirror/config**).
Scroll down in the **config.js** file until you find the **MMM-Traffic** module. Change "disabled: true" to "disabled: false". Insert you're your access token from step #3 here. Modify your origin and destination coordinates as desired (enter each address into Google Maps and the address bar will have the coordinates).

```
{
 disabled: false,
 classes: "hide",
 module: "MMM-Traffic",
 position: "top_left",
 config: {
 accessToken: "INSERT_API_KEY",
 originCoords: "-78.0799955,39.7369425",
 destinationCoords: "-75.3969875,36.8352952",
```

3. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Peloton Fitness Tracking (MMM-Peloton) (~5 Minutes)

- Track your Peloton fitness goals and progress – requires Peloton account.

1. You should have an active Peloton account. If you do not have an account, you can <u>use this link</u> to get an account.
2. Open the **config.js** file (**/home/pi/MagicMirror/config)**.
Scroll down in the **config.js** file until you find the **MMM-Peloton** module. Change "disabled: true" to "disabled: false". Insert your Peloton username and password.

```
{
disabled: false,
module: "MMM-Peloton",
position: "top_right",
header: "My Peloton Workouts",
config: {
  username: "username",
  password: "password",
}
},
```

3. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) MMM-Ecobee setup

```
These are the steps authorize this application to access your Ecobee 3:
  1. Go to https://www.ecobee.com/home/ecobeeLogin.jsp
  2. Login to your thermostat console
  3. Select 'MY APPS' from the menu on the top right.
  4. Click 'Add Application'
  5. Enter the code provided!

  Code refresh every 5min.
  Module check for the authorization every 30sec.

  If a code is not used for a long time (Magic Mirror is off, module is turned off, etc) a new
authorization will be required.
```

(OPTIONAL) mmm-hue-lights setup

In order for you to have access to your Hue lights, you need a **<u>Hue developer account</u>** and a couple of things:
- the `IP address` of the Hue bridge you're using
- an authorized `user` for your Hue bridge

Please follow the instructions on this page to get both:
<u>https://www.developers.meethue.com/documentation/getting-started</u>
If you don't have a Hue developer account already, click the `register` link on the page above to set one up (it's free).

Please follow the instructions at **<u>https://github.com/michael5r/mmm-hue-lights</u>** to setup your devices.

(OPTIONAL) Spotify Module (EXT-Spotify) (~10 Minutes) –
See what Spotify song is playing on your Smart Mirror and play Spotify through your Smart Mirror

1. Select "Ctrl" + "m" on your keyboard

2. Sign up for a free Spotify developer account at:
   https://developer.spotify.com/dashboard/login
   Sign up for a new account and use your Facebook or Spotify login credentials
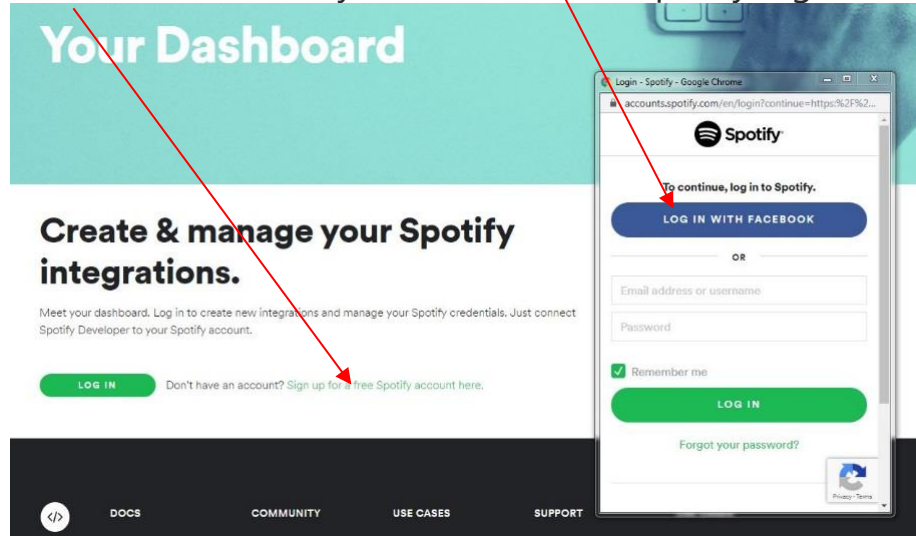
4. Click on "Create a Client ID" and include the app name such as "**Spotify Mirror**" and description "**Smart mirror Spotify integration**" click on "**Voice Other**" and click "**Next**"

- "Are you developing a commercial integration", click "**No**"

5. Agree to all conditions and click "**Submit**"

6. Click on the "**Edit Settings**" button in the upper right.

7. Under "**Redirect URIs**" and add the link below and then click "**Save**":
http://localhost:8888/callback

8. Copy and paste the **Client ID** and **Client Secret** into a file for the next step

9. Authorize your app and receive a token: From the command prompt (in the <u>upper left</u> of the toolbar in the Pi desktop ▧),

