

- d. Students will be coding and designing their own obby (obstacle course) that others can play using Roblox Studio.

2. Introduce Lesson

- a. This first lesson will show you an example of an obby
- b. For students who have never used Roblox before, this is also a chance to learn how the player controls work.
- c. At the end of the lesson, you will use Studio's built in AI to make changes to the example obby, you will also see why you still need to learn about how code works even with AI.

Guided Practice (35 minutes)

Logging In and Opening Roblox Studio (5 Minutes)

To use Roblox Studio, you will need a free Roblox account. If you do not have an account, create one at [roblox.com](https://www.roblox.com). For tips on how to secure your account, see [Keep Your Account Safe](#). Here are some basic account security tips:

- Strong Passwords: Emphasize creating unique, complex passwords for Roblox that are different from passwords used on other sites. Discuss why reusing passwords is risky.
- Email/Phone Verification: Explain the importance of adding and verifying a parent's or guardian's email address or phone number to the account for password recovery and security notifications.
- 2-Step Verification (2SV): Strongly recommend enabling 2SV using an authenticator app, email, or security keys as an extra layer of protection.
- Recognizing Scams: Educate students about common scams, such as offers for free Robux, requests for login information, or links to unfamiliar websites. Stress that Roblox employees will *never* ask for passwords or personal information. Teach them to identify legitimate Roblox sites and communication channels.
 - Roblox employees will never ask for your password — Report anyone who asks using the [Report Abuse](#) feature.
 - there is no such thing as free Robux — Never trust players or sites who say they have a way to get free Robux!
 - Check out this Roblox game to have your students learn more about online safety and civility: [Google's Be Internet Awesome World](https://www.roblox.com/games/17756790122/Google-Be-Internet-Awesome-World) (<https://www.roblox.com/games/17756790122/Google-Be-Internet-Awesome-World>)

- Logging Out: Advise students to log out of their accounts, especially when using shared computers.

System Requirements

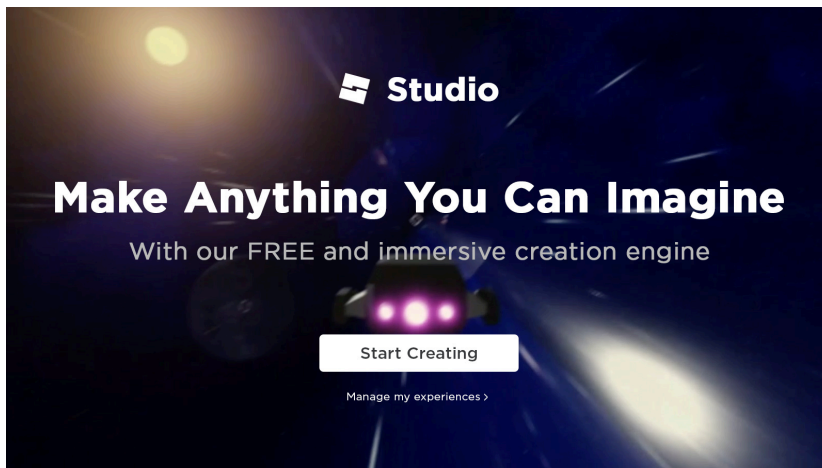
- A PC or Mac
- Internet Connection
- 2 button mouse

Installing Studio

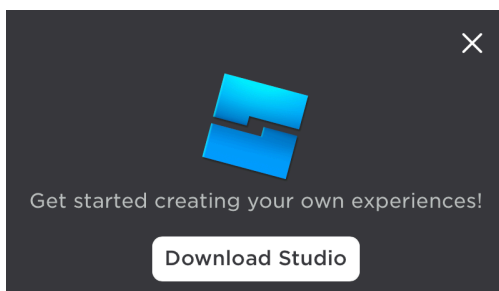
Before beginning, make sure you have Roblox Studio installed on your Mac or PC.

