

Lab 6

Do **NOT** share your solution, source code and/or idea. This is an individual effort assignment.

Cheating and Plagiarism

Each student must be aware of the College's policy regarding cheating and plagiarism. The policy relating to academic dishonesty, as outlined in the Student's Rights and Responsibilities, Code of Conduct and Procedures, and will be fully enforced.

Any student caught cheating in an individual test or assignment is subject to sanctions. See College Academic Policy.

Be sure to read the following general instructions carefully:

- This assignment must be completed individually by all the students.

Assignment Requirements:

Please submit the following:

1. Target API 33.
2. Minimum API 28.
3. Replace John with your first name, Smith with your last name, and 11111 with your student id.
4. Create an app FirstNameLayout6, i.e. JohnLayout6.
5. Package name firstname.lastname.lab6, i.e. john.smith.lab6
6. Rename the module FirstNameModule6, i.e. JohnModule6 and not app.
7. Rename the main activity to LastNameActivity6, i.e. SmithActivity6.
- 8.** Use homescreen icon different than the default Android icon (Replace the homescreen icons).
9. Must have a minimum of **10 commits/pushes**. Verify you have meaningful commit messages.
10. Application must not have compilation errors.
11. Application must not crash.

Github Requirements: Follow instructions:

12. Create repository, name must be **FullNameLab6** (i.e. JohnSmithLab5) on github.
13. Make your repository **private** (not public) and invite the professor as a collaborator (haki11). Please use haki11 in the invite, and not using the email.
14. Provide screenshot in your submission, showing that you already invited the professor as a collaborator in github.
15. Commit the project and push into github.

16. Use meaningful comments/descriptions when commits.
17. Must Commit on your laptop and push into github.
18. After each commit, push.
19. Must have a minimum of **10 commits/pushes**. Verify you have meaningful commit messages.
20. Must support **English and French**. Translate only the first 3 entries.
21. No hardcoding of text.
22. Add .gitignore file with the appropriate content into the project folder. Add your name and student id as a comment into the first line of .gitignore. Add content from <https://www.toptal.com/developers/gitignore>

Please note the file .gitignore must be at project level and not module level (**Delete** the one in your module).

Commit and push.

23. Add README.md file into the project folder, with the appropriate content explaining about your app. Use the appropriate tagging format. **Add Your name and student id as the first line in the file README.md.** <https://www.makeareadme.com/>

24. Add 2nd line, describe the purpose of your project.

Please note file must be at project level and not module level.

25. 3rd line, add the github project repo link in the README.md file.

Commit and push.

26. Verify the folder **.git** is included in your submission (located in the project folder), as it has all the git history (**Submission without .git folder will get 0**). It could be hidden on your PC.

<https://www.technipages.com/show-hidden-files-windows>

27. The entire project should be committed and pushed where it can be cloned. Marks will be deducted for incomplete commit/push.
28. Commit and push.

29. App requirements:
30. Follow the instructions in the link below and implement the BottomNavigationView application
<https://www.geeksforgeeks.org/bottom-navigation-bar-in-android/>
31. Follow instructions for the 3 screens, as described in the link above.
32. Add Image and title for the BottomNavigationView.
33. Create menu item at the actionBar (tool bar), always appear:
 - a. When user clicks on the menu item, display the device settings screen.
34. Declare an array of Provinces and territories of Canada in strings.xml
35. Add 4th screen
 - a. Call the title yourFirstName, i.e. John. The Fragment class should be named your firstNameFragment, i.e. JohnFragment.
 - b. It should be the 2nd screen from the left.
36. The order of the screens must be as the following from the left:
 - a. Home, John, Person, Settings.
37. Update the 4 screens with the following info:
38. **HomeFragment:**
 - a. **ProgressBar:**
<https://abhiandroid.com/ui/progressbar>
 - b. ImageButton with an image of your choice.
 - c. When user clicks on the button, display a toast with “your name” + counter, i.e. John + 1, ... etc. once the counter reaches 5, hide the progress bar.
 - d. When the counter reaches 8, exit the application.
39. **YourFirstNameFragment (i.e. JohnFragment):**
 - a. Background color with light yellow.
 - b. Your full name, bold, blue, 30 sp, centered at the top.
 - c. Add three radio buttons in a group, only one can be selected at a time.
 - d. Add labels for each of radio buttons of your choice.
 - e. When user selects a radio button, display AlertDialog.
 - f. Design the AlertDialog with the following:
 - i. Icon of your choice, don't use the ones from Android studio.
 - ii. Title: Your full name.
 - iii. Message: the label of the radio button selected.
 - iv. One button only with the label: OK.
 - v. When user clicks on OK, dismiss the dialog.
 - vi. The user MUST not be able to dismiss the alert dialog without clicking on the OK button.

40. PersonFragment:

- a. ListView of the provinces and territories from the array in strings, with background color of light green.
- b. User can select ONLY one item at a time. The selected item must be highlighted clearly.
- c. **Send the selected item and index to the 4th fragment.**

41. Settings Screen:

- a. Clock continuously updating.
- b. TextView: with initial value "PROVINCE". Updated with the province selected from the previous fragment, i.e. Ontario,...etc.
- c. TextView: with initial value "ORDER", updated with the order of the item selected from the previous fragment, i.e. 1, 2,...etc.

42. Commit and push.

Submission Criterion:

1. Take screenshot of the 4 screens, while the app running, showing all the details.
2. Take screenshot of how data passed between screens.
3. **Screenshot of github invitation.**
4. Put all the pictures into a document, adding description to each of the pictures.
5. Put your name and student id at the top of the document.
6. Save the document into a pdf file. Copy the PDF file into your project folder.
7. **Verify .git folder is included in the Android Studio project, at the project level. Zero if missing .git folder.**
8. Zip the folder and upload into blackboard.
9. **Github link as a comment, when you submit. Please provide the link as a comment when submitting!!.**
10. **Must submit prior to the lab.**
11. **Must present beginning of lab. Zero for not presenting.**