enter: `cd ~/MagicMirror/modules/EXT-Spotify`
- then enter: `npm run token`

10. You will then be automatically taken to the Spotify website. Sign in again.
                                                              -Agree to the terms
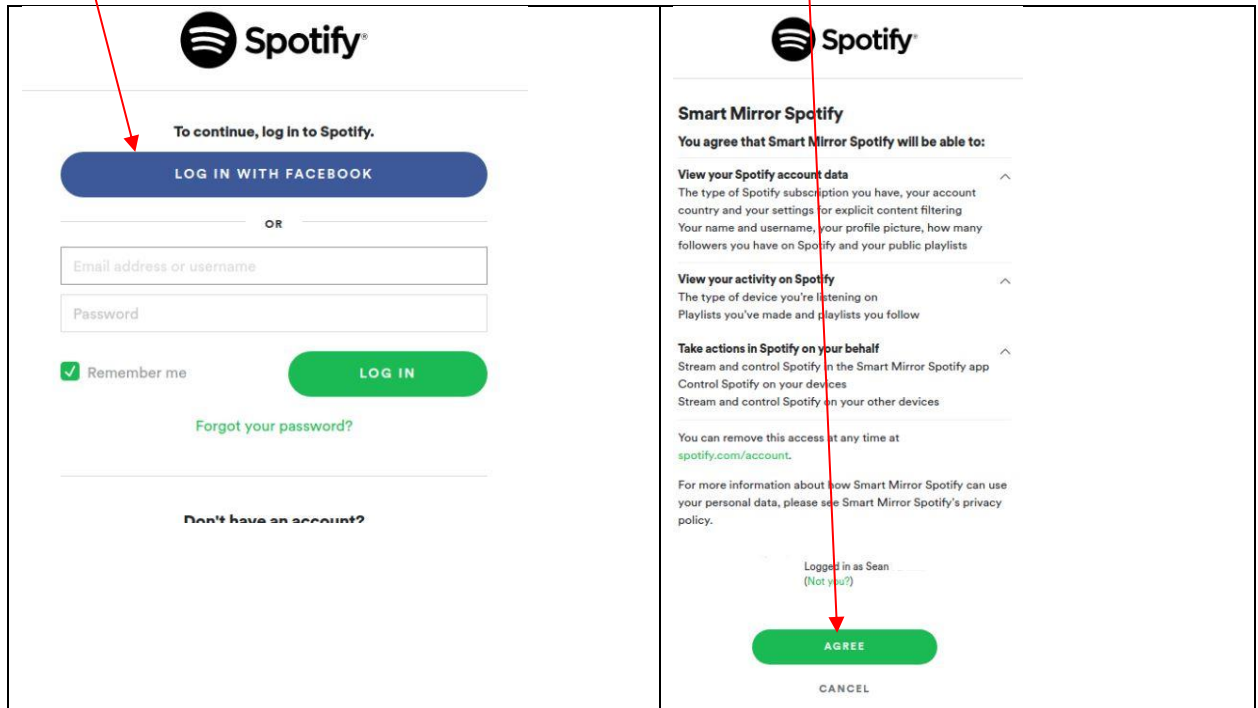
11. If authorization is successful, you will see the message below. You can now close the chrome browser.
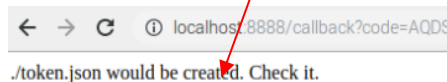
12. From the desktop, navigate to "/home/pi/MagicMirror/config" (using the file icon at the top left of the PI's desktop screen) 🗁 and select the "config.js" file. Scroll down and locate the "**EXT-Spotify**" module in the file and insert your Client ID and Client Secret from the previous step (example below). Just below the EXT-Spotify module, locate the **"EXT-Raspotify"** module and enter your Spotify email and password:

```
{                                              {
  disabled: false,                               disabled: false,
  classes: "hide",                               classes: "hide",
  module: 'EXT-Spotify',                         module: 'EXT-Raspotify',
  position: 'top_left',                          config: {
  config: {                                        debug: false,
    updateInterval: 1000,                          email: "INSERT_EMAIL",
    idleInterval: 10000,                           password: "INSERT_PASSWORD",
    useBottomBar: false,                           deviceName: "MagicMirror",
    CLIENT_ID: "INSERT_ID",                        deviceCard: "hw:CARD=DEVICE,DEV=1",
    CLIENT_SECRET: "INSERT_SECRET",                minVolume: 50,
                                                   maxVolume: 100
```

29

13. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

Play Spotify from Your Smart Mirror - From any Spotify account in your home (smartphone, PC, etc.), select your Spotify app and click on devices (icon next to the volume bar). You will see the smart mirror Spotify device listed as "==Spotify_MagicMirror==".

Lyrics and Screen Player Controls
Click on the Spotify image in the location of the Mirror where your Spotify is playing.
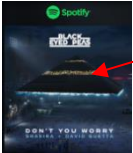
Access lyrics and playback controls. To minimize, simply click on the "Spotify" icon in the image
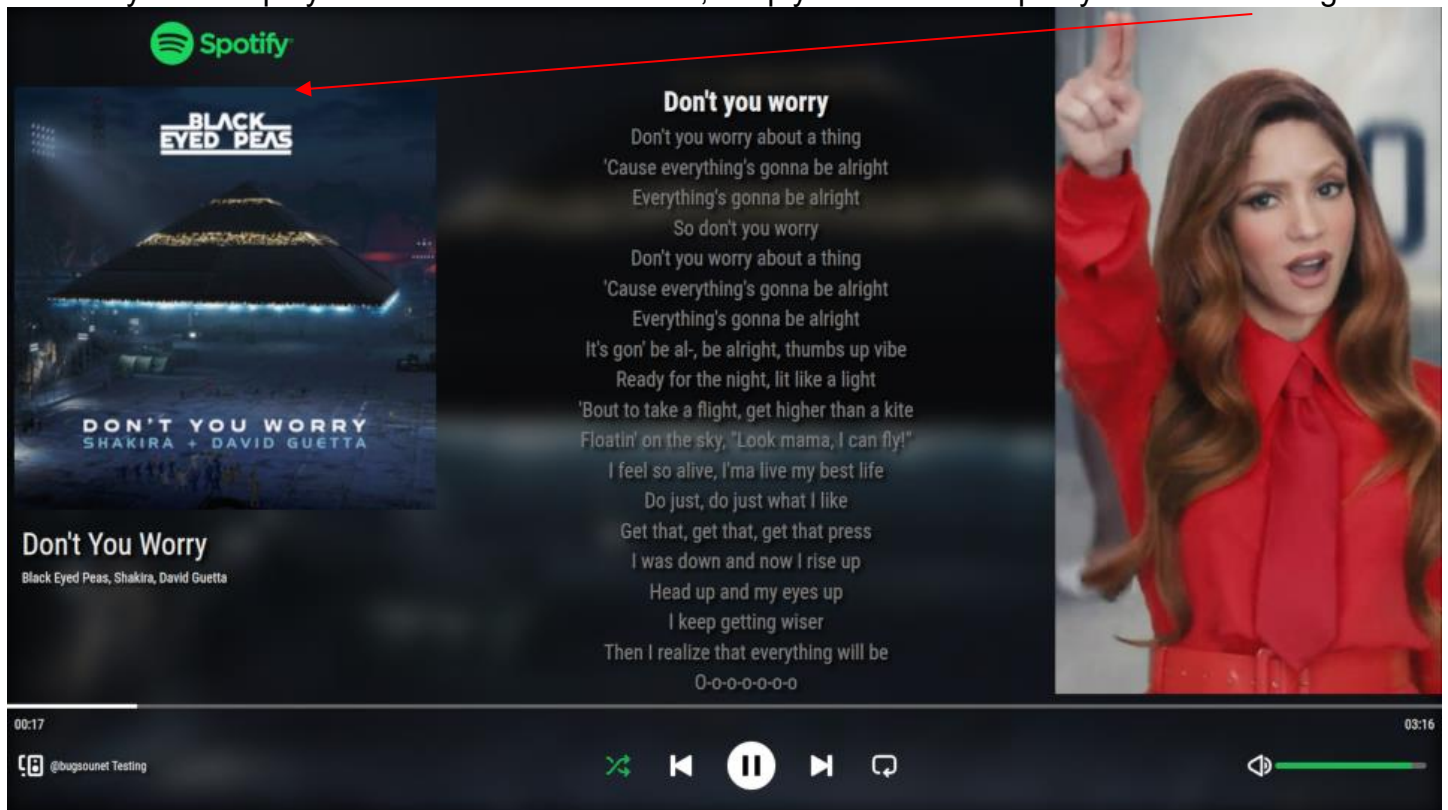
==(COMING SOON)== Spotify Voice Commands
Activate Spotify by using the wakeword **"Jarvis"** and just say:
- *Alan Walker on Spotify*: will search some music of Alan Walker on Spotify and play it
- *Alan Walker Faded on Spotify*: will search Alan Walker and title Faded on Spotify and play it
- *playlist Top Hit on Spotify*: Assistant will search the playlist Top Hit on Spotify and play it
- *album K-391 on Spotify*: Assistant will search the album of K-391 and play it
- *Spotify play*: to launch Spotify and play last music
- *Spotify pause*: make pause
- *Spotify stop*: stop
- *Spotify volume* [0-100]: for controlling volume