To install Studio:

1. Navigate to <https://roblox.com/create>.
2. Click the Start Creating button. A pop-up dialog displays.

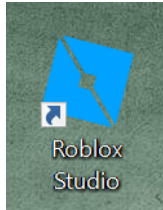


3. Click the Download Studio button.



4. Find the Studio installer in your browser's download history and double-click the file.

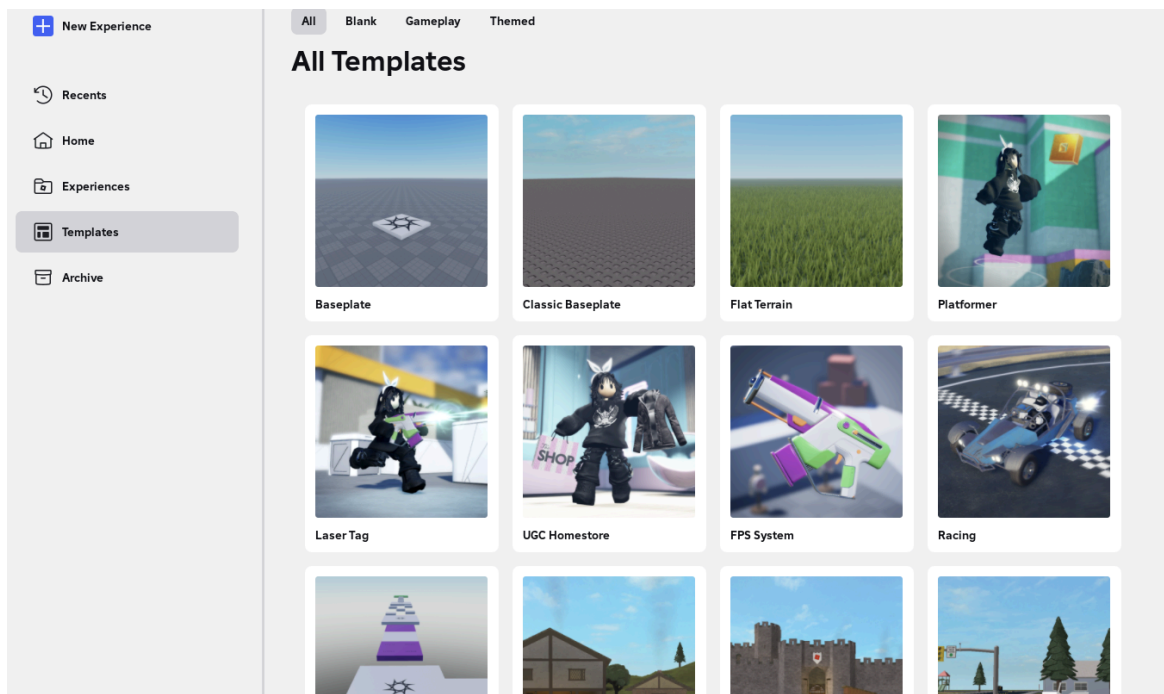
- On Windows, the file is RobloxStudio.exe.
- On macOS, the file is RobloxStudio.dmg.



