Lesson 5.5: Program Implementation from a Prototype and Testing

Objectives

In this lesson, students will:

- Use an iterative process to perfect a program
- Gather feedback to improve the program
- Debug issues during implementation

Agenda

1. Implementation from a Prototype	40 mins
2. Wrap Up and Reflections	10 mins

Preparation

- ❑ None

Resources & Links

- ❑ None

1. Implementation from a Prototype

In this lesson, students will code the program from their prototype. This includes presenting the program to their target audience for feedback. You may choose to designate a time at which all students present their program to their target audience as they will be working on their program as well.

Remind students to be realistic about the program itself, i.e. they should code something they know how to do in Scratch.

Instructions to give to students:

1. Using the prototype drawings from the previous session, start implementing your program
2. Test your program and fix any bugs
3. Present your program to your target audience and gather feedback
4. Repeat process 1-2-3 until the program is complete
5. Make sure you save your project. Add a description and instructions in the project page and share your project.

2. Wrap-Up and Reflections

Reflection Points:

- What was difficult in the implementation of your program? How did you address the challenges?
- What did you like about creating a project for somebody else? What was challenging about it?
- What other ideas would you add to improve your project if you had more time?
- Do you have any new ideas for other programs?

Student Activity: Implementation from a Prototype

1. Using the prototype drawings from the previous lesson, start **implementing** your program
2. **Test** your program and fix any bugs
   What bugs did you encounter? How did you solve them?

3. Present your program to your target audience and write down their feedback.
   Feedback:
   a)_____

   b) _____

4. From the feedback you received, what new ideas do you have for your program?
   Ideation:
   _____

   _____

4. **Prototype** the new ideas

5. **Implement** the new ideas
6. **Test** the new ideas
   What bugs did you encounter? How did you solve them?

7. Make sure you save your project. Add a description and instructions in the project page and share your project.