(OPTIONAL) Playing Music From Your Connected Sonos Speaker (~1 minute)

- To use your connected Sonos speaker with your smart mirror, open your Amazon Alexa app and ask Alexa to "Discover Devices" and it should automatically locate your Sonos speaker. If Alexa does not locate your Sonos speaker, select "Devices" on the bottom right of the home screen, then select the "+" in the top right of the screen, then select "Add device" and scroll down until you can select "Speaker" and "Sonos".

-   You will see the song and album cover playing on your smart mirror display. You can also raise or lower the volume simply by saying "Smart Mirror" →"Raise volume" or "Lower volume" or "Mute" on "YOUR_ROOM".

(OPTIONAL) SmartThings (MMM-Smartthings) (~5 minutes)

Connects to the Samsung/Smartthings API to display your device status information.

1. Log into the developer site with your SmartThings or Samsung Account and generate a personal token by clicking here: https://account.smartthings.com/tokens

2. After logging in, click "Generate Token". Then select all boxes and click "Generate Token" at the bottom of the screen.

3. Open the **config.js** file (**/home/pi/MagicMirror/config)**. Scroll down in the **config.js** file until you find the **MMM-Smartthings** module.

4. Copy and paste your token here and change "disabled: true" to "disabled: false"

5. Capabilities: A complete list can be found here: https://docs.smartthings.com/en/latest/capabilities-reference.html

```
{
disabled: true,
module: "MMM-Smartthings",
position: "top_left",
header: "Smartthings",
 config: {
  personalAccessToken: 'INSERT_YOUR_TOKEN',
  capabilities: [
  'contactSensor', //EXAMPLE ONLY
   'lock' //EXAMPLE ONLY
        ],
      }
    },
```


6. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(**OPTIONAL**) Ring Camera (MMM-Ring) <mark>(~5 minutes)</mark>

Whenever someone presses the button on your Ring device, or when motion is detected, the Ring video stream will appear in the middle of your display for roughly 2 minutes. Whenever there is no video being displayed, nothing else is shown in its place.

<mark>***In order to work, your smart mirror must be on a 2.4Ghz (2G) Wi-Fi connection, not 5G***</mark>

1. From the command prompt [>_], enter: cd MagicMirror/modules/MMM-Ring/

2. Then paste or type in the following command: npx -p ring-client-api ring-auth-cli

3. After the program runs, enter the email address and password that you used to sign up for your Ring account.

4. Check your email for your 2fa code from Ring and enter the code here.

5. If everything is entered correctly, your will see this message.

6. Copy the entire "RefreshToken" – <mark>**IMPORTANT**</mark> - when copying, be sure to leave off the quotes on either end of the token

7. Open the **config.js** file (**/home/pi/MagicMirror/config**).

8. Scroll down in the **config.js** file until you find the **MMM-Ring** module.

9. Paste your token here. **– IMPORTANT** - when pasting your token, be sure to paste inside the quotes with no extra spaces. Change "disabled: true" to "disabled: false"

```
{
 disabled: true,
 module: "MMM-Ring",
 position: "middle_center",
 config: {
ring2faRefreshToken:"xxxxxxxxxxxxxxxxxxxxxxxxxxdSl6Ii9vYXV0aC9pbnRlcm5hbC9qd2tzIiwia2lkIjoiZGVmYXVsdCIsInR5cCI6IkpXVCJ9.eyJpYXQiOjE1OTU4NzI0OTksInJlZnJlc2hfY2lkIjoicmluZ19vZmZpY2lhbF9hbmRyb2lkIiwicmVmcmVzaF9zY29wZXMiOlsiY2xpZW50Il0sInJlZnJlc2hfdXNlcl9pZCI6MzUyOTEwNDMsInJuZCI6Ilxxxxxxxx
xxxxxxxxxxxxxxxxxxx",
  ringMinutesToStreamVideo: 1.5, //Minutes to stream video after motion or button trigger
  ringVideoWidth: 2350, //in px - resize the streaming video window
  ringStreamMotion: true //trigger streaming video after motion (in addition to pushing the button)
 }
```

10. To change the size of the video pop-up box for ring, simple change this number - **"2350" is fullscreen**

11. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

12. Verify that your token was added to your MMM-Ring module by going to folder /home/pi/MagicMirror/modules/MMM-Ring and open the ".env" file. If you see long string of characters and letters after "RING_2FA_REFRESH_TOKEN=" then your token was successfully added. If it is blank after the "RING_2FA_REFRESH_TOKEN=", then DELETE the ".env" file and start over at step 1 above until you can see the token in the ".env" file.