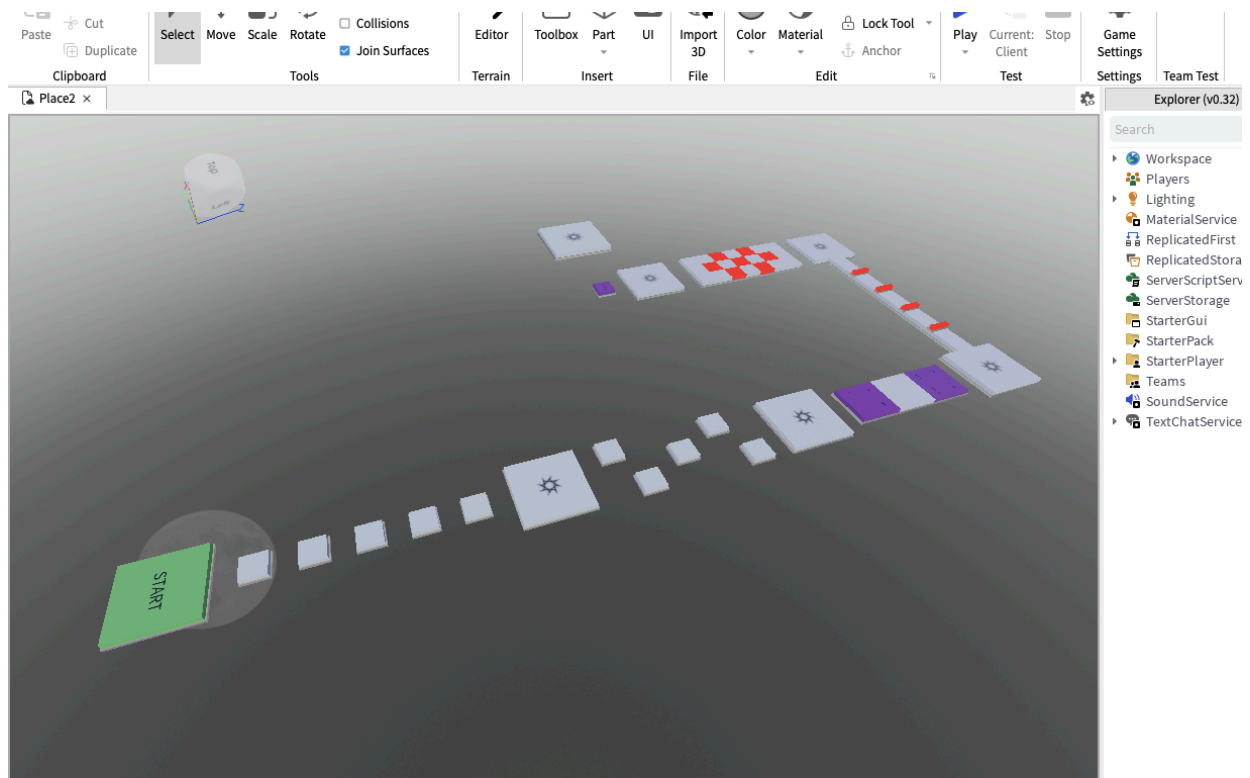
Opening the Classic Obby Templates (10 Minutes)

Templates are pre-built projects you can use as a starting place for your own experiences. you will open the Obby template and learn how to control your camera and avatar.

1. Click **Templates**.
2. Scroll down and click on the **Classic Obby** template



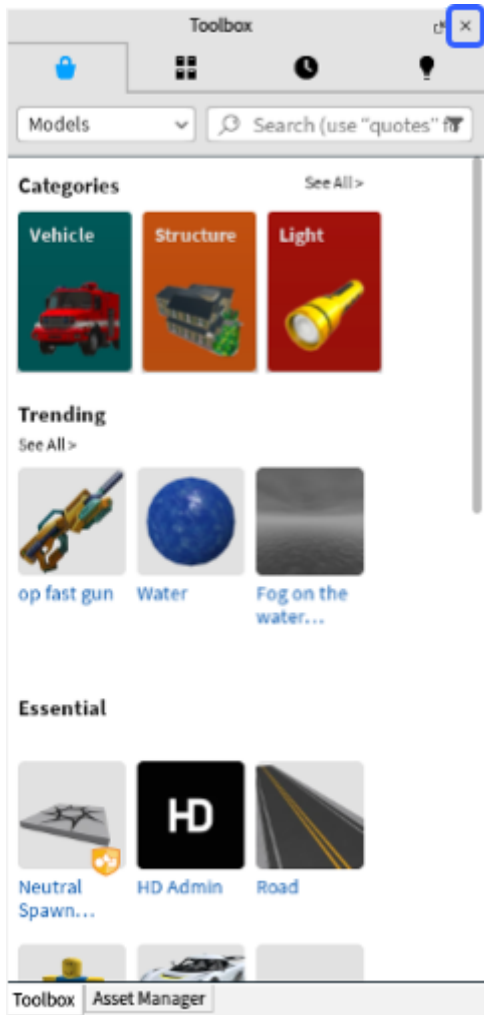
When Roblox Studio opens, it will look like this.



Customize Your Workspace

Give yourself more room to see by closing out everything on the left hand side. You can reopen those windows later.

