

Final Project - Raspberry Pi Weather Station

CpE185 Lab Section #2

Dennis Dahlquist

Monday/Wednesday Lab @ 6:30pm

Kyle Cruz

Shawn Bacani

Shammah Thao

Ramsey Alahmad

- **Project Proposal Name**

- Smart Mirror with Raspberry Pi

- **Project Description**

- This Alexa voice-enabled smart mirror provides weather, traffic, & news. It also provides reminders, sends SMS messages and takes selfies. This is sufficient to warrant a final project because it combines the modern features of a monitor into a mirror along with an operating system (Linux/Raspbian OS) to allow the user to perform basic functions such as checking the weather, the time, news, all by being stationary towards the mirror, without having to do separate things in different places.

- **Main Sub-Functions**

- *Function 1 - Kyle Cruz*

- I will be responsible for creating the code to implement Session Start and Simple Intents/Get Weather. It should display current temperature, conditions, highs and lows, along with a 4 day forecast. We will all work together for the assembly of this device.

- *Function 2 - Shawn Bacani*

- My function is to create code to save default location and get time and traffic. My code will link the user to an alexa account with default information such as location. My code will also get the current time and the traffic information. This traffic information will report traffic incidents happening at the time.

- *Function 3 - Shammah Thao*

- For my part I would create a function that would save the contact information of the user and also help send out messages if possible. Along with that i would also set a functionality that would clear up the reminder and also delete it.

- *Function 4 - Ramsey Alahmad*

- My function is to allow the smart mirror to allow the user to take a selfie, along with creating a reminder. The user should be able to do all of the function as said just by utilizing the mirror instead of going back and forth to places to do simple functions.