(OPTIONAL) Newsfeeds - MMM-News and MMM-EveryNews (~5 minutes)

1. Sign up for a free API key at: https://newsapi.org/register Your API key will be here after signup

2. Open the **config.js** file (**/home/pi/MagicMirror/config**). Scroll down in the **config.js** file until you find the **MMM-Everynews and MMM-News** modules.

3. Insert your API key here (between the quotes) and as well in the MMM-News module (next page). Use the same API key for both modules.

```
{
 disabled: false,
 classes: "hide",
 module: 'MMM-EveryNews',
 position: 'top_right',
   config: {
     source: "ESPN",
     //q: "apple",
     scroll: true,
     scrollSpeed: "3",
     apiKey: "INSERT_APIKEY",
```

Register for API key

First name

sean

Email address

admin@smartymirrors.com

Email addresses will be verified, please enter a real one. Disposable addresses have been blocked.

Choose a password

• • • • • •

You are...

◉ I am an individual

○ I am a business, or am working on behalf of a business

✓ I'm not a robot
reCAPTCHA
Privacy - Terms

☑ I agree to the terms.

Submit

Registration complete

Your API key is: 3c2076d071fe4

For help getting started please look at our getting started guide.

We post API status updates and other news on our Twitter feed, s please follow us there if that's important to you:

🐦 Follow @NewsAPIorg

✓ My account

```
{
 disabled: false,
 classes: "hide",
  module: "MMM-News",
  position: "middle_center",
  config: {
    debug: false,
    apiKey: "INSERT API KEY",
```

4. Insert your API key from step 1 above. Save the config.js file by clicking on "File" and "Save" (upper left in menu).

5. List of all possible news sources - listed on right next to "id": https://newsapi.org/docs/endpoints/sources

(OPTIONAL) Nest Thermostat (mmm-nest-status) (~5 minutes)

Keep an eye on all of your Nest thermostats in your home.

1. Click on or copy and paste this long link into your Chrome browser:
   https://nestservices.google.com/partnerconnections/96be5213-02df-46f8-8502-49d498c425e9/auth?redirect_uri=https://www.google.com&access_type=offline&prompt=consent&client_id=261241589700-ne9b68081jo1j5k07u38hhohgg7b6muh.apps.googleusercontent.com&response_type=code&scope=https://www.googleapis.com/auth/sdm.service

2. Using the link above, log into your Google Account
3. Allow permissions
4. Select your account
5. Click "Advanced" and "Go to SmartyMirrors"
6. "SmartyMirrors wants additional access…" – Click "Continue"

7. You will see a blank Google search screen, however, in the address bar, you will see code that looks like this - (i.e. https://www.google.com/?code=<mark>4/0AX4XfWghxBphAmNtciBE5JnjVmpLoFb0zUFNkVMMH05OONZQwMOKsXjXXXXXXXXX</mark>&scope=https://www.googleapis.com/auth/sdm.service)
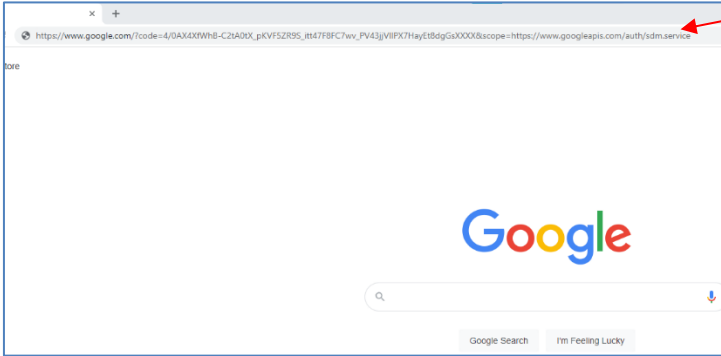
8. Copy the code just after "code=<mark>….</mark>" (as highlighted above)

9. Next, we will be using a curl command in the command prompt to obtain a refresh token. Replace the highlighted portion in the curl statement below, with the code you received (from the example highlighted above).

10. At the **command prompt** 🖥️ copy and paste the curl command below and insert your code where highlighted below and press enter:
    o curl -L -X POST 'https://www.googleapis.com/oauth2/v4/token?client_id=261241589700-ne9b68081jo1j5k07u38hhohgg7b6muh.apps.googleusercontent.com&client_secret=4IOjoe9EVELUTI1BQp0WzEQF&code=<mark>4/0AX4XfWiXRDsp…XXXXX</mark>&grant_type=authorization_code&redirect_uri=https://www.google.com'

11. You will now see some tokens, we are only concerned with "<mark>refresh token</mark>". Copy the refresh token only (highlighted example below)
    o {
       "access_token": "ya29.a0ARrdaM_CPE_JXmZFIcwDpQ-HgAWW0YodMnJg3EfR5mxC9TCgXxhEThFvw0Hgs9eWU0YW7-HpRs54ZFhKL4qBi1E1T1GYOf_d1RwodE2JUQUF6I3q9Ai0Kahh1mZA3rHvE_QDNKHO4GySLxl_NXYOOz4Dfy-l",
       "expires_in": 3599,
       "refresh_token": "<mark>1//06OWmTGg8cFF6CgYIARAAGAYSNwF-L9IrtEWV6Vj384lsRudbicBeVP4nmqDy1hfA3ceqf65-pQQTEw6JGQXXXXXX</mark>",
       "scope": "https://www.googleapis.com/auth/sdm.service",
       "token_type": "Bearer"

12. In the config.js, find "<mark>mmm-nest-status</mark>" and paste the token where indicated in the module (highlighted below). Change "disabled: true" to "disabled: false"

{
disabled: <mark>true</mark>,
classes: "hide",
   module: "<mark>mmm-nest-status</mark>",
   position: "top_left", // pick whichever position you want
   config: {
      clientId: "261241589700-ne9b68081jo1j5k07u38hhohgg7b6muh.apps.googleusercontent.com",
      clientSecret: "4IOjoe9EVELUTI1BQp0WzEQF",
      refreshToken: "<mark>INSERT_REFRESH_TOKEN</mark>",
      projectId: "96be5213-02df-46f8-8502-49d498c425e9",
      // ….

13. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Google Photos (~5 minutes)

Display your Google photos.

