Lesson 3: Make Characters Talk

By the end of the lesson, students will be able to

- ✓ Debug their projects
- ✓ Synchronize sprites using wait block
- ✓ Create conversations between characters

Things to do before the class

- ✓ Make a list of usernames and passwords for each group's Scratch account. Some students might not remember their usernames or passwords.
- ✓ Read the student guide and engage deeply with the given activities.
- ✓ Read the lesson plan and watch the videos linked inside. These videos are meant for teachers to help them learn Scratch as they run these lessons for their students.
- ✓ Have a whiteboard and marker to write things down.
- ✓ Make sure all the computers that the students will use have decent internet connection.

0. Access the student guide (5 mins)

✓ Ask students to type this URL in the address bar: cd8.notion.site

Note: Because students have typed the address in the last class, the browser will usually auto complete the address when they type the first few characters.

1. Debugging exercise (10 mins)

Ask students to read the **Let's start with debugging!** section(page 2) of the student guide. Explain briefly that errors in codes are called bugs, and debugging simply is the process to fix the bugs.

✓ Watch this video for a short, fun introduction to bugs: [Bugs! | Lesson 8 | Camp Coding Camp]

Ask them to debug any one of the two projects. Both projects are based on the previous lesson on making dance animations. Watch this video to see what debugging looks like in Scratch: [Debugging].

While the students are engaged in debugging, visit different groups and provide hints if needed.

✓ Avoid giving them the solution.
✓ Some students won't be able to debug their projects. It's okay. They can continue working on it later.
✓ Some students will debug their projects sooner than their peers. Ask them to try debugging the other project too.

Note: Some students might not know how to get back to the student guide after opening one of these projects. Inform them that they need to click on the **back button** at the top left part of the browser.

2. Getting ready for the lesson (10 mins)

Ask students to read the **Getting ready for the lesson** section(page 3) in the student guide and follow the instructions to.

- ✓ Sign in to the student accounts
  Students might need help with entering correct passwords and CAPTCHA

- ✓ Change color mode to high contrast blocks
  Most monitors used in the computer labs of schools aren't of good quality. Reading the default Scratch blocks(white text) on such monitors is stressful to the eyes. High contrast blocks are much easier to read.

Note: Students often make mistakes while typing their usernames and passwords. They also struggle with the CAPTCHA test. Ask some of your colleagues or older students to be present for the first 20 mins of the lesson to help students with those stuff.

3. Exploring starter projects (15 mins)

Ask students to read the **Let's explore some projects** section(page 4 and 5). Students can explore any one of the two starter projects and **remix** them. Encourage them to modify the projects and create something different from them.

Note: The comments on the blocks will help students understand the code. Encourage students to read the comments. Explain briefly if students struggle to understand the comments. Students will eventually build their own understanding.

If some students finish exploring one of the projects, ask them to explore the other one too. Some students might not finish exploring even one project in the given 15 mins. It's okay. Move on to the next section. Students can come back to exploring these starter projects while working on their projects on conversations.

4. Let's create conversations (40 mins)

Ask students to go through the **Let's create conversations** section(page 5 to 7) in the student guide.

This video shows the process of creating conversational stories in Scratch: [How to Make a Story in Scratch | Tutorial]

Three prompts are given to help students get ideas for their projects. They can choose to work on their own ideas instead of these prompts.

- ✓ Some students don't like to read the guide and will ask you directly for help. Suggest them where to look in the guide. If things aren't clear, explain the instructions without giving them solutions.
- ✓ Remind students to save their projects frequently. Sudden power outage can cause their unsaved progress to be lost.

Some students might complete their work before their peers. Ask them to work on the **More things to explore** section.

Looks blocks are often used in this kind of projects. Watch this video to learn more about these blocks: [02. Scratch - Looks Blocks]

5. More things to explore (Optional)

This section helps you differentiate learning in your class. Some students learn faster than their peers. You can use this section to engage such students. Ask them to go through the **More things to explore** section(page 8 and 9) in the student guide. Let them follow the instructions to record sound, and use them in projects.

This video shows the process of recording sounds in Scratch and using them in projects: **03. Scratch - Sound Blocks**

Sometimes you might have to repeat a lesson for a few students. Other students can work on the **more things to explore** section.

6. Reflection (10 mins)

Ask students to go through the **Let's Reflect** section in the student guide. There are 2 questions given for them to reflect on. Ask students to think on these questions and discuss with their group member.

Note: It's helpful if you can provide them with pen and paper to write their reflections.

Before students leave, ask them to exchange their reflections with two students they didn't interact much during the class.