

TEAM 8 - CODING PROJECT

GOOGLE CALENDAR FOR MAGICMIRROR

CS 499: FALL 2016
NOVEMBER 14, 2016

OUR PROJECT

- Improve Google Calendar functionality
- Allow access to shared Google Calendars
- Remember and persist login information



PROJECT BURNDOWN

- Sprint 1
 - Configure Development Environments
 - Proof of Concept Module
- Sprint 2
 - Create Google Calendar Module
 - Combine Calendar Modules
- Sprint 3
 - Testing
 - MagicMirror Pull Request

FILES CREATED/MODIFIED

- `google_calendar.js`
 - Main JavaScript file
- `googlecalendarfetcher.js`
 - Contains code to fetch and parse Google Calendars
- `calendarfetcher.js`
 - Contains mostly unchanged code from original calendar module
- `node_helper.js`
- `calendar.css` and `package.json`
 - Calendar theming and node.js package dependency information

QUALITY REVIEW

FUNCTIONAL TESTING/UNIT TESTS

- To test used both functional (end user) and unit testing
 - Functional testing- test "average case" behavior that affects the user most often
 - Unit testing- test individual aspects of the code to ensure each aspect behaves as expected

QUALITY REVIEW

END-TO-END TESTING

- User creates OAuth Token
- User creates config file
- User runs 'npm install && npm run' in root folder
- MagicMirror 'google_calendar' module performs OAuth authentication
- MagicMirror 'google_calendar' module downloads calendar data
 - Refresh occurs every 15 minutes

UNIT TESTS

- Small tests of each component before building on
 - Test that downloads work correctly
 - Test that Calendar events display on the MagicMirror UI
 - Test that their end-dates are correct
 - Test that user is asked to authenticate upon first login
 - Test that user is authenticated without prompt beyond that

TECHNICAL METRICS

STORY POINTS

- Setting up the Development Environments (1 points)
- Setting up the Raspberry Pi Environment (2 points)
- Sample Project using Google Sample Code (8 points)
- Google Calendar User Story
 - Deciding on format and Creating Specifications for Google Calendar config file (5 points)
 - OAuth with Google Calendar (10 points)
 - Downloading Google Calendars Initially (20 points)
 - Syncing Google Calendars (10 points)
- Merge iCal and Google Calendar User Story
 - Ensuring Cohabitation of iCal and Google Calendar Config Files (10 points)
 - Merging UI Modules (10 points)
 - Merging Backend Modules (20 points)
- Trying to Merge with the MagicMirror Source Code (13 points)

PROJECT WEBSITE

<https://thunderseethe.github.io/CS499/>