**AP Computer Science I**

Performance Task

# **Create — Name**

## **Overview**

## **Assessment**

You will be provided with 12 hours of class time to complete and submit the following:

* A video of your program running
* Written responses about your program and development process
* Program Code

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

## **General Requirements**

You are required to:

* Iteratively design, implement, and test your program.
* Independently create at least one significant part of your program.
* Create a video that displays the running of your program and demonstrates its functionality.
* Write responses to questions about your program.
* Include your entire program code.

## **Program Requirements**

Your program must demonstrate:

## **Submission Requirements**

### 1. **Video**

Submit one video in .mp4, .wmv, .avi, or .mov format that demonstrates the running of at least one significant feature of your program. 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 2a – 2e in order. Your response to all prompts combined must not exceed 750 words, exclusive of the Program Code.

## **Program Purpose and Development**

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

Identifies the programming language.

* Identifies the purpose of your program.
* Explains what the video illustrates.

(Approximately 150 words)

1. Define layout and design theories, and describe how you utilized these theories in your program. Describe the user friendly design you attempted and how accessible your website is for consumers (How does your site handle diverse humans?). Describe the difficulties and/or opportunities you encountered and how they were resolved or incorporated. (Approximately 200 words)
2. What is the design process? Define the stages of the process and identify what was accomplished in each stage. Capture and paste the program code segment that implements a part of your code that was difficult with comments explaining its purpose and how you fix or implement it into your code(marked with an oval in 2e below), that is easy to read and understand. Describe the choices they or their team made when developing a digital project. What constraints influenced their decision, what needs did they consider, etc. (Approximately 200 words)
3. How did you collaborate with others to collect feedback on this digital project that you or your team made. How did you identify areas for improvement, and implement those changes in your code; Capture and paste the program code segment (marked with a rectangle in 2e below). Evaluate an interactive website or program and identify how it incorporates principles of good UI (user interface) design (i.e., user control, navigability, accessibility, chunking).(Approximately 200 words)
4. Capture and paste your entire program code into the PDF.

* Include comments or citations for program code that has been written by someone else.

## Tasks

### **Activity 1 - Explore**

**Description**

Time To Complete: 1-3 Hours

### **Activity 2 - Research**

**Description**

Time To Complete: 12-15 Hours

### **Activity 3 - Ideate**

**Description**

Time To Complete: 1-3 Hours

### **Activity 4 - Evaluate**

**Description**

Time To Complete: 1-3 Hours

### **Activity 5 - Construct a Prototype**

**Description**

Time To Complete: 3-5 Hours

### **Activity 6 - Improve the Design**

**Description**

Time To Complete: 3-5 Hours

### **Activity 7 - Share Solutions**

**Description**

Time To Complete:1-3 Hours

### **Activity 8 - Reflect**

**Description**

Time To Complete: 1 Hour