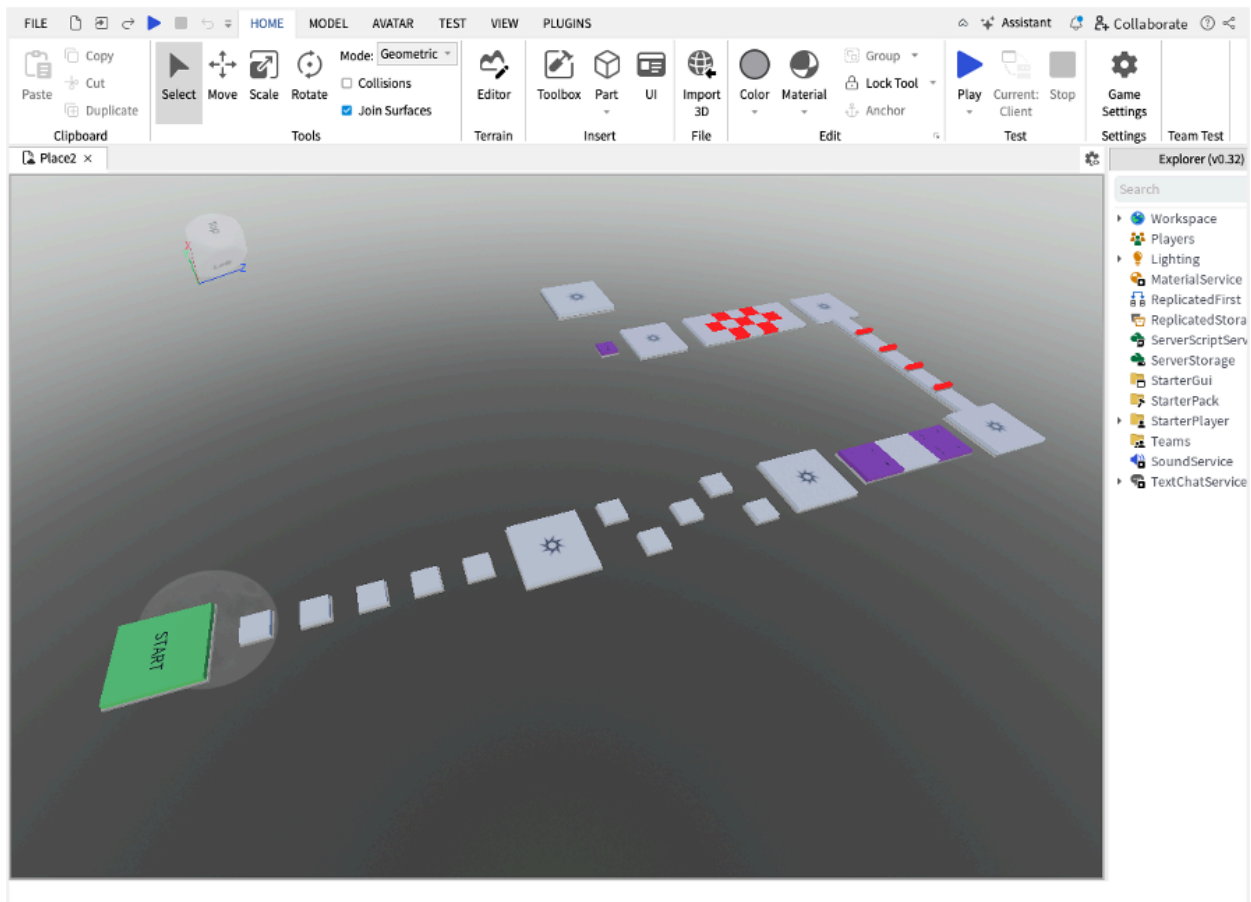
1. Click the **X** on the right-side of the window.



Tip: Reopening Windows

If you want to reopen a Window you closed, go to the **VIEW** tab and click on the name of the window you want to open.

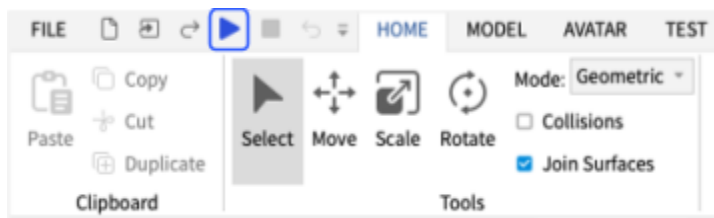
Studio should now look like this:



Playing the Classic Obby Template (2-3 minutes)

Lets see what this template Obby looks like. For those who have never played Roblox before, this is also a chance to learn how to control your character.

