**Game Design**

Performance Task

# **Create — Your First Game**

## **Overview**

In this performance task, you will finish your first game prototype. You have been working on various aspects of your game all semester and Now it is time to finish it. You have a working prototype and invaluable feedback from peers who have actually played your game. Now is the time to finish developing it!

Remember, this is your first game, so don’t expect it to be perfect. Your goal is to have a simple, working version that addresses the project requirements and the four good game elements.

Continue to break your development into concrete pieces, and focus on one at a time. For example, are you adding more details to your environment? List out the specific small tasks needed to be done and work your way through them.

## **Assessment**

You will be provided with 16 hours of class time to complete and submit the following:

* A video of your game being planned or a trailer for the game
* Written responses about your game and design process
* Digital Game Prototype

Your teacher will share submission guidelines that include suggestions for creating video and PDF files.

## **General Requirements**

You are required to:

* Describe systematic strategies for finding bugs based on observed errors.
* Use debugging strategies to identify errors in code.
* Analyze the essentials of storytelling, including visual and environmental storytelling
* Create rules for a game, e.g., levels and/or interactive flow
* Develop objectives and outcomes for a game
* Prototype a digital project that accounts for different user perspectives and needs.
* Research terrains for a specific environment
* Describe the impact of story (explicit, implicit and emergent) on level design
* Explain the importance of usability and how it impacts user experience
* Produce a game design document
* Compare categories of game mechanics
* Discuss relationships between game mechanics, game play, and interactivity
* Utilize compound boolean Expressions.
* Develop programs with sequences and simple loops, to express ideas or address a problem.
* Model the way programs store and manipulate data by using numbers or other symbols to represent information.
* Create programs that use variables to store and modify data.
* Describe the implications of access modifiers (private/public, local/global)
* Explain different types of errors which can occur in code.
* Modify events and their handlers to work with code.

## **Submission Requirements**

### 1. **Video**

Submit one video in .mp4, .wmv, .avi, or .mov format that demonstrates the running of your game. Your video must not exceed 1 minute in length and must not exceed 30MB in size.

### 2**. Written Responses**

Submit one PDF document in which you respond directly to each prompt. Clearly label your responses. Your response to all prompts combined must not exceed 950 words.

You may use images to show off or to explain things in your written responses.

## **Purpose and Development**

1. Provide a written response or audio narration in your video that:

Identifies the changes you made to your prototype. Identifies the changes.

* Explains what the video illustrates.

(Approximately 150 words)

1. Describe systematic strategies for finding bugs based on observed errors. Use debugging strategies to identify errors in code.

(Approximately 200 words)

1. Analyze the essentials of storytelling, including visual and environmental storytelling. Create rules for a game, e.g., levels and/or interactive flow. Develop objectives and outcomes for a game. Describe the impact of story (explicit, implicit and emergent) on level design.

(Approximately 200 words)

1. Describe the implications of access modifiers (private/public, local/global). Explain different types of errors which can occur in code.

(Approximately 200 words)

1. Explain the importance of usability and how it impacts user experience. Compare categories of game mechanics. Discuss relationships between game mechanics, game play, and interactivity in digital games.

(Approximately 200 words)

## Tasks

### **Activity 1 - Explore**

**Description**

It’s final game development time!

You have a working prototype and invaluable feedback from peers who have actually played your game. Now is the time to finish developing it!

Remember, this is your first game, so don’t expect it to be perfect. Your goal is to have a simple, working version that addresses the project requirements and the four good game elements.

Continue to break your development into concrete pieces, and focus on one at a time. For example, are you adding more details to your environment? List out the specific small tasks needed to be done and work your way through them.

Time To Complete: 1 Hours

### **Activity 2 - Game Design Document**

**Description**

Now is the time to finalize your game design document, which you started in the “Choose One and Plan” activity. Either copy and paste your most recent version into the editor, or open the relevant Google doc, and revise it so that it matches your final game. Below is a reminder of what the document needs to include.

* Final Game Design Document

Time To Complete: 2-3 Hours

### **Activity 3 - Testing**

**Description**

At this point, you should have a working prototype of your game! Now is the time to get feedback from peers to inform how you proceed with finishing your game. Your goal here is to collect as much information as you can!

Have up to three people play your game and give you honest feedback and questions. They can either type in their responses here, or they can write it down and you type it in after. They should at least answer the following questions:

1. What do you like about the game?
2. What do you not like about the game?
3. Is it fun? Would ideas make it more fun?
4. What technical aspects of the game make it difficult to play or take away from the fun? That is, could it be improved?

IMPORTANT: Now is NOT the time to defend your ideas or try to answer their questions. Ask follow up questions to really understand their experience. The more you can learn from your users and implement their feedback, the better chance you have at creating a good game!

* User Testing

Time To Complete: 2-3 Hours

### **Activity 4 - Evaluate**

**Description**

Students will self evaluate their game idea, and then peer review the idea looking for input and helpful feedback to finalize the idea before building the prototype.

Time To Complete: 1-2 Hours

### **Activity 5 - Improve the Design**

**Description**

Once the prototype is built the students will now test the games. Students should play 2-3 games and provide useful feedback to the creator. Students will then take their feedback and plan how to improve their game, play test it once more and get some final feedback.

Time To Complete: 2-3 Hours

### **Activity 6 - User Testing 2**

**Description**

At this point, you should have a working prototype of your game! Now is the time to get feedback from peers to inform how you proceed with finishing your game. Your goal here is to collect as much information as you can!

Have up to three people play your game and give you honest feedback and questions. They can either type in their responses here, or they can write it down and you type it in after. They should at least answer the following questions:

1. What do you like about the game?
2. What do you not like about the game?
3. Is it fun? Would ideas make it more fun?
4. What technical aspects of the game make it difficult to play or take away from the fun? That is, could it be improved?

IMPORTANT: Now is NOT the time to defend your ideas or try to answer their questions. Ask follow up questions to really understand their experience. The more you can learn from your users and implement their feedback, the better chance you have at creating a good game!

* User Testing

Time To Complete: 2-3 Hours

### **Activity 7 - Share**

**Description**

Students will share their feedback, prototype and whole design process with the class in a formal presentation, or gallery walk.

Time To Complete: 1-2 Hours

### **Activity 8 - Reflect**

**Description**

Students will reflect on their design process and how they went about creating their game, what struggles they encounter and how what worked and didn’t work for them. They will submit a video of game play, along with their written reflection.

Time To Complete: 1 Hour