Irrigation - Hardware and Software Integration

Software members:Maria, Dvin, Chris, Ghazal, Kevin
Hardware members:Ian, Ahmed, Aaron, Synee, Mario, Victoria, Jonathan

SPI Success

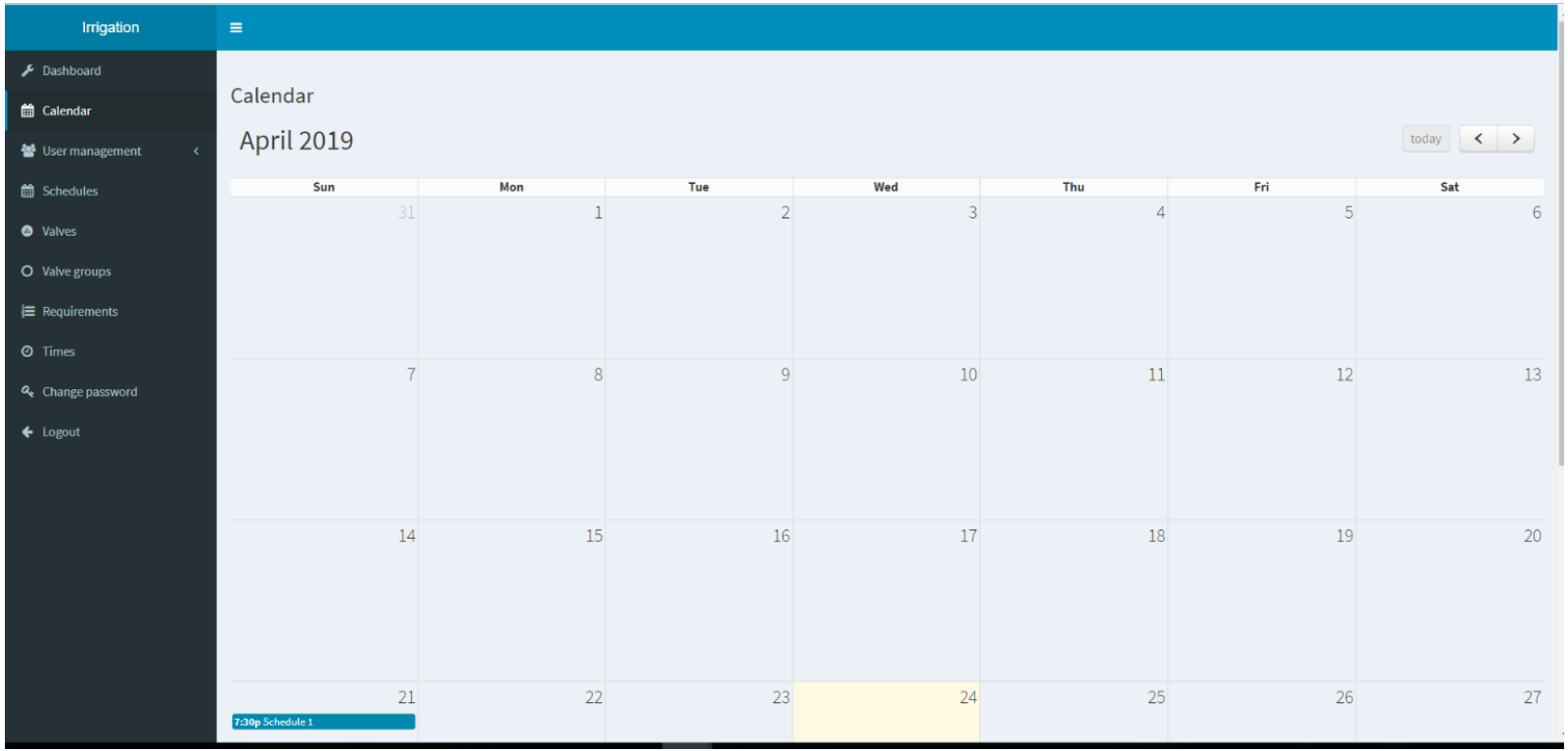
Switching to the F4 was a major breakthrough but there were many configurations attempted before success.

