Lesson 19 - Debugging My Project

Learning Goals

Students will continue coding and debugging their final projects in Sprite Lab.

Preparation

- Ensure that students have access to their reflection lists from Lesson 18.
- Project Planning Sheet: Make sure that students have access to a printed or digital copy of this sheet. They will work on the Define and Prepare pages during this lesson.

Links

For teachers:

- **Project Planning Sheet**
- Video #11: PBL Step 7 PD resource
- Video #12: PBL Step 8 PD resource

Teaching Guide

Warm Up (10 minutes)

Equitable Teacher Practices



7.UDL.b

Encourage students to reflect on feedback and make revisions (model norms that value students' perspectives on this process).

- Tell students that they will use their time today to continue coding their final projects. The goal for the day is for students to have code for every part of their project, even if it is not working exactly as they want.
- Have students review their annotated Project Planning Sheet and their reflection lists before they log in.

Main Activity (25 minutes)

Equitable Teacher Practices



7.CRP.b Allow students to compare their work and draw from peers' work.

8.CRP.a Help students express their knowledge and understanding through their product.

- Students should continue coding their projects.
- Testing and debugging:
 - About halfway through the class period, ask students to pause their coding for a brief class discussion.
 - Remind students of the debugging techniques they learned in <u>Lesson 16</u>.
 - Tell students that it is important for computer scientists to test their programs to make sure that they are working as intended, keeping in mind the following adage: "You are not your user." Ask students if they think this saying might impact how they finish their project.
 - Have students continue to code and test their projects, focusing on identifying, documenting, and attempting to fix any errors they might find.
 - As students continue to substantially complete their projects, remind them to think about their users:
 - Who will use my project?
 - What can I do to make my project more user-friendly?
- Throughout the class, continue to provide support to students' individual coding efforts and facilitate peer-to-peer interactions related to debugging.

Wrap Up (10 minutes)

- Tell students that they will have an opportunity in the next class to share their projects with one another and to get feedback.
- In preparation for this work, have them turn and talk with a classmate about the following questions:
 - What is one part of your project that you are proud of?
 - What is one thing that didn't work as expected?
 - What feedback from a classmate would be useful?
 - Who else might you share your project with? Why?
 - What feedback from this person or this group would be useful?

Give anonymous feedback on this lesson. (optional)