## CS 442 Mobile Applications Development (Android Section)

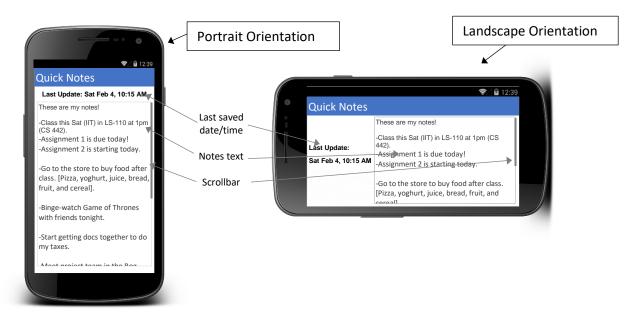
### CS 442: Mobile Applications Development Assignment 2 – Note Pad

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 results 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.



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### **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
  - o 20% Input operation
    - User text entry works properly scrolls as needed.
    - Text entry works as expected in both orientations.
  - o 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!

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