1. Click on the command prompt icon 📟 **in the desktop toolbar (upper left of desktop)**

2. From the command prompt, enter or copy and paste the command below and hit enter: cd ~/MagicMirror/modules/MMM-GooglePhotos

3. Then enter: node generate_token.js

4. The command above will attempt open the Pi's web browser. Once your web browser is open, enter the username and password you use to log into Google or Gmail. <mark>You will need to select "Continue" for each prompt.</mark> Then select BOTH boxes and "Continue"

5. After confirmation, some code (i.e. 4/ABCD1234XXXXX....) will appear in the browser. Copy the code

6. Paste where requested in the Pi's command prompt - "Paste your code:"

Sign in

Please copy this code, switch to your application and paste it there:

4/2gHzuzVX0GY1xq5woQZ4JVnCk51qFjcUQ0rkL
zrJAgHdarFHZrehxcs

```
bugs@debian:~/MagicMirror/modules/MMM-GoogleAssistant$ node auth_and_test.js
Opening OAuth URL. Return here with your code.
Paste your code: 4/0QFg4l01pwiQdTM1J3i13RoRTVB7mK
```

7. Once opened, scroll down in the config.js file until you find the **MMM-GooglePhotos** module. Change "disabled: true" to "disabled: false". Then save the config.js file.

```
{
 disabled: true,
 module: "MMM-GooglePhotos",
 position: "fullscreen_above",
 config: {
```

Google hasn't verified this app

You've been given access to an app that's currently being tested. You should only continue if you know the developer that invited you.

Continue   Back to safety

Final Mirror wants access to your Google Account

Select what Final Mirror can access

Make sure you trust Final Mirror

Cancel   Continue

(OPTIONAL) Todoist (~5 minutes)

Your To-do lists, all in one place

1. **Sign up for an account at: <ins>https://developer.todoist.com/appconsole.html</ins>**
2. **Click on "Create new app"**   3. **Create a name for your app – leave URL blank**

Manage App   Submit App

Home

App Management

Your applications:

You don't have any applications. Create some? 🚀

Create a new app

Create App

App name*   App service URL

SmartMirror   https://your_app_service.com

Create app   Cancel

4. Scroll down and select "Create test token"   **5. Copy your access token for the next step**

Test token

To get started quickly with your app development, you may create an access token to your own account without going through the authorization process. The generated token will have the full scope access.

Create test token

Test token

To get started quickly with your app developm without going through the authorization proc

Your access token

75c6ae97e306cbd771636c3afffc46a9deff8(

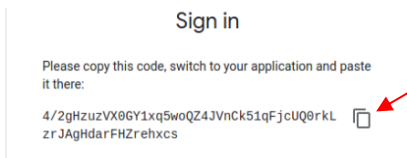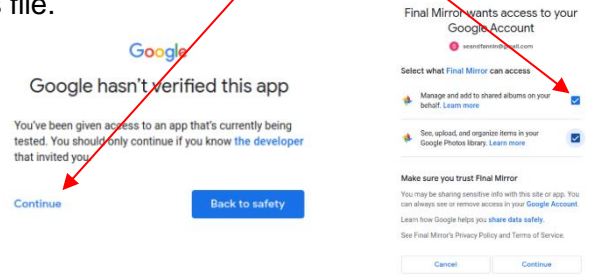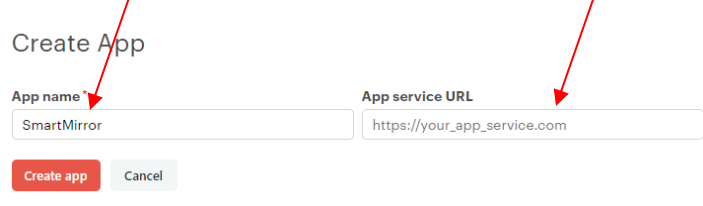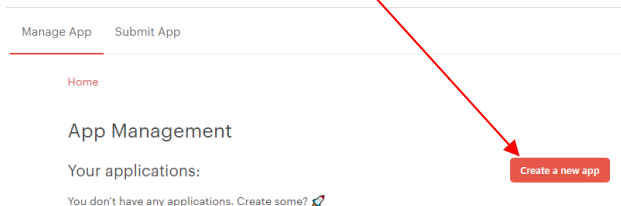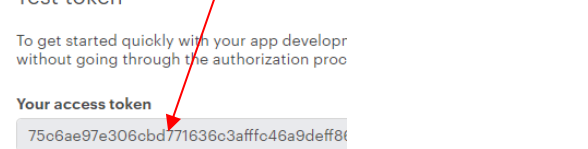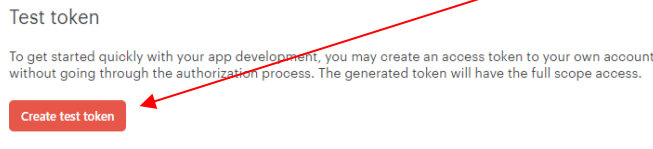**6.** In the config.js, find "MMM-Todoist" and paste the token where indicated in the module (highlighted below). Change "disabled: true" to "disabled: <mark>false</mark>"   **7.** Open your ToDoist app (either from your PC or smartphone) and login

```
     disabled: true,
     classes: "hide",
     module: 'MMM-Todoist',
     position: 'top_right',
              config: {
                    accessToken: INSERT_TOKEN,
                    projects: [INSERT_PROJECT_NUMBER]
```

8. After login, you will see "Projects" on the left tab – click on it.
9. <ins>Add and name your own project</ins>, and then click on it. In the address bar, you will see something like: https://todoist.com/app/project/<mark>2222815xxx</mark>
10. Paste this number here

11. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Changing Onscreen Button Video Links (~5 minutes)

1. Open the **config.js** file (**/home/pi/MagicMirror/config)**. Scroll down in the **config.js** file until you find a series of **iFrame** modules with YouTube links.

