

Features

- Powered by a 5V Wall Wart Power Supply for consistent power
- Easy to use interface for Wi-Fi, weather, and news setup
- Plexiglas construction for durability
- Built-in Bluetooth speaker
- Motion sensor controlled standby functionality

The Overall System

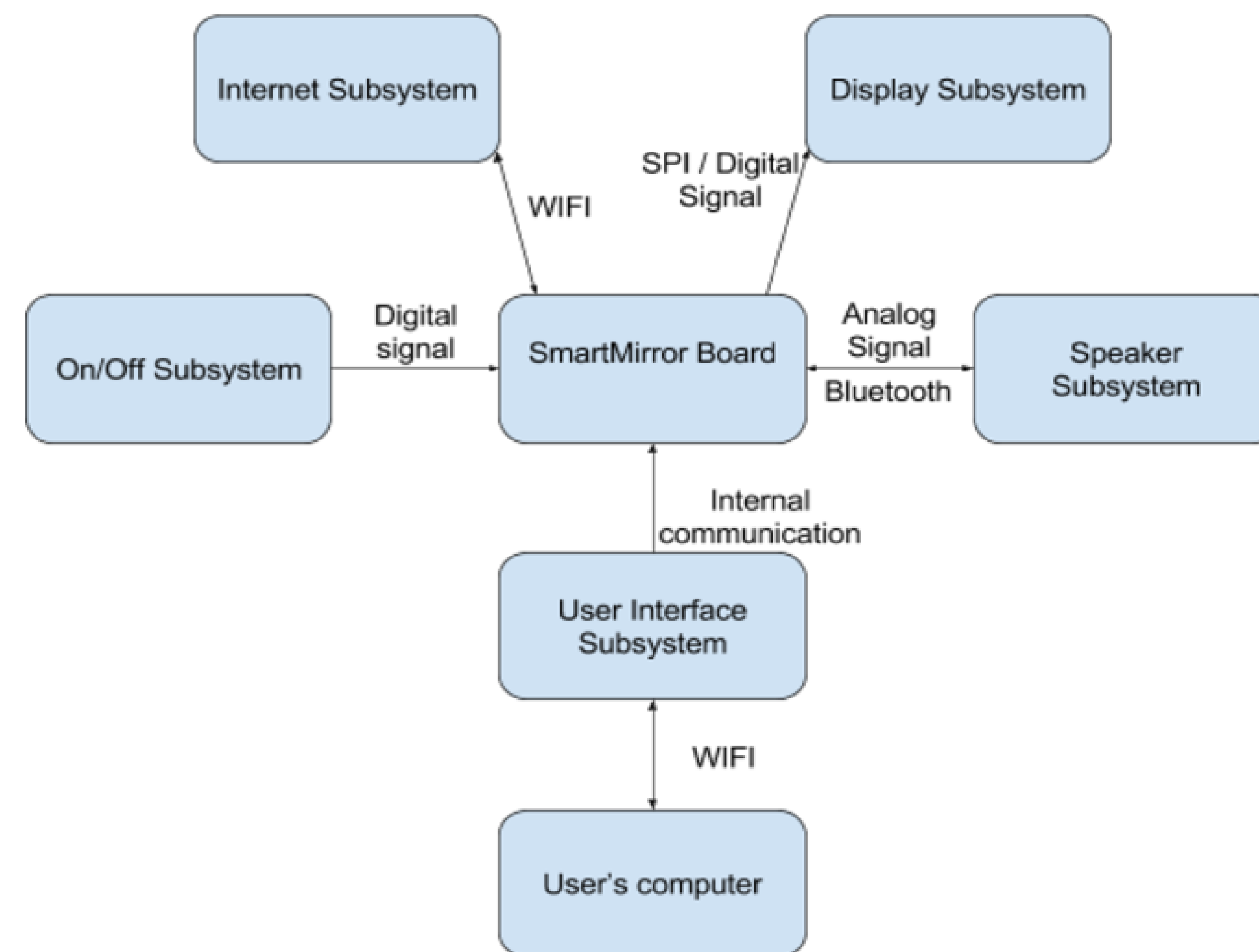
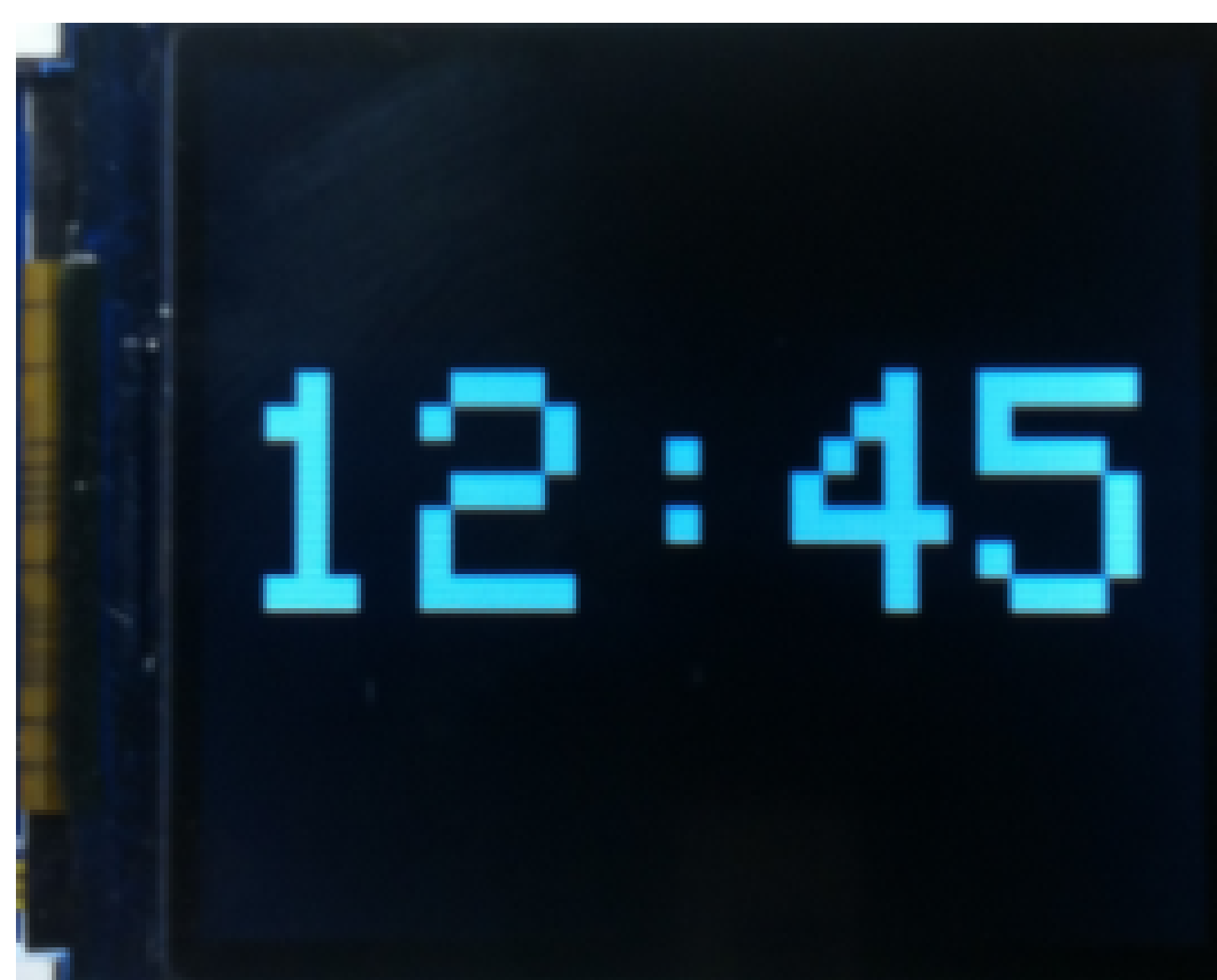