Keil, Atollic, CubeMX, Arduino Studio all failed

Full duplex master-slave, multi byte communication of proper messages using Raspberry Pi and F4

Success: Using mbed online compiler and modified code from translated Chinese Google.

Software Scheduling- User Interface



Software Scheduling - User Interface

Progress

- Ability to export, save as pdf, csv etc. schedule information
- Interactive calendar displaying Schedule start times
- Admin VS normal user role navigation bars
- Added menu options

Software Scheduling - User Interface

Goals

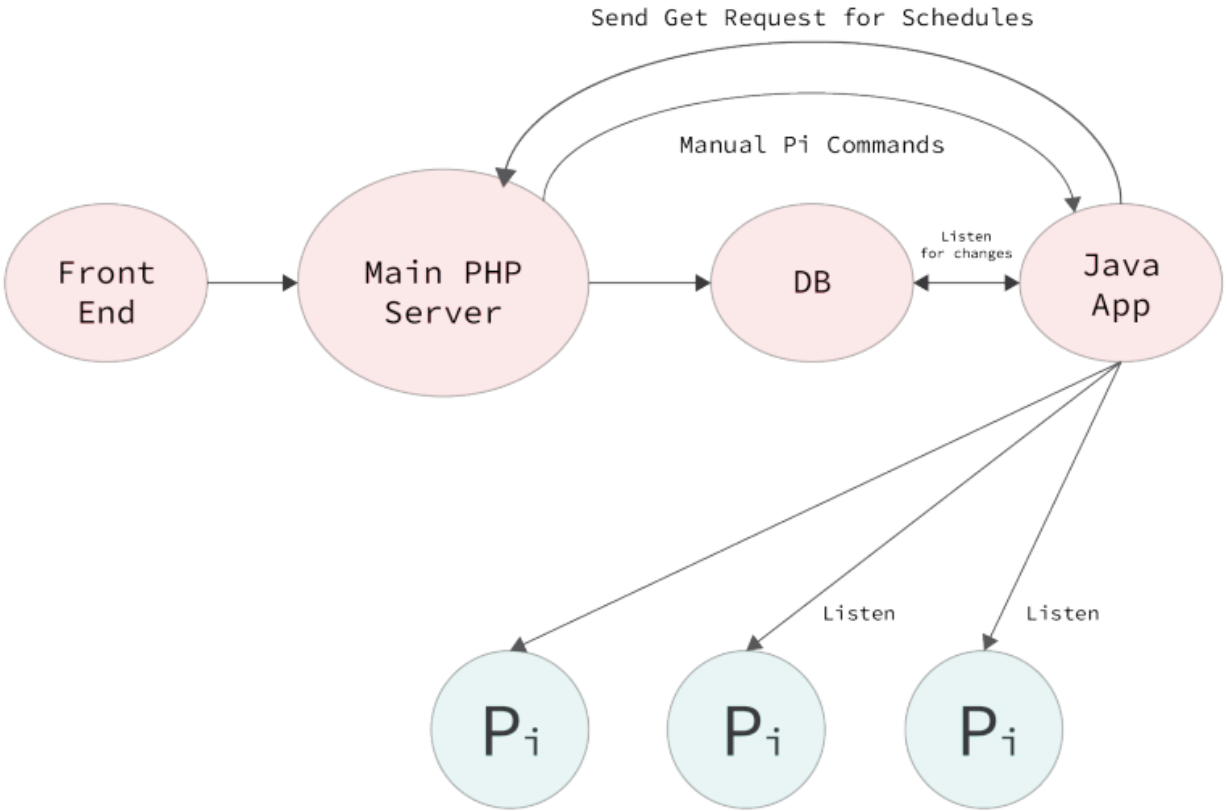
- Schedule Day view
- Condense menu options into fewer ones

