420-408-VA Graphical & Wireless Programming
Android Mobile App
Developement Proposal

🏛 Vanier College 🏛
Computer Science Technology Department
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☑ **Due date: as scheduled on LEA** ☑

Revision History

Revision	Date	Author(s)	Description
1.0	January 23, 2020	S.R.	Initial handout.

Contents

1 Constraints

- Your report must be written individually without collaboration

- Markdown must be used to write your report

2 Learning Objectives and Requirements

As part of the Creative Team Project, your are required to propose a plan for realizing an Android-based mobile application. As a first step, you are asked to document your idea and present the features of the applications you are proposing.

Bear in mind that the selected project/idea must be implemented according the different topics we are going to cover during the semester (as stated in the course outline). For example, your project must involve the use of: activities, communication between activities, fragments, menus, lists, Android notifications, modal dialog, local storage (using, files, SQLite database and shared

preferences), location-based services (such as Google Maps, or other services.), web services (any public API of your choice that is directly related to the idea you are going to implement), using and manipulation media resources (images, audio, videos, etc.), Android services, etc.

Additional requirements will subsequently be provided in this regard.

Examples of application domains:

- Transportation

- Education

- Health

- Energy/environment

- Smart home

- Well being/sport

NOTE: Please stay away from generic ideas such as task, course, product management, games, etc. Be creative!

3   Structure and Content of Your Reports

Your first deliverable consists of a concise project proposal. Therefore, you are asked to write and submit a report that include the following sections.

1. **Project Title:**
   The title of your application.

2. **The goal and description of your application**
   In this section, you need to discuss the "why" and "how"...

   To be more precise, you must detail the following points:

   (a) What is the project about?
   (b) Describe how you are going to realize (implement) the idea you are proposing.

   For example, if I don't wake up after the third time the alarm went on, my awesome app will spray water on me. If I hit the snooze button for the first time, my app shouts: *"Yo man! Wake up you king/queen of the snooze button! If you snooze, you lose!"*. If I hit the snooze button again, my app will hit me back with a pillow. When the alarm goes on for the third time in a row, my phone starts spraying water all over the place.

3. **Platform and libraries:**
   The platform is obviously Android! Here you need to talk about the libraries and REST-based APIs you are going to use in your app. The following is a list of sources from which you can choose **one or more** APIs to be used. Please pick REST-based APIs that, when they are called, provide a JSON or an XML document as response.

   - A collective list of free APIs: link

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- Any API: link
- API Marketplace: link
- Programmable Web: link
- Open-source Programmable Web: link
- APIs Guru: link
- Rapid API: link

You can also include the details about any Android/Java libraries you are going to use for various purposes.

4. **Resources needed:**
   What are the required resources your are going to use to realize your app? For example: Database, camera, microphone, sensors, images, videos, audio files, etc.

5. **Exhaustive list of features:**
   In this section you must document the list of features your app going to provide. For example:

   (a) Spray water
   (b) Yell at someone
   (c) Vibrate madly
   (d) Hit like a truck

6. **Is there any similar apps**?
   If so, in this section you should document how your application is going to be different from the existing app(s).Here, you need to compare and contrast the similarities and differences between your app and the existing app(s) in question.

   For example:

   - **Similarities**
     Yes! An existing app called *"The Wake-up Machine"* was made by my hero: ***Simone Giertz*** (*aka* the Queen of Shitty Robots)
     You can see in it action here (at minute: 3:20)
     https://www.youtube.com/watch?v=mXLzfAHl4-k

     Please watch her amazing **TED Talk**! You won't be disappointed! Here is the link:
     https://www.youtube.com/watch?v=cObsKc4tiuY
   - **Differences**
     Spraying water, yelling, etc...

4   Evaluation Criteria

Please read carefully, failing to respect the provided instructions will result in a major grade deduction.

- The clarity, relevance, and level of details of your project presentation.
- The amount of effort put in the presented work.
- Originality of your idea. Please try to not closely mimic what is already existing. Be creative! Be curious! Be a hero!

5   What to Submit

1. A compressed (.zip) file mainly containing the Markdown source and a PDF version of your report and additional files such as screenshots, diagrams, mockups (if you would like to sketch the app UIs), etc.)