CP317 Assignment 1

Portable Calendar

Portable Calendar

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1.1 Purpose

Nowadays, with the rapid development of technology, digital products are becoming more popular all over the world. People often worry about forgetting the business events or appointments because of busy work. It is no longer a rarity for owning a personalized digital calendar. 'portable-calendar' application is a kind of mobile application that facilitates users to plan their daily schedule and keep track of their reminders. The user can set a reminder period and time by creating a schedule or task, and this application will remind you. The 'portable-calender' support set up a regular shutdown and alarm clock for the mobile phone. What is more, that also supports multiple cycles, times, cycles reminders for schedules and tasks.

1.2 Intended Audience

'portable-calendar' applies to most people, from students to retirees. To be specific, the majority population is mainly for the people who use the mobile phone frequently and need to manage time on a regular basis.

1.2.1: The work needs the whole view crowd, carries on the long-term task crowd.

1.2.2: People who have a weekly basis of working.

1.2.3: People who work in hours or days and have more meetings.

1.2.4: People who do not have access to paper calendars because they are probably outdoors for a long time.

1.3 Intended Use

This application not only provides intimate viewing of upcoming events but also has many practical tools such as memo scheduling activities, creating events, searching events and setting alarm. Helping people have a clear plan for a busy life.

1.4 Scope

Portable calendar is a mobile application that users can use to prepare their daily events and set the notifications to remain users of some important events. What is more, they also can use the application to search for some important events. This application will have Ios and Android version.

1.5 Definitions and Acronyms

Portable calendar, this application is based on the ionic platform development, supporting Android and IOS two systems. It is mainly used to help people reasonably plan their time and schedule. It also incorporates other functions, such as alarm clock, memo and search. At the same time, it supports multiple languages and is convenient for people around the world to use.

User:

This calendar is suitable for people engaged in various professions. Users can customize festivals, tasks and reminders. For example, students can use it to remind themselves of the courses and assignments. Office workers can record meetings or tasks on time.

Events:

The app will automatically display important festivals and events that the user has set.

Alarm:

After the user sets the event, the app will turn on the alarm clock or automatically send an email to remind the user.

Language:

After user choose the language, app will translate all the content to the language that user set.

2.2 Assumptions and Dependencies

1. Use of the cross-platform framework Ionic will reduce the workload of developers for multi-platform difference adaptation and reduce the development cost.

2. Users will be able to use the application on both IOS and Android systems equally well.

3. Official administrator is not required for the project.

3.1 Functional Requirements

3.1.1 Use cases and Descriptions

View Upcoming Events

The *View Upcoming Events* use case allows users to view the most recent events in one week created by the *Create Event* use case. The users can view the details of those events including

title, start time, end time and location. This use case also enables the users to delete a specific event they have created.

Create Event

The *Create Event* use case is one of the core functions of Portable Calendar. It allows users to add a personalized event to the homepage and view it from there. The steps of this use case are as follows:

> 1.Determine the title of this event.
>
> 2.Set the location of this event.
>
> 3.Set the start date, start time and end date, end time of this event.
>
> 4.Choose whether an email notification of an alarm is needed.
>
> 5.Integrate step 1 to step 4 into one event and add this event to the homepage. Failing to give enough information will lead to the message "Fail to create event"
>
> 6.If the event is successfully created, a toast will be generated and redirected to Calendar Page.

Set Alarm Preference

The *Set Alarm Preference* use case enables users to choose between three kinds of alarms including Mute, Vibrate and Sound.

Search Event

The Search Event use case is a convenient tool to help users find a specific event they are looking for. It will return the events that satisfy the conditions applied by the users.

> 1. Enter the specific date, location or event title.

2.Display all the events meeting the conditions or display an error message if no result is

found.

Choose Language

To meet the needs of users with different languages, we develop this *Choose Language* use

case. It contains several most frequently used languages for users to choose from.

