



AMERICAN UNIVERSITY IN DUBAI

SCHOOL OF ENGINEERING

DEPARTMENT OF ELECTRICAL & COMPUTER ENGINEERING

ECEE 457 – Mobile Applications

Project Documentation

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Table of Contents

ABOUT..... 3

BASIC INSTRUCTIONS..... 3

SPECIAL INFORMATION..... 6

LESSONS LEARNED 7

ABOUT

Name of the Application: Deadline

By: Danah Hamadeh

For a pre-populated list:

Username: trial@hotmail.com

Password: 123456789

BASIC INSTRUCTIONS

When the app first starts up the login/signup activity is the first one to be displayed portrayed in figure one. If an invalid username or password is used while trying to sign up a toast message as seen in figure two will pop up saying Invalid Username or Password. If the user is trying to log in but there exists no username in firebase, or it's an incorrect password, a toast will also show as shown in figure three

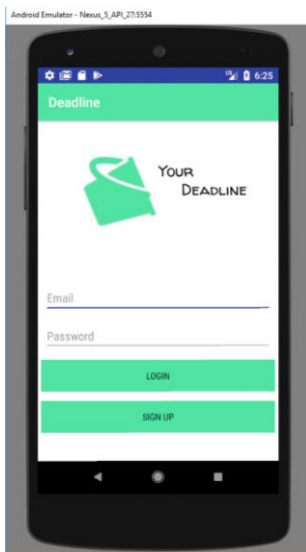


Figure 1: Login/Signup activity

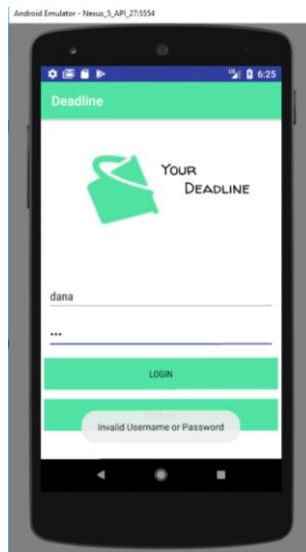


Figure 2: Invalid username/password while signing up

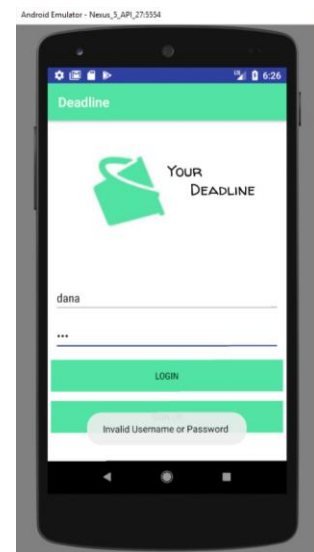


Figure 3: Authentication failure during log in

After successfully logging in, the app will start a list activity with the tasks' title and date, displayed in figure four . However, if the user just signed up their list activity would still be empty. The action bar shown in figure five contains a logout and a help button. Logging out will take you back to the login/sign up activity, while pressing on the help will provide you with a toast telling you to either add or edit an item as seen in figure six.