2. To change the YouTube link, simply change the last part of the link to your desired YouTube link.
{
 disabled: false,//
 module: 'iFrame',
 classes: "show",
 position: 'middle_center', // This can be any of the regions.
 config: {
  // See 'Configuration options' for more information.
  url: "https://www.youtube.com/embed/**yg3CJ7Zb55o**?rel=0&autoplay=0&mute=0&controls=1", //Meditation
   // url: ['modules/MMM-BackgroundSlideshow/videos/Steamywonder.mp4", "modules/MMM-BackgroundSlideshow/videos/SmartMirror.mp4"],
   height: "1300px", //
  width: "2350px", //To change the size of the image, simply change "700px"
 idnum: 1 }
   1.   Each iFrame module corresponds to a different onscreen button. For example, "idnum: 1" is button 1 "Focus", "idnum: 2" in the next iFrame module is "Reef", etc.

(Optional) Dakboard Calendar Setup (~20 Minutes)
With Dakboard, you can quickly and easily setup, modify, and control your calendar, photos, and tasks, from any location or device.
1. Go to: https://dakboard.com/site and select a free account.

2. The easiest method for setup is to continue with Google.
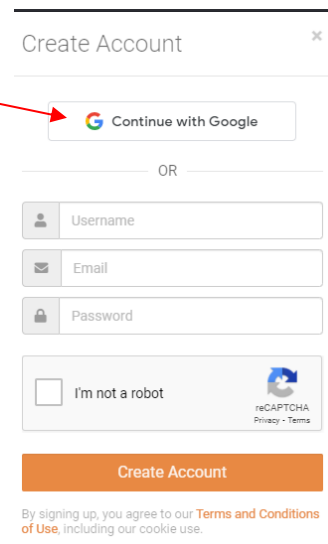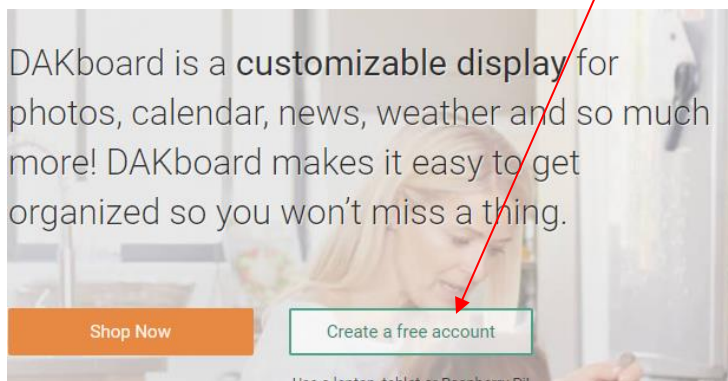
3. Choose the "PREDEFINED SCREEN"

At the top of the screen you will see a tab for each setting in Dakboard. Configure each tab until you get to "Settings & Defaults". **Be sure to click the "<mark>Save Changes</mark>" tab at the bottom after changes to each tab.**

4**. Layout**: Next, choose your layout options, ("top/bottom" works best for calendar)

5. **Background**: Adjust to your preferences

6. **Calendars**: Enable and choose your primary calendar. If you use a different calendar not listed, you can enter the iCal address here.
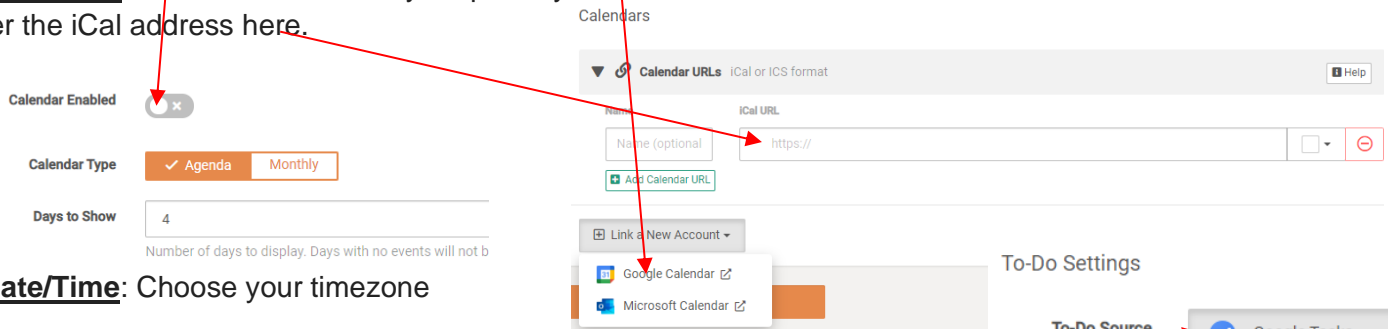
7. **Date/Time**: Choose your timezone

8. **News**: Enable RSS and choose your newsfeed

9. **Todo:** Choose your favorite tasks account from the dropdown

10. Check your display by selecting "View Screen" (top right). In view mode,
if you want to make more changes, select the gear icon in the top right of screen

11. **Settings & Defaults**: Once all of your changes have been made, copy the "Private URL" link
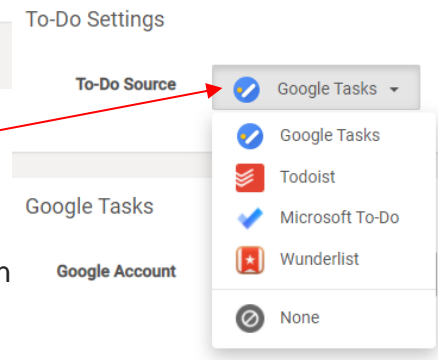
12. In the **config.js** file **(/home/pi/MagicMirror/config),** scroll down to the module named **"MMM-HTMLBox",//DAKBOARD".** Paste your link from step #11 above here and be sure to leave the apostrophes.
 disabled: false,
 classes: "hide",
 module: "<mark>MMM-HTMLBox",//DAKBOARD</mark>
 position:"top_bar",
 content: "<iframe src='<mark>INSERT_DAKBOARD_LINK_HERE</mark>'

(OPTIONAL) Google Fit (~5 minutes)

Display your Google Fit Stats.

1. Open the **config.js** file **(/home/pi/MagicMirror/config)**. Scroll down in the **config.js** file until you find the **MMM-GoogleFit** module. Change 'disabled: true' to 'disable: false'. Set your daily step count goal.

```
{
  disabled: false,
 classes: "hide",
   module: 'MMM-GoogleFit',
   position: 'top_left',
   config: {
   stepGoal: 10000,
```

2. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, you will need to select "Ctrl" & "q" on the keyboard in the MagicMirror window in order for the changes to take effect.

