Create Performance Task Template 2018

This template will help you create your Create Performance Task submission. Use the links to the [Help Site](https://sites.google.com/site/mobilecspportfoliohelp/performance-tasks/create-1) for more information on each section.

Make your own copy of this document. Once you have completed and checked your copy, make an anonymous copy, and remove all detail except your written responses and code, and download it as a PDF. That PDF document is what you will submit to the College Board, along with your video submission.

# 2a.

**The video demonstrates the running of at least one feature of the program that illustrates the program’s intended purpose as described in the written response or the video narration. Identify the programming language, the app’s purpose, what the video shows.**

Advice: Do not leave this blank in case the graders cannot hear your video narration.

**Writing prompts for success** (Do not use these exact words! Use your own words!)

My program is…., written in ….

Its purpose is…

The video shows [this function]...

**Write your 2a response here (<150 words):**

|  |
| --- |
|  |

**Submission Checklist - 20%**

|  |  |
| --- | --- |
| ***Does your video and writeup contain*** | *Yes or No?* |
| A clear explanation of the program? |  |
| Is your video under a minute and under 30 megabytes? |  |
| Does the video show at least one working functionality element |  |
| Did you clearly define the PURPOSE of why this program was created? |  |

# 

# 2b.

**Describe the incremental and iterative development process of your program focusing on two distinct points in that process but also describing the whole process. Describe two difficulties and/or opportunities you encountered and how they were resolved or incorporated.** In your description clearly, indicate whether the development described was collaborative or independent by using "I" and "we". At least one of these points must be independent work! (200-word limit)  
-An opportunity is a moment where you found a way to make the program better.  
-A difficulty is a moment where you encountered a problem.  
You must clearly demonstrate how you resolved these items in an incremental way ("First, I tried this, but that had these problems, so I then tried ...."). When explaining what you did independently write in the first person using "I"**.**

**Writing prompts for success** (Do not use these exact words! Use your own words!)

I started by...

I found a difficulty/opportunity which ...

First I tried …

Finally, I …

Another [difficulty/opportunity] ...

**Write your 2b response here (< 200 words):**

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|  |

**Submission Checklist - 20%**

Does your answer contain

|  |  |
| --- | --- |
| Task | Yes or No |
| **Describe the iterative and incremental development process for the ENTIRE program.** |  |
| **Describe Opportunity or Difficulty #1** |  |
| **Describe how Opportunity or Difficulty #1 was resolved** |  |
| **Describe Opportunity or Difficulty #2** |  |
| **Describe how Opportunity or Difficulty #2 was resolved** |  |

# 

# 

# 2c.

**Capture and paste a program code segment that implements an algorithm and that is fundamental for your program to achieve its intended purpose. This must be an algorithm you developed on your own! It must include two or more algorithms within it and must integrate mathematical and/or logical concepts. Describe how each of the two algorithms within the bigger algorithm functions independently as well as in combination to form a new algorithm. An ideal algorithm that includes two sub-algorithms is a procedure that you created that includes calls to two other procedures that you created where at least one of those includes math or logic (ifs or loops). (200-word limit).**

**Writing prompts for success** (Do not use these exact words! Use your own words!)

I created the following algorithm made up of two algorithms to [program purpose/feature/function].

My first algorithm uses [conditional statements] [iteration].... First, it does, then it calls, etc…

My second algorithm uses [conditional statements] [iteration].... First, it does, then it calls, etc…

Together they combine to …

**Write your 2c response here (< 200 words)**

|  |
| --- |
|  |

**Submission Checklist - 30%**

Does your answer contain

|  |  |  |
| --- | --- | --- |
| Checklist Task | | Yes or No |
| The algorithm employs mathematical, conditional logic or iteration:  Ex. #1 Mathematical - formula to calculate the speed  Ex. #2. Conditional Logic - If statement to determine message logic.  Ex. #3. Loop - For Loop to iterate through an array of customer names. | |  |
| The algorithm is related to the purpose of the program in the discussion. | |  |
| Algorithm code is shown in the response. | |  |
| An algorithm that implements two other algorithms is shown and related to the purpose of the program. | |  |

# 2d.

**Capture and paste in a program code segment that contains an abstraction you developed individually on your own. This abstraction must integrate mathematical and logical concepts. Explain how your abstraction helped manage the complexity of your program. (200-word limit).**

Recommendation: use a procedure that you created independently and explain how it reduces the complexity of your program to demonstrate procedural abstraction. This must be a procedure that you create and name, not a built-in event-handler like button.click. Variables do not count as abstractions here, but more complex data abstractions like lists and databases would also count.

**Writing prompts for success** (Do not use these exact words! Use your own words!)

My app uses the abstraction [procedure/etc] to [reduce] [organize] the…. It also uses [logical] [mathematical] concepts to ….

**Write your 2d response here (< 200 words)**

|  |
| --- |
|  |

**Submission Checklist - 30%**

Does your answer contain

|  |  |  |  |
| --- | --- | --- | --- |
| Abstraction Cited | The abstraction that manages the complexity of the program. | Does your answer explain how your abstraction makes managing the complexity of your app easier? | Yes or No |
| *Ex. Procedure “resetGame()”* | Ex. #2. Procedure  Ex. #3. List, Database | Ex. #1. Procedure - resetGame() - Function that will reset the program used in a dozen disparate Events.  Ex. #2. Database - Externally references initialization settings to allow for quicker setup and Q&A testing. |  |
| The discussion describes how the abstraction helps to manage the complexity of the program. | | |  |
| The code that shows the abstraction is included in the response. | | |  |

# Show all of your code here

**Note: Circle (2c) and Rectangle (2d) your referenced code above in this section (use** [**Insert/Drawing**](https://docs.google.com/document/d/17k-EoKt5aur0JY6CD789NxJ6v2bxypf2D0x19UBiRmI/edit) **and paste in code screenshot in there and draw shapes on top). Code done by others should be cited in the comments of each block.**

Once you have completed and checked this, make a copy and remove all detail except your written responses and code, and download it as a PDF. That PDF document is what you will submit to the College Board, along with your video submission.