

TBD (To Be Done) Documentation

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Major Features/Screens

Adding/Updating/Deleting Tasks

Tasks can be added from the AddTaskActivity

- Tasks include fields for title, date, time, tags, importance, description, and audio note file paths

Tasks can be updated and deleted from the TaskDetailActivity

- Task fields are displayed and can be directly edited other than modifying the audio note

Creating/Populating Custom Tasks Lists

- Custom task lists can be created from the main activity. Premade task lists include all tasks, today, this week, academic calendar, and someday.
- Lists are populated based on the criteria (all tasks, today, this week) or the name of the list which is stored as the primary tag for each task (academic calendar and custom task lists). This serves as the filtering of tasks.
- Tasklists can be further narrowed down by using the search bar at the top. It will search for occurrences of the search term in the titles of tasks as well as in the tags.

Calendar with Task List

- Calendar can be used to select date for which all tasks of the date are displayed in a listview below. Task details can be accessed by clicking the tasks from the listview.

Optional Features

Microphone / Audio Management (15 pts)

Audio management is used to record and playback short audio notes for each task. Recording is accessed AudioRecordActivity which can be reached through AddTaskActivity. Audio notes are saved in internal storage and the filepath is saved to each task. Notes can be played back in TaskDetailActivity.

Data Storage using SQLite (20 pts)

Data storage using SQLite is done through the Room Architecture. Tasks and TaskLists are saved in separate tables in a single database. Lists and tasks are populated by pulling from the database. This feature is integrated into most activities.

Consume Pre-Built Web Service (15 pts)

Academic calendar events are saved as tasks on first start of application. These are parsed from a JSON of events for Spring 2018. This JSON would be updated per academic year and included in each subsequent release.

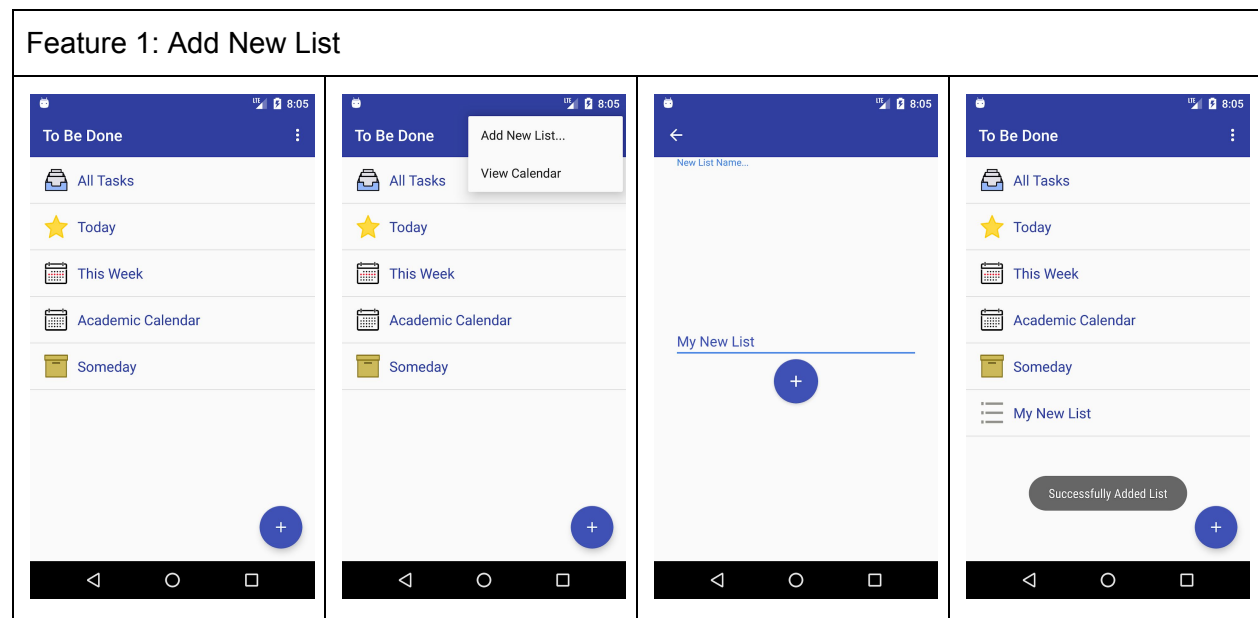
Usage:

There are no specific instructions required for using this app, it is designed to be as intuitive as possible

Notes:

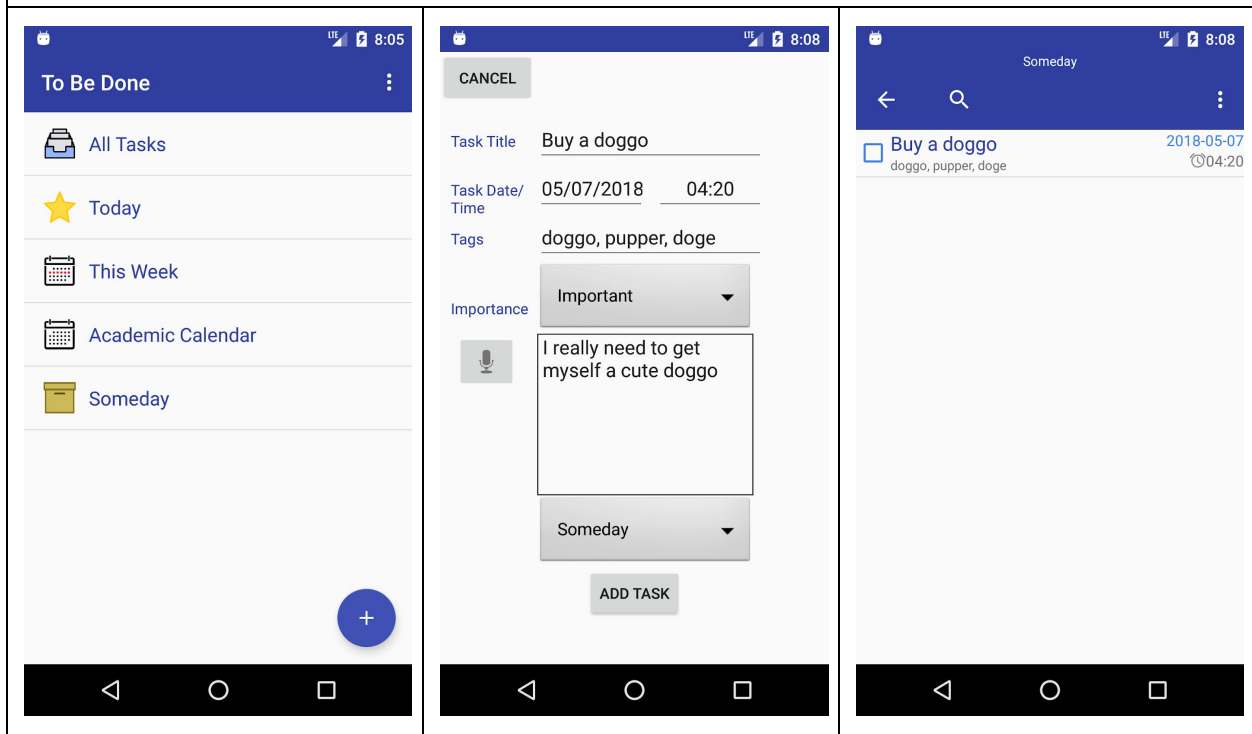
- When editing tasks, the importance will only be changed if the edittext is set to “Low Priority”, “Normal”, “Important”, or “Very Important”. Otherwise the original importance is retained
- Tasks tagged with the primary tag of “Today” or “This Week” will show up in these lists even if they are not actually within those parameters. This is intentional in case the user wishes to keep a particular task in that list

