**CalendarSync**

(Changed from Event+)

**MILESTONE 2 README**

Proposed Level of Achievement: Project Gemini

**A.  Overview**

**1.      Project Status**

The project is looking to be completed by the end of Orbital 2018 with various features already implemented as listed in Milestone 1. As of this README, the basic app layout and user interface is already implemented, and set up for the functional implementation in the following month. We ran into problems mainly with our authentication methods and calendar libraries used, and as such the backend has not been implemented. However, we are hopeful that the more advanced features of our app will be delivered by Milestone 3.

**B.  Project Specification**

**1.      Implemented Features**

As of this README, the following features have been implemented in the app:

* UI/UX design
* Basic login and settings
* The main calendar
* Contacts and Events

**2.     Problems Encountered**

While implementing the aforementioned features, the team has encountered the following problems. Solutions to each of the problems are also disucssed in this section.

|  |  |  |
| --- | --- | --- |
|  | **Problems Encountered** | **Solutions** |
| 1. | **Lack of functionality for the Android CalendarView widget**  We had initially implemented the main calendar UI with the android calendarview widget. However, after much experimentation and research, we realized that the provided functions were insufficient for our usage. | Ultimately we adopted the a different library called the Material-CalendarView |
| 2. | **Various APIs were poorly documented and/or hard to use**  We ran into trouble with the APIs we used, including the CalendarView API and the Firebase API. Implementation using these libraries were not as simple as we had initially thought they would be, and they proved to be difficult in understanding and use | We extensively researched on our respective areas and continued experimenting with the libraries |
| 3. | **UI Design Issues**  We came up with multiple sample designs for our application, and had explored implementing each one. Oftentimes we ran into issues that arose mainly due to our lack of knowledge in these design areas | We persisted and explored our options before settling on certain UI design elements and layouts.  material.io by Google was effective in helping us understand UI design |

**3.      Course of Action**

After Milestone 2, the team plans to work on the following features:

**1. Firebase authentication**

As of Milestone 2, the Firebase login has yet to be fully developed due to the errors we encountered. We hope to promptly implement Firebase as our user authentication to allow for other dependent functionality.

**2. Sync with Google Calendar**

In tandem with our user Authentication, we will continue our work on the Google Calendar API as well to allow users to sync their Google Calendar with our own application.

**3. Advanced features**

Once we have the primary functionality squared away, we will work on more vigorous testing and also implementing additional settings and features as quality of life improvements

**4.      Technologies Used**

Our application is developed for the Android platform with the following technologies:

* Programming Language: Java
* Developer tools: Android Studio
* User Authentication: Firebase
* Additional APIs used: material-calendarview, firebase, events

**Project Log**

**Milestone 1 Main Focus:**Planning and Picking up Skills Necessary for the Project (Java and Android Studio)

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| --- | --- | --- | --- | --- | --- |
| **S/N** | **Task** | **Date** | **Orbitee 1 (hrs)** | **Orbitee 2 (hrs)** | **Remarks** |
| **1** | Pre-Liftoff Meetup | 13/5/18 | 2 | 2 | Brainstorming Project Ideas |
| **2** | Liftoff Day 1 | 14/5/18 | 8 | 8 |  |
| **3** | Liftoff Day 2 | 15/5/18 | 8 | 8 |  |
| **4** | Team Meeting and Initial Planning | 19/5/18 | 5 | 5 | 1. Brainstorming and ideas for UI 2. Delegate roles 3. Research |
| **5** | Team Meeting | 21/5/18 | 2 | 2 | Confirm final idea of app. Plan project schedule. |
| **6** | Pick up new language (Java and Python) | 21-26/5/18 | 12 | 12 |  |
| **7** | Learning Google API and Android Studio | 27/5/18 - 2/6/18 | 10 | 10 | One focus on API, One on Android Studio. |
| **8** | Team Meeting: Milestone 1 | 2/6/18 | 4 | 4 | Milestone 1 Preparation |

**Project Log**

**Milestone 2 Main Focus:** Picking up Additional Skills and working on the app prototype

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| --- | --- | --- | --- | --- | --- |
| **S/N** | **Task** | **Date** | **Orbitee 1 (hrs)** | **Orbitee 2 (hrs)** | **Remarks** |
| **1** | Working on initial prototype design | 3-9/6/18 | 2 | 2 | Brainstorming App Design Ideas. |
| **2** | Creating initial layout in Android Studio | 10-16/6/18 | 6 | 6 | Exploring multiple prototype designs for the app using fragments |
| **3** | Learning Android CalendarView Widget  and Material-CalendarView | 16-17/6/18 | 7 | 7 | Material-CalendarView was used in favor of  Android CalendarView due to the latter's limitations. |
| **4** | Learning Firebase and Events API | 17/6/18 | 3 | 3 |  |
| **5** | Team Meeting | 18/6/18 | 2 | 2 | Discussing various ideas and implementations of the app. |
| **6** | Working on our respective areas | 18-24/6/18 | 12 | 12 | Jie Liang - Worked on the events and contacts  Andrew - Worked on authentication and the calendar |
| **7** | Continue on our work and  finalizing initial prototype for Milestone 2 | 27/5/18 - 2/6/18 | 12 | 12 |  |
| **8** | Team Meeting: Milestone 2 | 1/7/18 | 4 | 4 | Milestone 1 Preparation |

**Total Hours:**

|  |  |
| --- | --- |
| **Orbitee 1 (hrs)** | **Orbitee 2 (hrs)** |
| 99 | 99 |