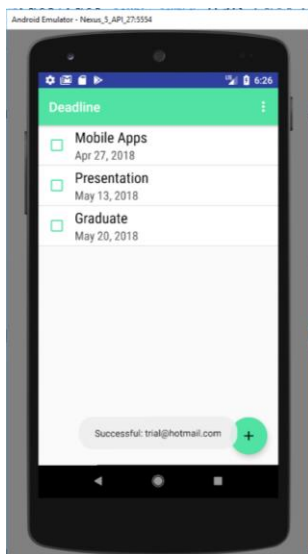


Figure 4: success logging in, list activity is shown

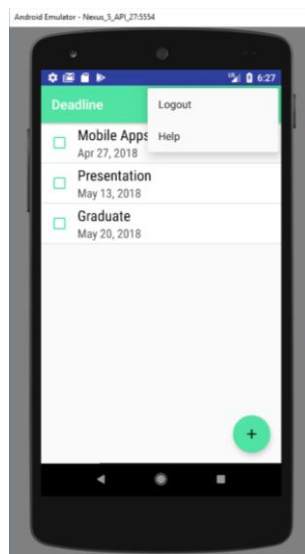


Figure 5: Logout and Help in the action bar

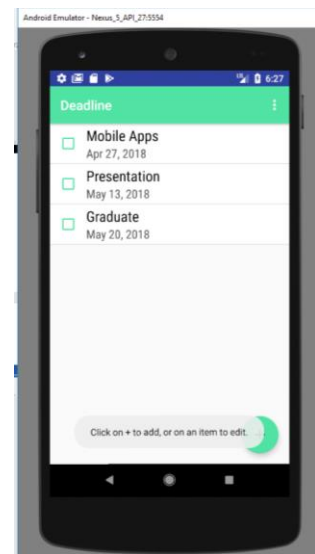


Figure 6: Toast when help button is clicked

When the floating button (add button) is clicked the add activity would start. As seen in figure seven, the activity provides you with fields to enter a title, description, date, and a location. When clicked on the date button as seen in figure eight, a date picker would show allowing the user a calendar view when choosing a specific deadline. Once the fields are set a user can save or press the back button and cancel the new task. A user cannot save a task without providing a title, as the app would notify that a title is required.

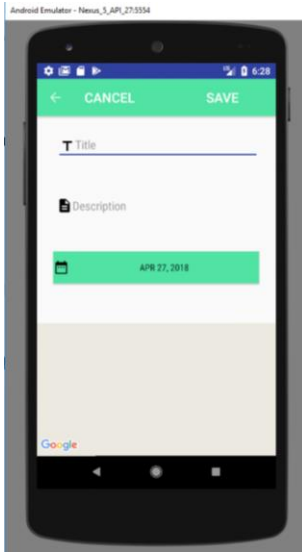


Figure 7: Add activity

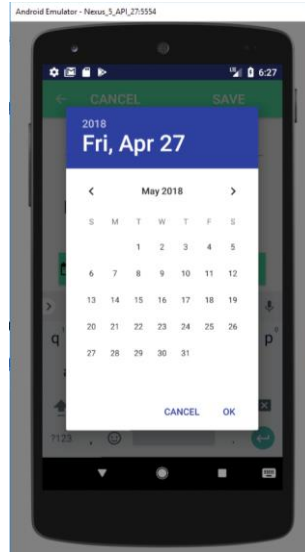


Figure 8: Date picker

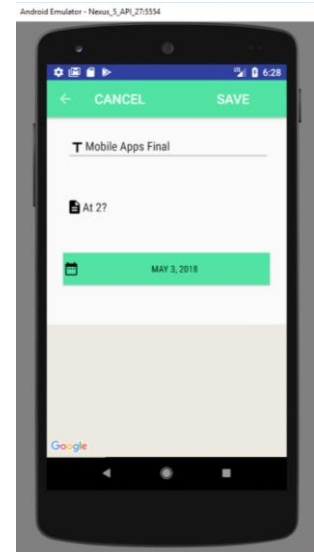


Figure 9: Filled in add activity

Once a user clicks on the save button, the app will go back to the list activity showing the new task added. All the tasks are sorted according to date where the soonest is on top as seen in figure ten. Figure eleven shows how when a task is checked it directly goes to the bottom of the list.

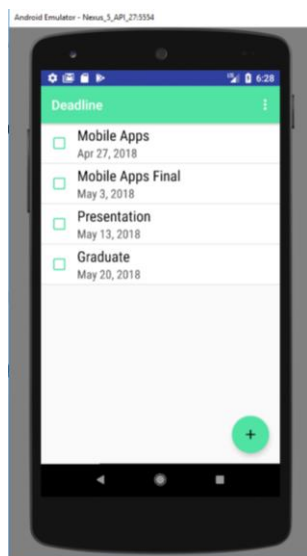


Figure 10: List view with added content

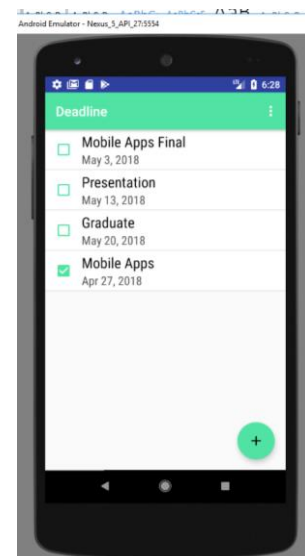


Figure 11: Checked task moved to the end of the list

When a user clicks on an item from the list. The edit activity would start. The edit activity is the add activity with the fields already populated, however after a user clicks on save the task would not be added again but rather updated and shown again in the list as the modified version, shown in figure fourteen.

