



CS 442: Mobile Applications Development

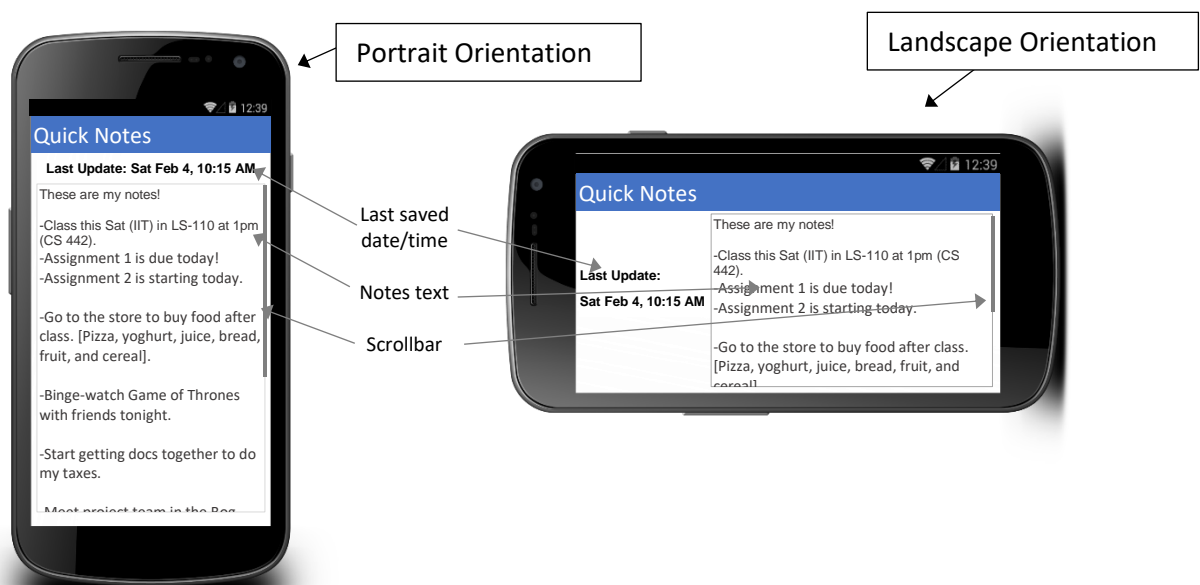
Assignment 2 – Note Pad

Your assignment is to create a Note Pad app as described below.

Uses: File System, State Saving, Alternate Landscape Layout

App Requirements

- The app should act as a simple note pad, allowing the user to enter text notes.
- The note pad should display the last update date/time (which is the last save date/time – this should be saved when the note is saved - not entered or editable by the user).
- Note text (and the saved time) should be automatically saved when the user presses the back arrow, home button, etc. – any time the app goes into the **Stop state**.
- Note text (and the saved time) must be saved to the device's *internal* file system. You should use a JSON file to do this – no other options should be used.
- Note text (and the saved time) should be automatically loaded when the app goes into the **Resume state**.
- If no saved data file is present, the app should startup with no text and the current date/time displayed as the Last Update time. This startup with no saved data file situation should not result in any errors.
- The note text on the screen should have a scroll bar, because the text entered can be longer than the displayed area.
- *The app must use a different layout for landscape orientation* (different than the portrait orientation layout) – shown below. All data content must be present in both portrait and landscape orientations.
- Contents and practices discussed in class must be followed.
- The below is an example of how the app *should* look. Note, you do NOT need to make yours look *exactly* like this, but the content here is limited to try to keep variation minimal.





Assignment Assistance

The TAs for our course is available to assist you with your assignment if needed. Questions on assignment requirements and course concepts can be sent to the instructor.

Submissions & Grading

- Submissions must consist of your zipped project folder (please execute Build → Clean Project before generating the zip file). Submissions not following these requirements will be penalized.
- Submissions should reflect the concepts and practices we cover in class.
- Late submissions will be penalized by 10% per week late. (i.e., from one second late to 1 week late: 10% penalty, from one week plus one second late to 2 weeks late: 20% penalty, etc.).
- The following are the key points that will be examined in Project when graded:
 - 40% UI Design and Appearance
 - Portrait orientation looks & works properly
 - Landscape orientation has its own layout, and looks & works properly
 - Proper use of Constraint Layout in both layouts
 - All required information is present when rotating between orientations.
 - Overall appearance is clean and professional
 - 20% Input operation
 - User text entry works properly – scrolls as needed.
 - Text entry works as expected in both orientations.
 - 40% Save & Restore
 - Note text and the current date/time (last updated time) are saved when Stop state is entered
 - Note text and the saved current date/time are loaded when Restart state is entered.
 - App behaves appropriately if save-file is not present

If you do not understand anything in this handout, please ask.

Otherwise the assumption is that you understand the content.

Unsure? Ask!