Selected Features and Corresponding Screens



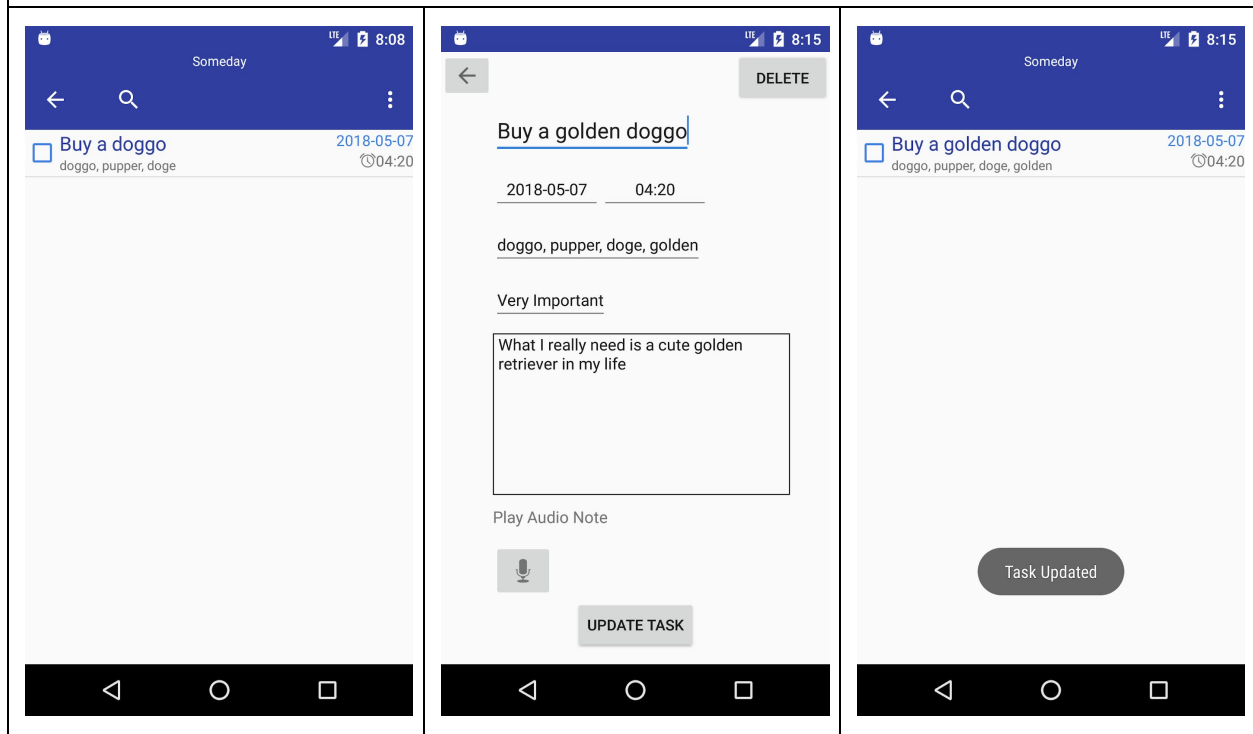
A major feature of our app is to let users add and delete custom lists in which they can organize their tasks. As shown in *Feature 1*, a user is able to click on the top-right menu and select “Add New List...” This will show a new, simple activity in which the user simply types their desired list name. After typing the name, all the user needs to do is click on the add button and their list will be added to the main screen. If a user attempts to add a duplicate list, a warning will be shown. Otherwise, a toast is shown to verify that the list had been successfully added.