Email Setting
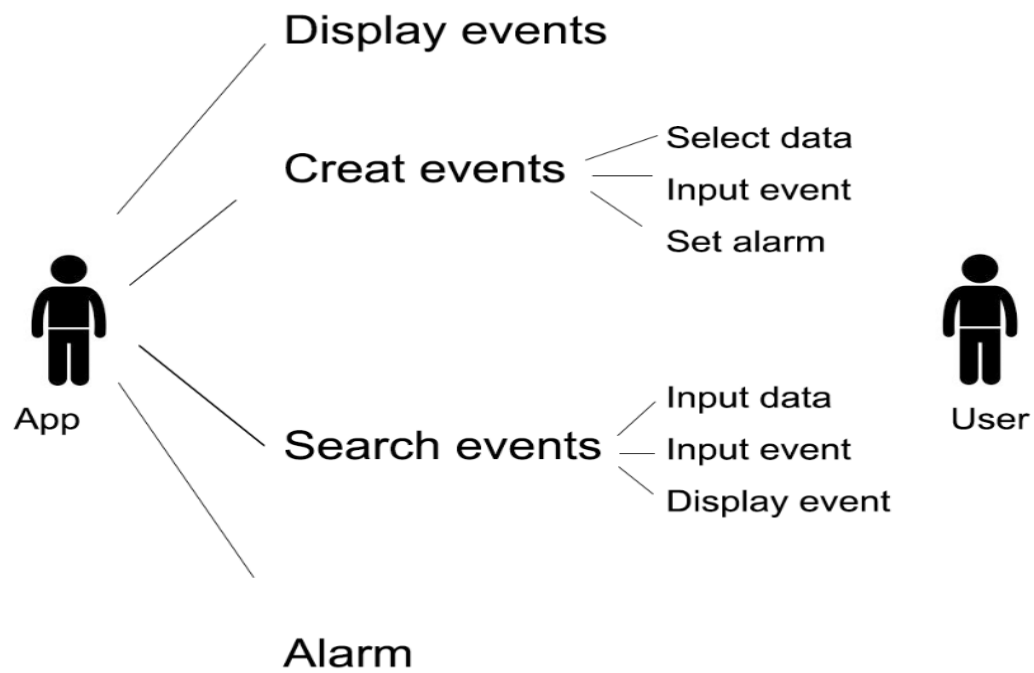
Users can set their email for notification through this use case. It enables the *Create Event* use

case to send emails to the appointed address.

Dark Mode

Users can change the theme of the Portable Calendar through *Dark Mode* use case. It aims to

improve users' experience by protecting users' eyes in dark environment and saving energy

consumption.

3.1.2 Use Case Diagram

Display events

Creat events
— Select data
— Input event
Set alarm

Search events
Input data
— Input event
Display event

Alarm

App

User

3.2 External Interface Requirements

Hardware Interfaces:

    The API should execute on both IOS and Android.

Software Interfaces:

    Need to build data sharing with clock, email and translator.

3.3 System Features

3.3.1 Event:

Describe: Creating events. Set start time, end time and location etc. event details according to the title and options.

Priority: Highest

Note: see section 3.1.1 "Create Event".

3.3.2 Calendar

Describe: Visualize events. Providing an overview of future events, and events can be searched or deleted.

Priority: High

Note: see section 3.1.1 "View Upcoming Events" and "Search Event".

3.3.3 Function Setting

Describe: Setting functions for the events such as email notification, alarm, language and dark mode.

Priority: High

Note: see section 3.1.1 "Set Alarm Preference" "Choose Language""Email Setting" and "Dark Mode".

3.3.3 Function Setting

Describe: Setting functions for the events such as email notification, alarm, language and dark mode.

Priority: High

Note: see section 3.1.1 "Setting Page".