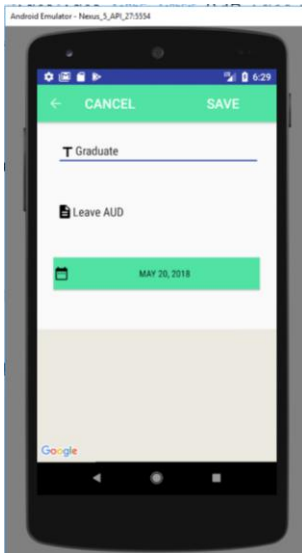


Figure 12: Edit Activity

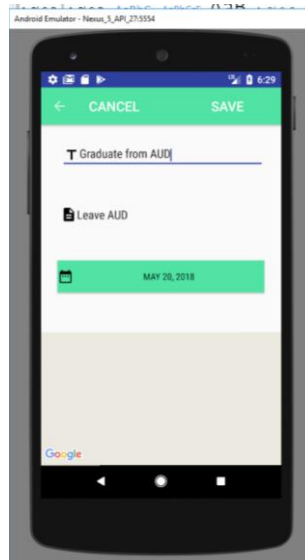


Figure 13: Modifying task

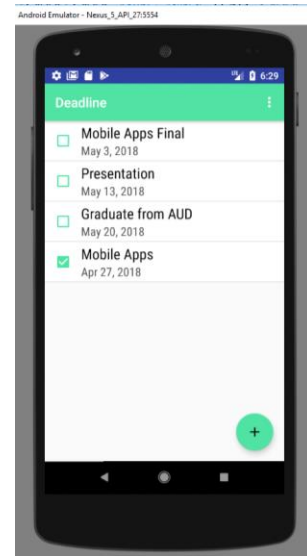


Figure 14: Modified task added to the list

SPECIAL INFORMATION

Google maps would not show on any virtual device unless the emulator has a Google Support API. In the SDK Manager you should install system image with Google APIs support as seen in figure fifteen. Otherwise, using any android phone would work just as fine.

Android 6.0 (API 23)			
Documentation for Android SDK	23	1	Installed
SDK Platform	23	2	Installed
Samples for SDK	23	2	Installed
Android TV ARM EABI v7a System Image	23	2	Not installed
Android TV Intel x86 Atom System Image	23	2	Not installed
Android Wear ARM EABI v7a System Image	23	1	Not installed
Android Wear Intel x86 Atom System Image	23	1	Not installed
ARM EABI v7a System Image	23	3	Not installed
Intel x86 Atom 64 System Image	23	8	Not installed
Intel x86 Atom System Image	23	8	Not installed
Google APIs	23	1	Installed
Google APIs ARM EABI v7a System Image	23	7	Installed
Google APIs Intel x86 Atom_64 System Image	23	12	Installed
Google APIs Intel x86 Atom System Image	23	12	Not installed

Figure 15: Installing Google API

LESSONS LEARNED

- How to work with authentication using firebase.
- Working with saving information in firebase then retrieving it.
- How to populate a list with the information retrieved
- Editing the information retrieved and updating the firebase as well as the list
- Understood and utilized google maps in an application
- How a certain location can be converted into longitude and latitude
- Having a certain field always show the current date rather than being empty, and a user choosing the date
- Adding menu and items to an action bar
- How to add more than one button in a toolbar
- How to change colors of both the action and tool bar
- Working with Boolean concerning if the checkbox has been checked or not
- Changing the color and size of a checkbox
- Understood and used the two functions for sorting a list where one sorts according to soonest date, and another sorts if a task has been checked or not.
- Working with floating buttons. They are exactly like any other button but appearance wise looks much better.
- Avoid having crashes by constantly having a toast whenever a field is empty.
- Understanding that a simple user interface is the best kind of interface.
- Similar to the user interface, the simple user experience, the better.