

BlueStamp Engineering

Smart Mirror Build Plan

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Location: Palo Alto

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Starter Project: TV-B-Gone

Main Project: Smart Mirror

Major Steps to complete the project:

MILESTONE #1

1. Setup Raspberry Pi with monitor
2. Install Base software for Mirror
3. Edit base software on display
4. Implement personal calendar
5. Input weather api key to mirror's code

MILESTONE #2

6. Install alexa voice control software onto the pi
7. Connect usb mic and speaker to pi
8. Download alexa application and connect to calendar
9. Install python script for PIR sensor
10. Connect PIR sensor to the GPIO pins on the pi
11. Run the python script separate from the mirror software
12. Install commute module
13. Install spotify module

MILESTONE #3

14. Remove plastic casing on monitor
15. Take measurements for frame
16. Cut wood according to dimensions of monitor
17. Secure the mirror and monitor down against the frame with extra wood
18. Stain Frame
19. Connect pi and remaining electrical components
20. Tape components down to back of monitor

FINAL MILESTONE

21. Attach LED strip along border of the frame
22. Connect a wifi adapter to the LEDs
23. Download magic home application and add the LED strip as device
24. Enable Magic Home on Alexa application

Modifications Made:

1. Alexa Voice
2. PIR motion sensor
3. Controllable LED strip

4. Commute information from home
5. Spotify display