Feature 2: Add Tasks To Selected List



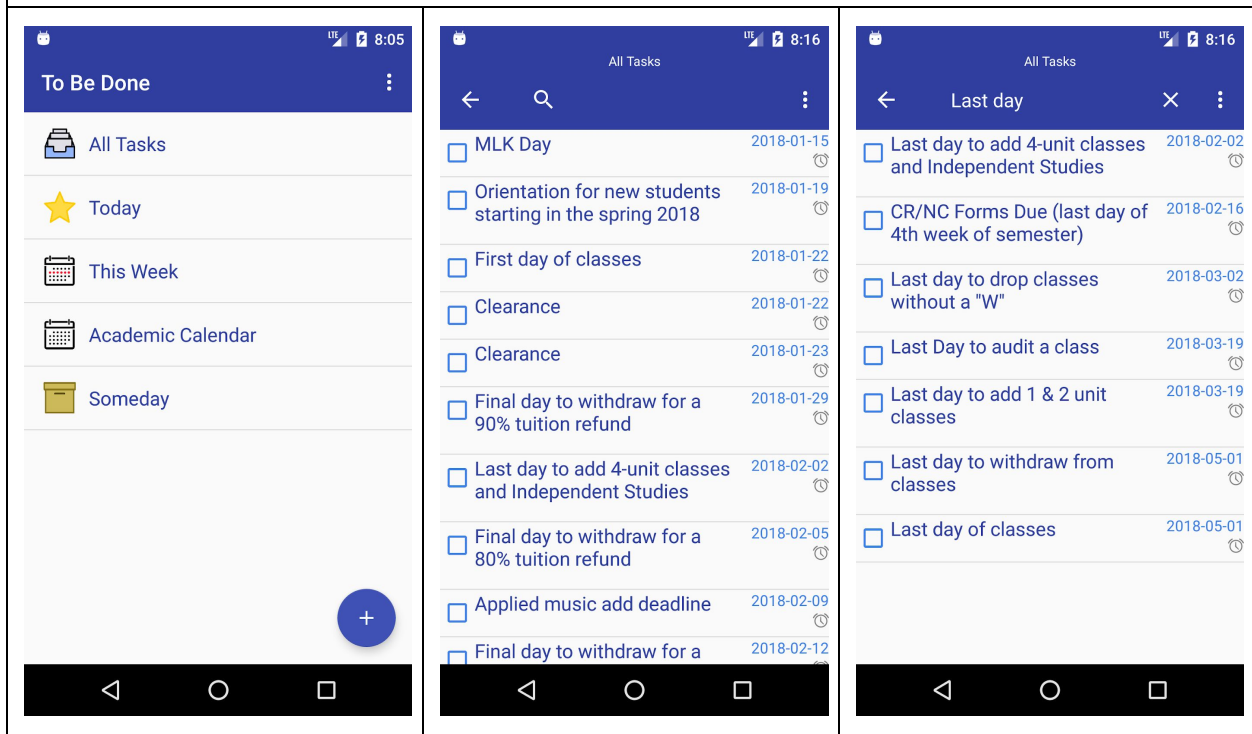
As part of the customization of a user's tasks, they are able to specifically choose which main list they want to store their tasks as shown in *Feature 2*. In the (*shown middle*) add task activity, a user is able to select the list they wish to use, if no list is selected, then the task will be automatically added to the "All Tasks" list by default. The user is able to know the list they are using by the list name at the top (*shown right*). If the user has completed their task, they can simply check on the checkbox. If they leave the list, the task will be successfully completed and deleted from the list, if they choose to not complete it, they can simply uncheck the checkbox and the task will remain as long as they remain within the list.

Feature 3: Edit and Update Tasks



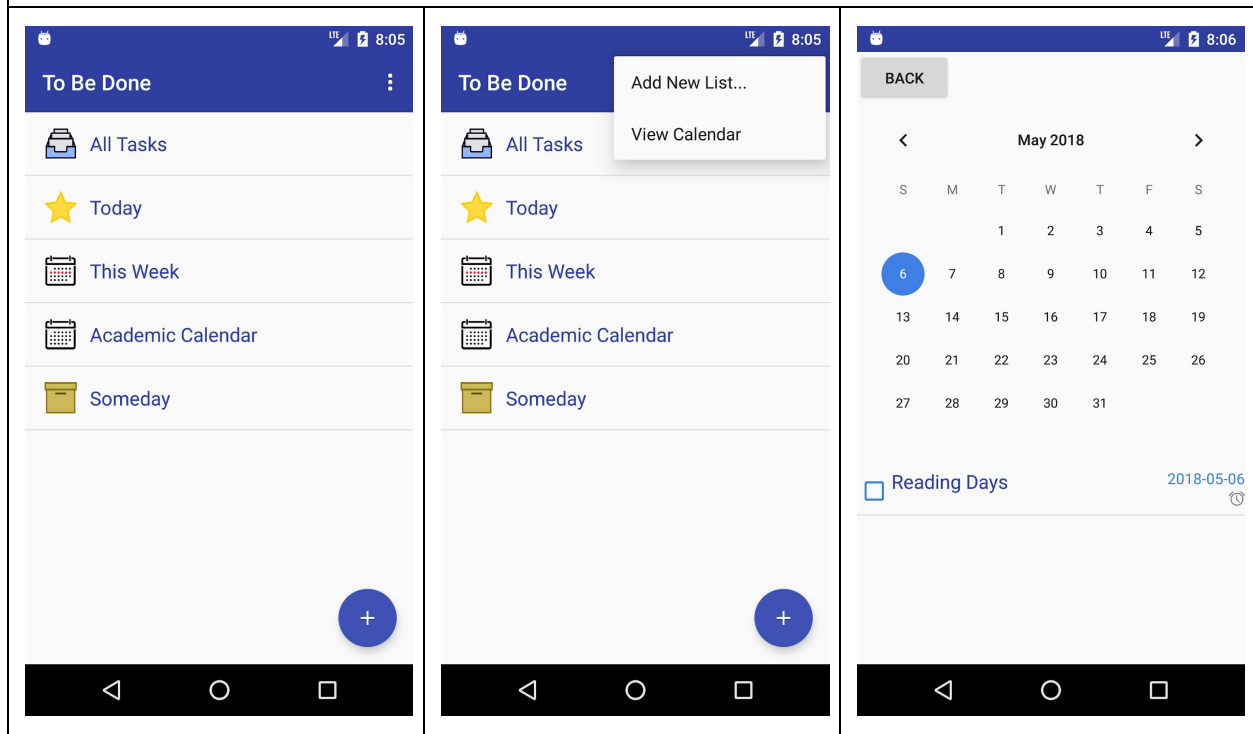
Sometimes users can change their minds about what they need to do, when they need to do it, and how important it is to get it done. To create a better user experience, a user is able to select their desired task and an edit task (*shown middle*) activity will show. The user is able to edit their task and update it (*shown right*). Note that in the edit task activity, the user has the ability to “delete” the task. This is different than completing the task, this just means that they want to get rid of the task. This checkbox functionality is to enhance user experience by providing an “accomplishment” feeling.

