

General Project Outline: Nov. 9 Checkpoint

Group 12: Daily Journal

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Application Concept

This application will serve as a daily log for the user, where each day, they can store a variety of media to express how that day in their life went, as to remember and reflect on it later. This media includes a voice memo, picture/video, or text box as a sort of journal entry, and the user can use a combination of all three on any day.

Key Functionality

Upon opening the app, the user is brought to the entry of the current day. In the bottom right corner, they have access to an 'add' icon, where they click it and choose what type of entry to add to the particular date.

They can proceed to add the desired material for the specific date. After adding, if they decide they want to remove a particular entry, they can also do that.

The user can click on the header that has the date displayed to reveal a monthly calendar. From this view, they can navigate to past months to add entries from days before, or view the calendar for days after, but will not be able to add content for days that are past the current date.

Rough Architecture/Android System Components to implement

Two main activities. One will be the ListingActivity and the other will be the CalendarActivity.

For the Calendar Activity, we might either implement the calendar ourselves, or possibly see if there's a prewritten widget. We need a customizable calendar to show which days have entries, besides being a general calendar. Otherwise, it's mostly a fragment that contains enough rows of buttons, along with some TextViews at the top for info, and buttons for switching between months. Possibly we'll have a swipe from side to side to go between months instead of using buttons.

The Listing Activity needs more stuff. The main ListingFragment needs to be able to particular ListItems, which are different fragments for different types of entries. Basically, one for images, one for video, one for text, and one for music. Inside that (beside the time TextView on the left) is a widget for that type of media. Image and text should be relatively simple, however video might require getting a separate Video Viewing widget. Sound should probably have such a widget, though it may be possible to implement that ourselves.

Outside of the ListingFragment are the floating material design style buttons. When tapped these need to spawn the other buttons. Each of these will open something. The Text one should open an incredibly simple third Activity that consists solely of a textbox. The Audio one will open a fourth Activity/Fragment that consists of a record then stop button -- this may already exist as a widget we can pull from. Video and Picture may end up as a single button and activity, or two, consisting of asking Android with an Intent to open a camera to take pictures and/or video with. It depends on whether they need to be separate or if you can choose whether to take a picture or video in a single view.

The data will be stored in a folder stored on external memory, and the app will refuse to work without that permission. That folder is the internal application specific folder existing within "/sdcard/Android/data/". Inside here, we can store each of the pictures, video, and audio we record. However, we should use a database to store the text and what media are under each day. That ease, basically day keys that point to a list of objects within a day, each of which contain a time and either a pointer to a piece of media inside that folder, or just the text entry. These should ultimately be passed to other code as an ArrayList of entry objects for the ViewAdapter to show.

At the top of the screen, the date exists also as a button to go to the Calendar Activity. The two arrows are buttons to navigate to proceeding/following days without using the Calendar Activity. The next button will be disabled/greyed out if the view is on the current day, and the previous button will be disabled for days before the beginning of unix time. We may also implement a swiping from side to side feature like gmail, so that pressing the buttons aren't necessary.

Work Items:

Sapna

- Navigation between views
- Backend development of adding media

Simon

- Current Date view set up
- Frontend integration of views with backend

Nick

- CalendarView set up

Storyboard

