

Project Requirements

1. The project shall consist of:

- a. **Groups of max 4 students. Please register in the groups on eConestoga**
- b. At least 4 Activities/Screens (at least 1 screen per member)
- c. At least 1 class per member
- d. You may choose any project you wish, such as a game, utility, or tool. But it must have some purpose. Consider creating an app that you would want to use, or you can create a clone app, fitness app, e-commerce app etc.

2. Project shall make use of the following technologies/techniques/Widgets:

- a. User Input
- b. Stack or Tab Navigation or both
- c. Custom List Views
- d. Data persistence
- e. Either one of embed Maps or Network Requests, or an alternative native Device functionality
- f. Data Structures (Custom classes, collections, Arrays)
- g. The following Dart language features:
 - i. Array and or Dictionary
 - ii. Classes, objects, inheritance etc.
- h. **Commenting:** The code shall be commented according to the following requirements
 - i. Each class shall have a header with the principal author of the code and a short description of what the code in the file is for
 - ii. Each method and property shall be commented and include a brief description of the purpose of method and property. If the author of a method is different than the author of the class, then author name shall also be included in method headers
 - iii. The code (inside methods) shall be commented to explain WHY the code is there (not how, not what) wherever necessary.
- i. **Coding Conventions:**
 - i. Naming conventions and guidelines must be consistent as used in classes.

3. Work assignments:

- a. **Each dart class shall have only one author out of the group. "We all worked on it together"**. As a team you collaborate but each team member must take ownership and responsibility of a piece of the code. You will be graded individually based on your contribution.

- b.** The author shall be clearly documented in each source file. Again, multiple authors in a single file not acceptable.
- c.** The work assignments must be consistent with the original project proposal even if minor differences exist AND they must be updated in the project completion document.

4. Project Presentation

- a.** Present the purpose of the application
- b.** Present a high-level overview of Widgets, Screens and classes used in the application
- c.** Demo the application functionality. Each student in the group shall demo the functionality he/she worked on.
- d.** Present briefly the technologies used in the application (follow the list of requirements given in point 2).

5. Penalties – these apply to overall project grade.

- a.** 50% for not presenting project.
- b.** Up to 100% for not being able to explain your code correctly.

6. Presentations will be the last two weeks of class.