3. Open the MagicMirror and swipe to the page that indicates "Google Fit/Enter Code". Go to https://google.com/device and input the code displayed on the MagicMirror screen (under "Google Fit") and follow the steps indicated (below).

4. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Tesla - Display Current Diagnostics (MMM-Teslamate) (~1 Min)
This will allow you to change the sleep time of the display after no motion.

1. Open http://localhost:4000 in your web browser

2. Sign in with your Tesla credentials

3. You can now view dashboard data via http://localhost:3000

4. To change the look or make any other adjustments to the module, open the **config.js** file (**/home/pi/MagicMirror/config),** scroll down to the module named "**MMM-Teslamate**". Insert your username and password.

```
    {
  module: 'MMM-Teslamate',
  position: 'top_right',
  config: {
    mqttServer: {
      address: 'localhost',  // Server address or IP address of the MQTT broker
      port: 1883,            // Port number if other than default (1883)
      user: 'user',          // Leave out for no user
      password: 'password',  // Leave out for no password
    },
    rangeDisplay: "%", // "%" or "range"
    imperial: true, //use imperial units (true = Miles & F) or metric (false = Km & C)
    carID: '1', // defaults to '1'; only override if you have multiple Teslas and want to display
    // set to true to enable both the graphic, and the additional stats
    // (charge remaining, scheduled charge start, etc)
    hybridView: true,
    sizeOptions: {        // size of the visible area
      width: 450, // px, default: 450 // size of the icons + battery (above text)
      height: 203, // px, default: 203
      batWitdh: 250, // px, default: 250        // the battery images itself
      batHeight: 75, // px, default: 75
      topOffset: -40, // px, default: -40        // visual distance reduction to the module above
    },
    carImageOptions: {
      model: "m3", // mx, ms (S pre-refresh), ? (S post-refresh)
      view: "STUD_3QTR", // STUD_SIDE works better for S/X
      // full list of option codes: https://tesla-api.timdorr.com/vehicle/optioncodes.
      // you need at least the color and the wheels. not all combos work.
      // also consult: https://teslaownersonline.com/threads/teslas-image-compositor.7089/
      options: "PPSW,PFP31,W38B,DV4W",
      // play with this until it looks about right.
      verticalOffset: 0,     // tested values: 0 for m3/STUD_3QTR, 25 for ms/STUD_SIDE
      opacity: 0.5
    }, // show inside and outside temperatures below the car image: when AC or preconditioning is running
(default), always, or never
    showTemps: "hvac_on", // "always", "never"
  }
```
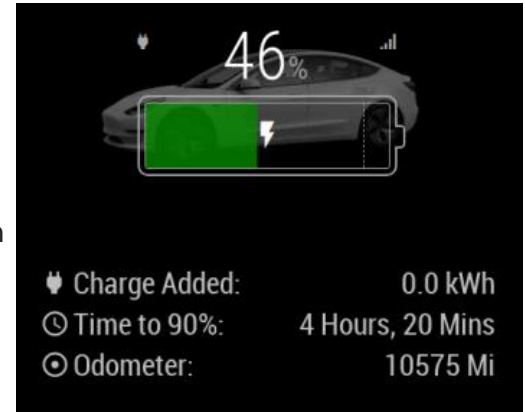
5. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(OPTIONAL) Change Onscreen YouTube Stream (MMM-EmbedYoutube) (~5 Minutes)

1. Click on the file cabinet icon at the top left of the desktop screen 🗂 and navigate to "**/home/pi/MagicMirror/config**" and double click the "config.js" file.

2. Once opened, scroll down in the **config.js** file until you find the **MMM-EmbedYoutube** module. If you do not wish to use this module, simply change "disabled: false" to "disabled: true". To change the YouTube video, simply replace the video_id below to your desired YouTube video ID, which is located at the end of the YouTube link: **https://www.youtube.com/watch?v=LvfaMv9nbJc**

```
{
 disabled: false,
 classes: "hide",
 module: "MMM-EmbedYoutube", //
              position: "middle_center",
              config: {
                   video_id: "LvfaMv9nbJc",//SHARK TANK LIVE STREAM - AQUARIUM OF THE PACIFIC
                   loop: false,
                   autoplay: true,
                   width: 2350,
                   height: 1300
```

3. Save the config.js file by clicking on "File" and "Save" (upper left in menu). Once you save the config.js file, the MagicMirror window will reload and changes will take effect.

(Optional) Alexa Voice Assistant - Echo Input Setup (<5 minutes)

1. Install the Alexa app **(from the app store – see setup instructions below**)
2. Open the **Alexa** app .
3. Go to the settings menu .
4. Select Add Device. Select Amazon **Echo,** and then **Echo Input**.
5. Follow the instructions to **set up** your device.
6. **To adjust volume, simply say "Alexa" – "Raise the volume" or "Lower the volume"**

- **Please note: Echo Input** is connected to a pair of small auxiliary speakers behind the mirror. For better sound quality, you can choose to connect the **Echo Input** to your own Bluetooth speakers or auxiliary speakers. Unfortunately, the soundbar speaker that is included and connected to your smart mirror cannot be connected to both **Echo Input** and the Smart Mirror sound at the same time. If you purchased the optional **Soundbar**, you can connect **Echo Input** via Bluetooth**,** but will need to switch between Bluetooth and Aux from the soundbar remote.

(OPTIONAL) Install the Amazon Alexa App <mark>(~5 Minutes)</mark>

- To install the **Amazon Alexa** app on your <u>smart phone</u>. This will allow you to add events to your Google calendar in your Magic Mirror simply by saying "**Smart Mirror, add event to calendar"** or "**Smart Mirror, set a reminder".**

- Open **Amazon Alexa** [O] from your smart phone and under "**Home",** select the three bars in the upper left of the screen ▣, then select "**Settings**" at the bottom of the menu.

- Scroll down until you see "**Calendar & Email**". Then select "**Add Account**" to add your Google Calendar account (you can add more than one calendar) and select "**Connect Account**" and sign into your Google account.

(OPTIONAL) Alexa Flash Briefings <mark>(~5 Minutes)</mark>

Flash briefings are short, informative pieces of prerecorded audio that are updated daily. It's kind of like a set of brief (2-5 minute) podcasts or radio shows that are curated by you. Each Alexa flash briefing can last up to ten minutes and are usually pushed out on a daily or weekly basis. You can also get short-form lifestyle content like a daily horoscope or word-of-the-day, local or national news, receive professional advice or daily tips. Think of flash briefings as a cross between podcasts and Alexa skills. They're not as interactive as skills, but allow you to receive all the news you care about most.

