Lesson 4: Create PT - Complete the Task (12 hrs)

Overview

It is finally time for students to take on the Create Performance Task. For a total of 12 class hours, students should work on their projects with only types of teacher support allowed (essentially: Advise on process, don't influence or evaluate ideas). Students may also work with a collaborative partner in *in development of their program* - written responses must be done on their own.

The lesson includes reminders about how you can interact with students while they are working on their projects, and suggestions about time line. The Create PT requires a minimum of 12 hours of class time. At the end, students will submit their program code, program video, and written responses through their AP digital portfolio.

Purpose

There are no new CS concepts covered in this lesson. Students will work individually or with a collaborative partner on the Create Performance Task.

Standards

Full Course Alignment

CSTA K-12 Computer Science Standards (2017)

▶ **AP** - Algorithms & Programming

Agenda

Lesson Modifications

Warm Up (20 minutes)

Ready?

Set

Activity (70 minutes)

GO! Complete Create Performance Task

Wrap-up

Students submit completed Create Performance Task

Objectives

Students will be able to:

- Complete and submit the Create Performance Task.

Preparation

- Review pages 169-171 in the **Course and Exam Description** to understand the teacher's role on the Create PT
- Review how to create a stand-alone App Lab project to assist students

Links

Heads Up! Please make a copy of any documents you plan to share with students.

For the teachers

- **CSP Unit 8 - Create PT Prep** - Slides

For the students

- **APCSP CT 20-21 Scoring Guidelines** - Rubric
- **APCSP CT 20-21 Task Instructions** - Resource

Teaching Guide

Lesson Modifications

 **Attention, teachers!** Coming soon. This lesson is receiving extra attention to align it to materials on AP Classroom.

Warm Up (20 minutes)

Ready?

Remarks

> - For the next ~12-16 days, you will be completing the Create Performance Task.
>   - Most of the work for this task *must* be done independently - but you are allowed to collaborate with another student to create a program. However, you must have enough individual contributions to meet all the requirements of the written responses.* I (teacher) can help you with *process* and timeline and keep you on task
> - There are a few other last minute things we should look at to make sure you're clear before we start.

Teaching Tip

Creating an App Lab Project: Before students begin programming, they should make sure that they are creating their program in a new App Lab Project - NOT in a level associated with a previous lesson.

However, you can use a previous project as a starting point as long as you add new parts that fulfill the task requirements.

To build off a program started in a previous lesson:

Make sure to click “Remix” from the original program level. This will create a new copy of the program that can be accessed from the list of individual student projects found at **https://studio.code.org/projects**. Students should indicate using comments what parts of the program are copied from older projects.

For students who are creating an entirely new program:

Create a new App Lab project by visiting **https://studio.code.org/projects/applab/new**

How Can You Help as a Teacher: Review the **Course and Exam Description**, in particular pages 170-171 to understand how you as a teacher can and cannot assist on the Create Performance Task.

Before we start let's review the AP CSP Create Task Instructions.

Discuss: *Read page 12-13: Preparing for the Performance Task. This is a general checklist of things you should do to prepare for the AP Performance Task. Let's see how we did. With a partner - one person reading from the top down, the other reading from bottom up - check off things we've done to prepare so far. Identify anything we haven't done. Discuss together before discussing as a class. Also, Read Page 11: AP Computer Science Principles Policy on Plagiarism. With a partner carefully read this section. Discuss together before discussing as a class.*

Do This: Make sure everyone understands expectations.

- For example: if you use a library that someone else created, you need to include a comment citing this source as code you yourself did not write
- If using images, media or other copyrighted material found on the web, you should cite those sources in comments in your program code - usually at the top. Something like:

```
// The images used in this app came from:
// [1] bird image - http://name-of-site.com/path/to/image.jpg
// [2] flower image - http://site.com/path/to/flower.jpg
```

1 Tech Setup and Tools for Create PT

Discuss: *Read Pages 14-15: Guidelines for Completing the Create Performance Task. This is a final list of Do's and Don'ts for the Create PT. With your partner, read the* **You must**, **You may not**, *and* **You may** *sections of this page. Then with you partner summarize: what kinds of things can your teacher help you with?*

Discussion Goal:

- Discuss specifically how you (teacher) are allowed to help and not. Short version: you *can* help students with the *process* of completing the task, you *cannot* help by evaluating their work or ideas in any way.
- If you modify an existing project for the Create PT **make sure** that the purpose is also new, or modified to fit the changes and updates you are making. For example: "The purpose was to add a login feature to a game I made previously".

Set

Do This:

- Take out your Create PT timeline that we developed and reviewed.
- Ask and answer any remaining questions.
- Remind students of the overall timeline and that the official PT time is about to start.

2 Create PT Coding Workspace

Activity (70 minutes)

GO! Complete Create Performance Task

Links in Code Studio:

- Students can find links to AP documents on the student page in code studio associated with this lesson.
- Students may use the **Create PT Template** to record their Written Response. Remind students that these responses must be entered into the appropriate fields in the Digital Portfolio before submitting their work.

Wrap-up

Teaching Tip

Submission Timeline: You may spread out submission over a few days if you like since students can save progress in the AP Digital Portfolio. As long as they finalize submission by the closing date of the PTs it's fine.

In the past submitting everything right at the deadline has been a risky proposition as the site sometimes experiences outages due to heavy traffic. Get *something* in early and modify later.

Students submit completed Create Performance Task

Submitting:

- You are encouraged to submit and save work in the AP digital portfolio as you go!
- At the designated end of the Task administration (having allowed for at least 12 hours of class time for work) students should submit their video of the program running, written responses, and program code to their **AP Digital Portfolio**. You can find more instructions as well by using the **AP Digital Portfolio: Student User Guide**.

Before they submit their final work:

- Encourage students to check over the Survival Guide checklists one more time to make sure they met the requirements.
- Make sure they have all the components necessary for the Create Performance Task.