Feature 4: Search Through Tasks



Due to their busy nature, a user might end up having hundreds of tasks within each of their lists. Because this can get out of control, sometimes scrolling through long lists can be a tedious process. Especially if the user finds itself in the “All Tasks” list. As a result, in order to enhance this user experience, the user is able to use a search bar to search for tasks. The tasks are found using keywords or key phrases, allowing the user to find their tasks faster.

Feature 5: In-App Calendar



A good way to keep track of a user's tasks in an intuitive way is to display a calendar. This calendar shows the user's tasks based on their date. Additionally, since the app automatically pulls the dates of events from the Oxy academic calendar, these events are already in the calendar for the user to see. The user has the ability to edit and update these events as if they were their own tasks. This allows the user to choose which events they most care about.

Resources:

Calendar

https://www.youtube.com/watch?v=5WVEbU_bTeg&ab_channel=AnggaRisky

SQLite with Room

<https://codelabs.developers.google.com/codelabs/android-room-with-a-view/#0>

<https://developer.android.com/training/data-storage/room/index.html>

<https://code.tutsplus.com/tutorials/android-architecture-components-room--cms-29946>

<http://thetechnocafe.com/how-to-use-room-in-android-all-you-need-to-know-to-get-started/>

Microphone/Audio

<https://developer.android.com/guide/topics/media/mediarecorder.html>

<https://developer.android.com/training/data-storage/files.html#java>

Time and Date Picker

<https://developer.android.com/guide/topics/ui/controls/pickers.html>

<https://www.tutlane.com/tutorial/android/android-timepicker-with-examples>

<https://stackoverflow.com/questions/22807226/time-picker-showing-time-like-47-instead-of-0407>

<https://stackoverflow.com/questions/41356279/how-to-get-current-year-in-android>

Easier Sorting

<https://stackoverflow.com/questions/1814095/sorting-an-arraylist-of-objects-using-a-custom-sorting-order>

<https://stackoverflow.com/questions/762400/how-to-display-all-elements-in-an-arraylist>

<https://stackoverflow.com/questions/15085608/how-to-sort-an-arraylist-of-date-in-ascending-and-descending-order-which-is-in-s>

MISC

<https://stackoverflow.com/questions/10576930/trying-to-check-if-a-file-exists-in-internal-storage>

<https://stackoverflow.com/questions/15061653/run-a-piece-of-code-only-once-when-an-application-is-installed>

<https://stackoverflow.com/questions/27417111/getting-wrong-position-after-filter-listview>

<https://stackoverflow.com/questions/14210508/how-to-make-a-relative-layout-scrollable-when-it-has-many-children-views>