Setup

- From your smart phone install and open your **Amazon Alexa** app [O] and then select the three bars in the upper left of the screen ▣, then select "**Settings**" at the bottom of the menu.

- Scroll down until you see "**Flash Briefing**" and select it.

- Click on "**Add content**". From there, there will be hundreds of different sources listed, including horoscopes, local and national news, and professional advice. You can also use the search (at the top of the screen) to locate specific sources/services.

- Simply click on a service you want and click the "Enable to use" button. You will now see the service in your "Flash Briefing" services. Please note that the order you see in your Flash Briefing services is the order they will play once you say "**Smart Mirror, what's up?"**

- To change the order of your Flash briefings, simply click on "Edit" (upper right) and drag and drop each service to your desired order by selecting the "**=**" to the right of each service.

- To listen to your flash briefings, simply say "**Smart Mirror, what's up?"** or " **Smart Mirror, What's my Flash Briefing**?" or "**Smart Mirror, What's the news**?"

-        You can have as many or as few flash briefings as you prefer:

🍓 🍓 🍓 **SETUP COMPLETE!** 🍓 🍓 🍓

HOW TO USE SCHEDULER MODULES

https://github.com/ianperrin/MMM-ModuleScheduler

The scheduler keeps the screen and modules refreshed and is set to reboot daily. To change the time of the reboot and restart, open the config folder in: /home/pi/MagicMirror/config and then open the "config.js" file and change the values highlighted below. Please note that 7am is '0 7….' and uses a 24-hour time-period.

```
      {
    module: 'MMM-ModuleScheduler',
    config: {
      notification_schedule: [
        // TURN THE MONITOR/SCREEN OFF AT 12:30 AM EVERY DAY
        {notification: 'REMOTE_ACTION', schedule: '30 0 * * *', payload: {action: "MONITOROFF"}},
        // TURN THE MONITOR/SCREEN ON AT 7:00 EVERY DAY
        {notification: 'REMOTE_ACTION', schedule: '0 7 * * *', payload: {action: "MONITORON"}},
        // REBOOT THE RASPBERRY PI AT 6am EVERY DAY
        {notification: 'REMOTE_ACTION', schedule: '0 6 * * *', payload: {action: "REBOOT"}},
        // RESTART THE MAGICMIRROR PROCESS AT 6:05am EVERY DAY
        {notification: 'REMOTE_ACTION', schedule: '5 6 * * *', payload: {action: "RESTART"}}
      ]
    }
  },
```

Remote Support Through TeamViewer (~5 Minutes)

TeamViewer will allow Smarty Mirrors (with your permission) to remotely log into your Smart Mirror to help with setup or fix any issues.

1. select "Ctrl" + "m" to minimize the MagicMirror window. Then go to https://login.teamviewer.com/LogOn#register to sign up for a free account.

2. Once signed up, select the TeamViewer icon on the from the **Pi desktop**.

3. Select "Sign in" and enter your email and password.

4. Send **Smarty Mirrors** your ID and password.

Available Modules

https://github.com/MichMich/MagicMirror/wiki/3rd-Party-Modules

How to setup modules instructions for beginners *(don't forget to scroll down the page of each module to verify if there are any "npm install" dependencies)***:**
https://forum.magicmirror.builders/topic/4231/how-to-add-modules-for-absolute-beginners
- **The cofig.js file is located here:**
- **/home/pi/MagicMirror/config**
- **Open "config.js"**

How to position modules:
https://forum.magicmirror.builders/topic/286/regions

top_bar **and** bottom_bar **are light gray**
top_left **and** bottom_left **are red**
top_center **and** bottom_center **are blue**
top_right **and** bottom_right **are green**
upper_third **is yellow**
middle_center **is cyan**
lower_third **is magenta**

Modifying the CSS Syntax to Change the Appearance of Specific Modules:
This will allow you to change the size, color, and appearance of individual modules in the MagicMirror display.

Before you modify the CSS, be sure to **make a backup of the custom.css file**, located in **/home/pi/MagicMirror/css**.
- Here is a link for learning more about CSS and how to change the custom.css file: https://forum.magicmirror.builders/topic/6808/css-101-getting-started-with-css-and-understanding-how-css-works

****BACKING UP YOUR SD CARD – HIGHLY RECOMMENDED*** (15 Minutes)
Completely power down your Raspberry Pi and unplug the main cord. Remove the mini SD card located below In your Raspberry Pi.

If you would like to back up configuration, backup the SD card to your desktop PC using the instructions in the link below
https://thepihut.com/blogs/raspberry-pi-tutorials/17789160-backing-up-and-restoring-your-raspberry-pis-sd-card

After you have backed up your Magic Mirror image, remove the SD card from your computer and the adapter and insert back into your Raspberry Pi - as pictured above.

USEFUL STUFF

Pi Power Switch – Top left of Mirror
If for some reason your Raspberry Pi <mark>completely freezes up</mark>, you can press the on/off button on the top of the frame to do a hard reboot of your smart mirror.

Increase or Decrease Display Power Off/Sleep Delay Timer (EXT-Screen)
This will allow you to change the sleep time of the display after no motion.

In the **config.js** file **(/home/pi/MagicMirror/config),** scroll down to the module named "**EXT-Screen**" (example below). Change the time by delay to power off after no motion (i.e. 20 minutes)

```
{
 disabled: false,
  module: 'EXT-Screen',
 classes: "hide",
  position: 'top_right',
  config: {
    debug: false,
    animateBody: true,
    delay: 20 * 60 * 1000,
```

Save the config.js file by clicking on "File" and "Save" (upper left in menu) and then "Ctrl" & "q" in the MagicMirror window for the changes to take effect.

Magic Mirror Keyboard Controls/Appearance
- **'CTRL' & 'm' to minimize window in Magic Mirror display and show the raspberry pi desktop (to make changes to the config file using Real VNC)**
- **'CTRL' & 'SHIFT +' to zoom in Magic Mirror display (make larger)**
- **'CTRL' & '-' to zoom out Magic Mirror display (make smaller)**