3.4 Nonfunctional Requirements

Interface requirement

The interface of this calendar is beautified based on the traditional calendar interface. Users can choose different styles, such as night mode and special interface skin. Make the calendar special, beautiful, and simple from vision.
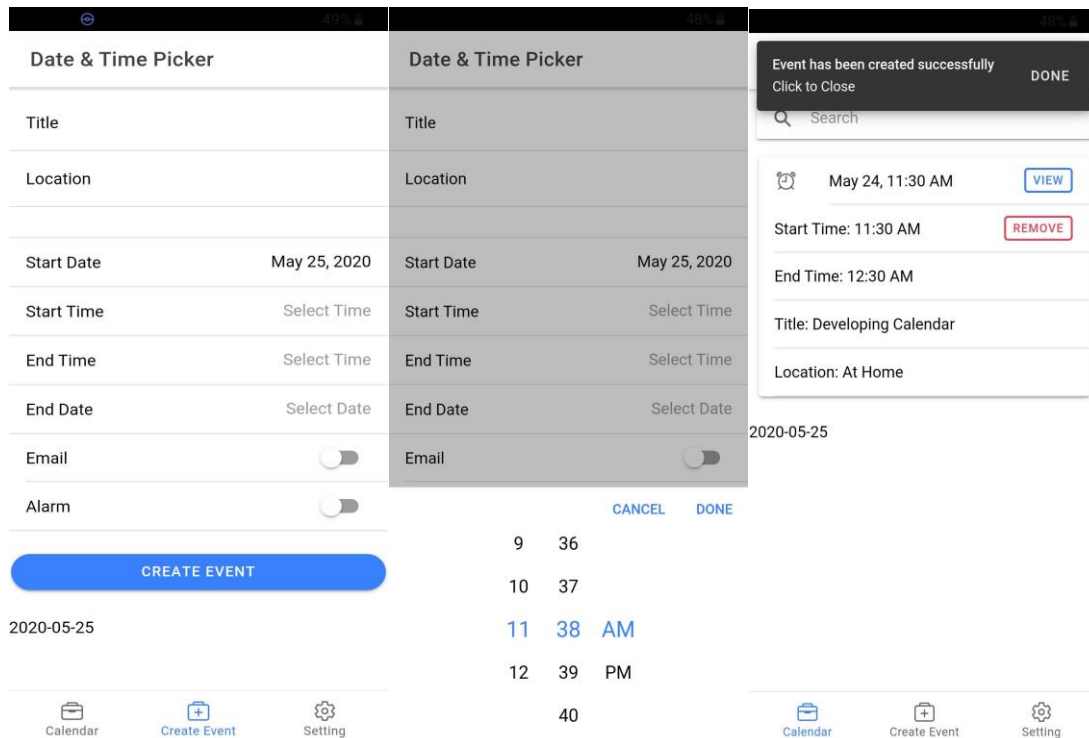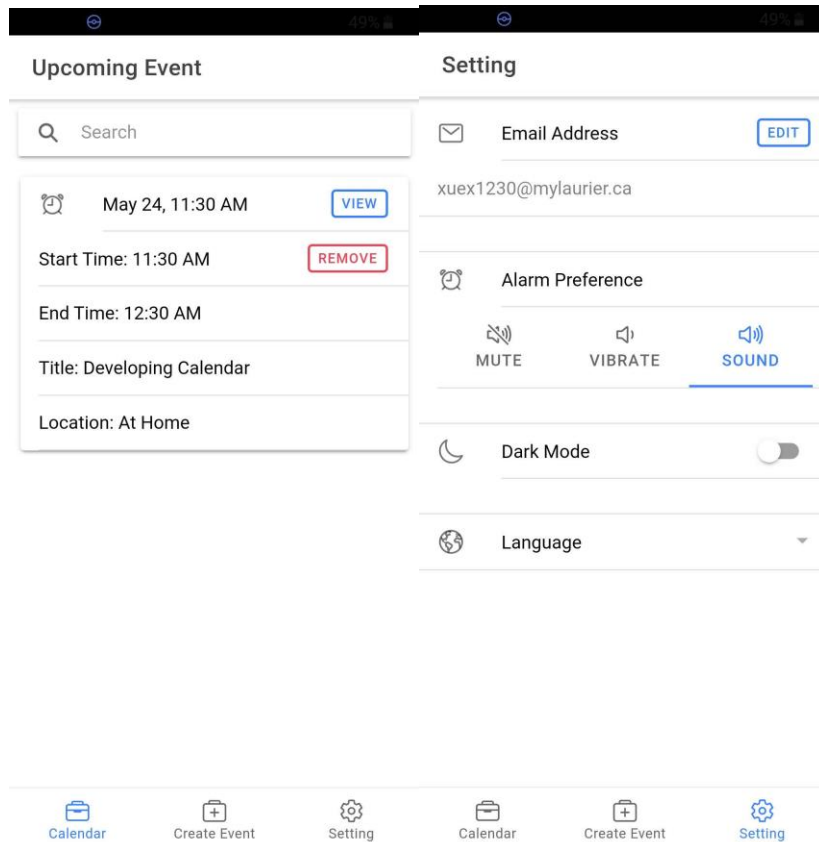
EU requirement

Keeping the traditional operation habit of the calendar makes the users adapt more quickly. And show tips while users first use this calendar. Also, it will make appropriate changes according to the local culture and support for multiple languages.

Security requirement

Keep users' privacy strictly confidential.

4. Graphical User Interface

Upcoming Event

🔍 Search

⏰ May 24, 11:30 AM   [VIEW]

Start Time: 11:30 AM   [REMOVE]

End Time: 12:30 AM

Title: Developing Calendar

Location: At Home

Setting

✉ Email Address   [EDIT]

xuex1230@mylaurier.ca

⏰ Alarm Preference

🔇 MUTE   🔉 VIBRATE   🔊 SOUND

🌙 Dark Mode   ⬤○

🌐 Language   ▾

Calendar | Create Event | Setting   Calendar | Create Event | Setting

Date & Time Picker

Title

Location

Start Date   May 25, 2020

Start Time   Select Time

End Time   Select Time

End Date   Select Date

Email   ○⬤

Alarm   ○⬤

CREATE EVENT

2020-05-25

Calendar | Create Event | Setting

Date & Time Picker

Title

Location

Start Date   May 25, 2020

Start Time   Select Time

End Time   Select Time

End Date   Select Date

Email   ○⬤

CANCEL   DONE

9   36

10   37

11   38   AM

12   39   PM

40

Event has been created successfully   DONE
Click to Close

🔍 Search

⏰ May 24, 11:30 AM   [VIEW]

Start Time: 11:30 AM   [REMOVE]

End Time: 12:30 AM

Title: Developing Calendar

Location: At Home

2020-05-25

Calendar | Create Event | Setting

Link to Github: https://github.com/HelloElijah/CP317-Calendar.git

5. Declaration

All of us done the survey