

Game-In-5-Weeks Proposal

Name: _____ Period: ____ Proposed Name of Game: _____

This is your final project of the year. You will demonstrate a lot of what you have learned as well as creativity. The game must be:

- a) **Original** – it should show creativity and originality.
- b) **Educational** to the user
- c) **Functional** – it should function at a level specified by this proposal and amended per daily journal entries.
- d) **Interesting** – the user should be able to play it multiple times without it being overly repetitive. For example, if there is a quiz involved, the same questions should not appear in the same order every time.
- e) **Written incrementally, in class** – you will be assessed on your daily progress during work time in class during the 5-week period beginning April 9. Very minimal work will be done away from class; outside time will be used for user testing, and finding resources (e.g. finding Images). If you are absent, you will make up work time at school, under supervision of a computer science teacher. If you code it during Spring Break, it is automatically 20% off. The idea is that it is to be done in class.

I. Educational Implementation of Game:

1) Field(s) of interest/study in which the game has relevance: _____

2) What is your educational goal? Define your topic and what will be taught, practiced, and/or reinforced. There must be a teaching aspect of your game! Be specific (e.g. “This will teach Algebra” is NOT specific).

3) Define your testing audience for this game. Your audience should match your educational goal! Indicate where you will find multiple testers to: a) participate in paper-pencil testing of your initial design; and b) play/test the “prototype” versions of your game. Be specific.

II. Description of Play:

- 1) Describe how the game is played, in its simplest level/form. Include a description of the “end game” scenario – how the game is concluded and how the level of success of a player will be determined.

- 2) Describe how playing will differ, at different levels/stages. If the game does not contain multiple levels, explain how you will provide varying degrees of difficulty.

- 3) On one or more sheets of paper, **draw or cut/paste** a “screen shot” of each of the following panels:
 - (i) start panel - with the name of the game, some directions, and navigation to other panels;
 - (ii) game panel – where the basic game will be played;
 - (iii) any additional panels involved with the simplest version of the game.

Each drawing should be labeled, so it is clear: (1) what layout(s) you are using; and (2) what components you anticipate using (e.g. buttons, menus, etc.).

Draw an arrow to each component in each “screen shot” and indicate what the component will be used for / what data will be generated. Your explanations should clearly show how the game will function and help you decide how it will be designed; be sure you are clear and specific.

- 4) How will you use files (image and / or text files)? (This is a mandatory feature.)

5) Four topics from our Java class curriculum are listed below in bold. For each of these four topics, you are required to use at least one of the sub-topics listed below it in the design of your game. Circle the sub-topics you will likely use to develop your simplest version of your game.

Math / Data Type Conversion / Data Analysis

Math Methods (e.g. Math.random()) Programming-specific Operators (e.g. %)

Casting	String methods
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Control Structures / Decision Making

If...Else Loops Recursion

Arrays / Data Organization and Management

1-D Array Files (Text or Images)

Events & GUI Interface

Mouse Key Action (Buttons, Checkboxes, MenuItems, etc.) Scroll/Sliding Interfaces

If you intend to use any computer science/programming topic, structure, component, etc. that is not listed above and/or was not included in our class curriculum, please list them below. These need to be explicitly approved by your teacher during the proposal approval process. Use of timers is OK – but be aware that students sometimes have problems implementing their use. If you are planning to use a timer, you must have a back-up plan such that will still have a functional game even if you cannot get the timer to work.

If, during the game design process you decide to use anything requiring approval, notify your teacher ASAP to get approval before proceeding.

III. Background Research

Do an Internet search to identify existing games that are similar to yours. For each such game, indicate as many details for the game as are available: name, author, manufacturer/publisher, year of publication, web site where you found it, including the URL, and/or computer language used for the code.

If you cannot find any game at all similar to yours: a) try again! b) list the search engines and key words that you used in your search.

Sign and date the following statement:

I understand that although I may look at online resources in the programming process, it is dishonest and unethical for me to copy online resources word-for-word or online ideas (large ideas inherent in the format and implementation of code), without appropriate acknowledgement of references. This assignment is meant to assess MY understanding of programming based on this course's content, so submission of code with many new methods / techniques not used in class, code that is very similar to another person's code, or code for a game another person is writing, will lead my teacher to assume that I have been cheating. This is a grave offense, which will result in punishment as indicated on the course green sheet (which reflects district policies). I will likely use some resources not made by me, including Images and/or text file questions. I will cite them appropriately, using a bibliography and documentation (pseudocode) to indicate what is from a resource.

Signed _____ Date _____