ICS3UO APP INVENTOR FINAL PROJECT

Brief Description of the Project

For this project, you will *create your own app*. The *main objectives* of this project are as follows:

- *Bring together*, in one piece of software, many of the *main ideas* that you have learned about programming through App Inventor.
- *Conduct research* to include App Inventor features not covered directly in class.

Overview of Evaluation

The following are the main criteria that will be used to judge the quality of your software:

- The level of *difficulty* of the project
- The thoroughness of the *design process* used
- The extent to which the *main ideas* learned in class are used
- The extent to which *ideas not covered directly* in class are included
- The *user-friendliness* of the software
- The *correctness* of the code
- The *efficiency* of the code
- The *readability* of the code
- The *organization* of the code

Main Ideas

• **Computer as a Data Processing Machine:** INPUT \rightarrow PROCESSING \rightarrow OUTPUT

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MEMORY

- Data Types: Numeric, String, Logical
- Comments: Used to explain code that is difficult to understand and to introduce major sections of code
- Variables: Used whenever a program needs to "remember" information.
- Components, Properties, Methods, Events
- Making Decisions/Selections: "If" Statements
- **Repeating Statements:** "Loops" → Counted ("For" Loops), Conditional ("While" Loops)
- **Operations:** +, -, *, /, ^, Mod, etc.
- Procedures: Event Handlers, General Procedures, Parameters/Arguments
- Lists

ICS3UO – APP INVENTOR PROJECT EVALUATION GUIDE

Victim: App Name:								
Categories	Criteria	Descriptors					T	4.000000
		Level 4	Level 3	Level 2	Level 1	Level 0	Level	Average
Knowledge and Understanding (KU)	 Degree to which Main Ideas Play a Role in the App Input/Processing/Output Model Variables: Global versus Local Components: Properties, Methods, Events Selections/Decisions: "If" Statements Loops: Counted and Conditional Procedures: With and without results, Event Handlers, Parameters and Arguments Operations: +, -, *, /, modulus, etc. Lists 	Very High	High	Moderate	Minimal	Insuffi- cient		/30
Application (APP)	Loops used Wherever Possible To what degree are repetitive actions implemented using counted and conditional loops?	Very High	High	Moderate	Minimal	Insuffi- cient		/30
	Global versus Local Variables To what degree is the scope of variables appropriate?	Very High	High	Moderate	Minimal	Insuffi- cient		
	Correctness and Efficiency of Code To what degree has the student written code that works as intended and is as efficient and compact as possible?	Very High	High	Moderate	Minimal	Insuffi- cient		
Thinking, Inquiry and Problem Solving (TIPS)	Implementation of Main Ideas To what degree are the main ideas incorporated in a useful way?	Very High	High	Moderate	Minimal	Insuffi- cient		/20
	Inclusion of Elements not Covered in Class To what degree has the student included elements/features not covered explicitly in the course?	Very High	High	Moderate	Minimal	Insuffi- cient		
Communication (COM)	Descriptiveness of Identifier Names Variables, Components, Procedures, etc. Clarity of Code How easy is it to understand, modify and debug the code?	Masterful	Good	Adequate	Passable	Insuffi- cient		/20
	Comments How effectively have comments been used to explain major blocks of code and code that is hard to understand?	Very Effectively	Effectively	Moderately Effectively	Largely Ineffectively	Comments not included at all		

Comments