Software Scheduling - Database

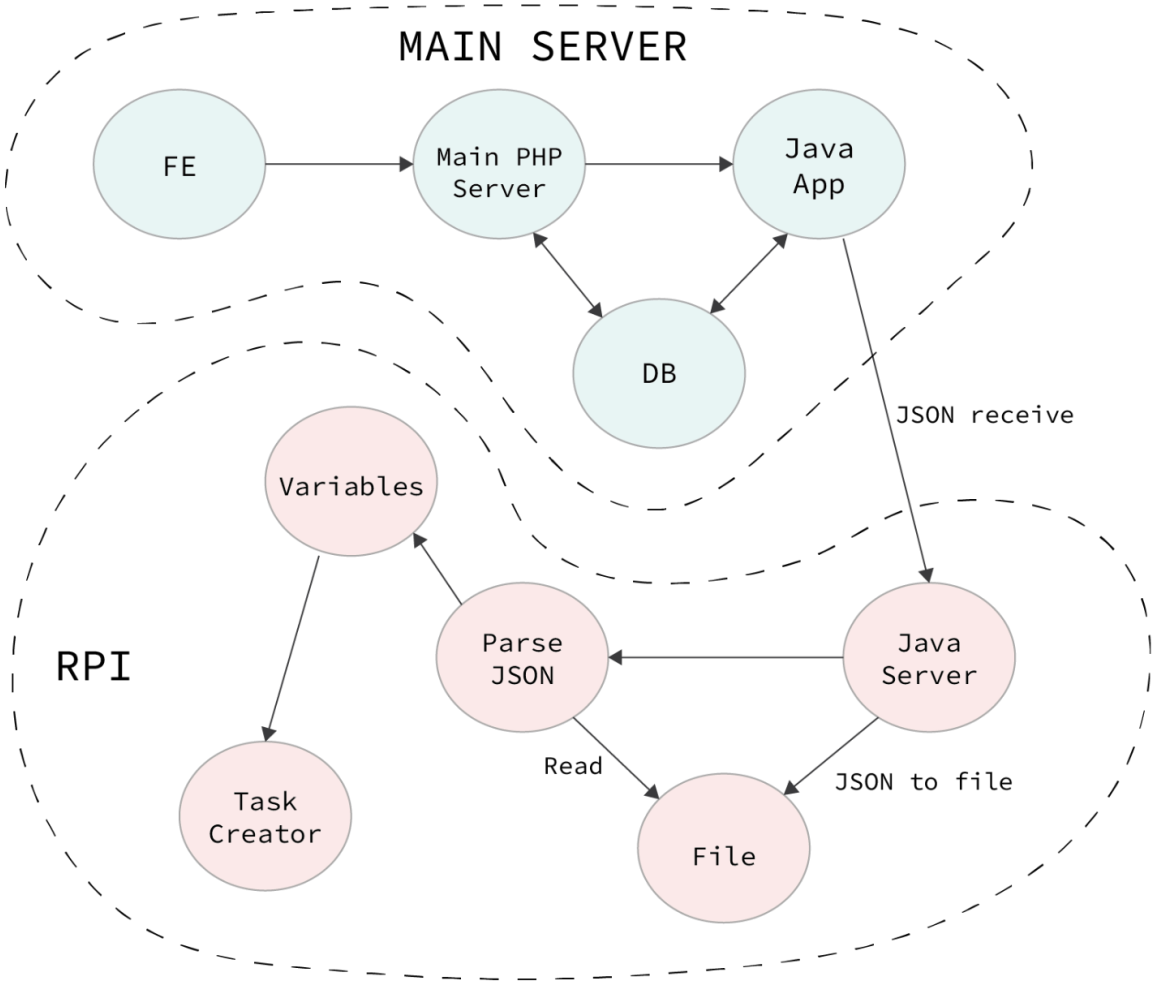
Progress

- Java app and MySQL database connectivity via JDBC
- Ability to parse database tables into JSON objects

Pi - Server - STM Communication



Software Team



Software Scheduling - Server

Progress

- Java App and PHP server connectivity via PHP/Java Bridge
- API for receiving simplified schedule data established
- Java App can successfully make get requests to server for schedules

Software Scheduling - Server

Progress

- Java client in the main server can successfully send schedules in JSON to a Java server in same network
- JSON successfully parsed in order to get valve activations (i.e. valve num, start time, volume/duration)

Software Scheduling - Server

Progress

- Java app to create Tasks based on schedule data

Software Scheduling - Server

Goals

- Convert Java JSON parser and Task creator to C
- Modify JSON schedule structure