Figure: Overall System Flow Diagram

The Displays



Sample Displays

Smart Mirror

Mirror with built in displays and speakers to allow quick access to time, weather, and the news

Teague Kohlbeck - Christopher Rectenwald - Benjamin Richmond

The Problem

It is a necessity to spend at least some portion of the day standing in front of a mirror in order to prepare for the day. It can become inconvenient to attempt to monitor the time, determine the weather conditions for the day, and stay up to date with the most recent news headlines. The time and weather also determine how a person prepares for the day. By having to search for each of these pieces of information separately can become a drain on time, which is often not something a modern person can afford.

The Solution

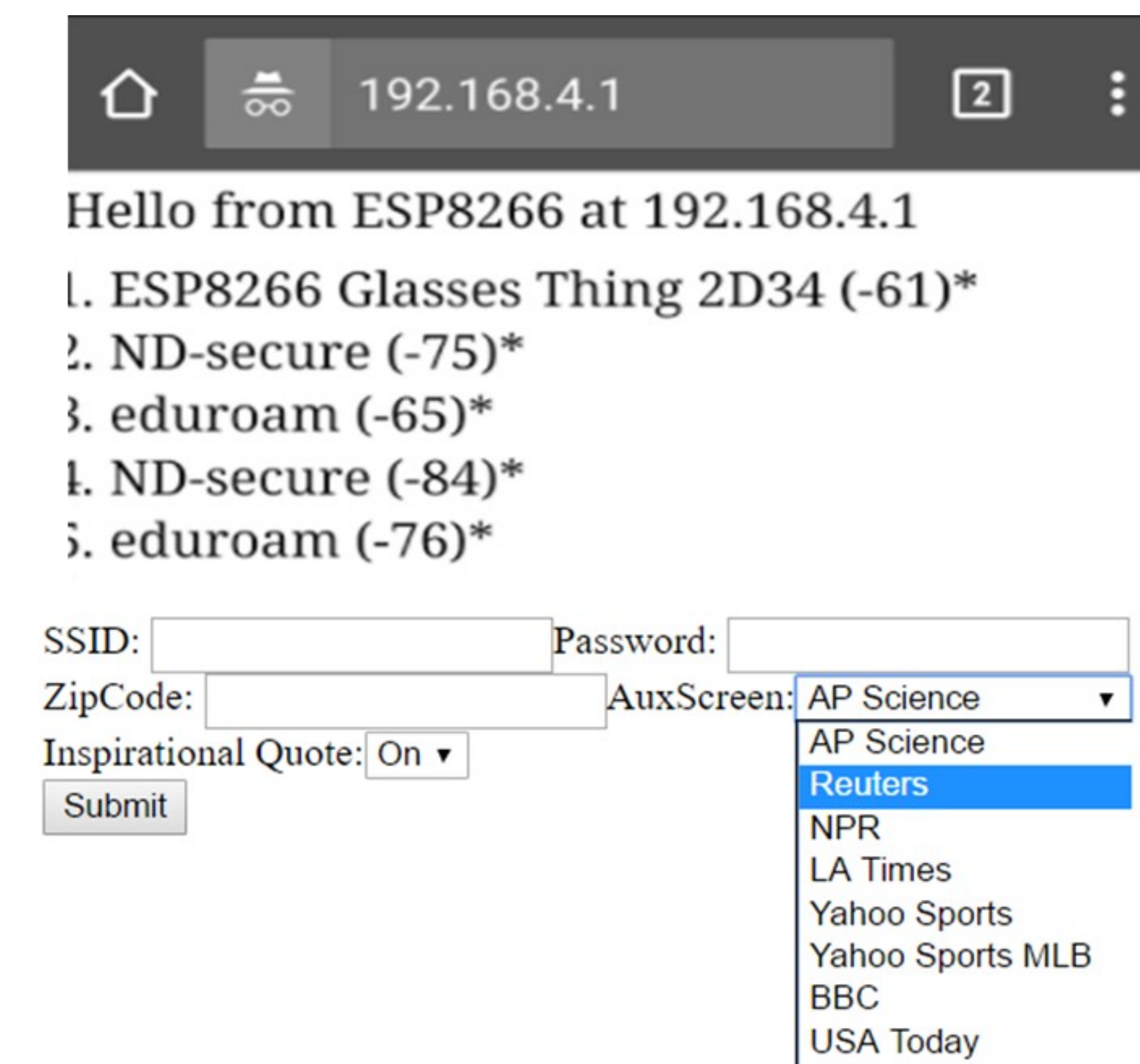
In order to facilitate the gathering of all information that is relevant to properly preparing for the day, the smart mirror gathers time, weather, and news headlines via Wi-Fi and displays to screens mounted within behind a 2-way mirror. There is an easy to use interface that allows the mirror user to input their SSID and Wi-Fi password, select for what location they want to receive the weather, and choose a news source from which they wish to receive the headlines. By concentrating the time, weather, and news on the mirror and enhancing the daily mirror experience, the Smart Mirror works to ensure a swift and efficient morning routine.

The Board Design



Mother Board

The User Interface



User Interface

Project Website

<http://seniordesign.ee.nd.edu/2017/Design%20Teams/smartmir/index.html#>