- Press the **Play** button in the top-left corner.



Teaching Tip

Let students play 2-3 minutes. This will give your students an idea of what they are working towards without having to go online. Let students know from the start how much time they have and give a one minute notice before time's up.

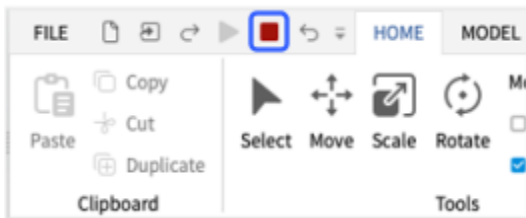
In-game Controls

Practice using the following controls to move within the Obby.

- Use **WASD** or the arrow keys to move your character.
- Use **Spacebar** to jump.
- Hold the **right mouse-button** to look around.

Stop Playtesting

- To **stop** playtesting, press the red stop button.

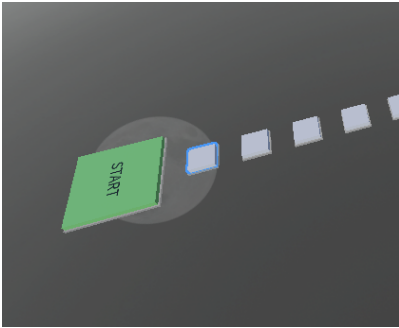


Using Assistant to Make Changes (10 Minutes)

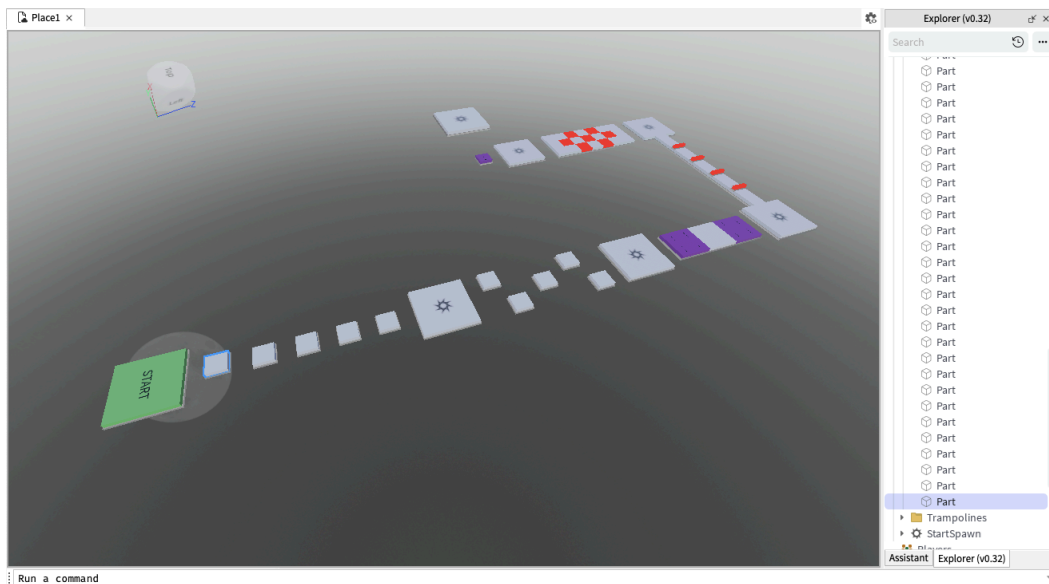
Roblox Studio has a built-in AI (artificial intelligence) named "Assistant" that can help you create and code your game. Think of Assistant as a friend that is eager to be helpful, but does not always understand what you want. This section will show you how to make requests using Assistant and how learning to code makes you better at using Assistant.

For your first request, you will make a part sparkle when a player jumps on it. Start by renaming a part to make it easier for Assistant to work with.

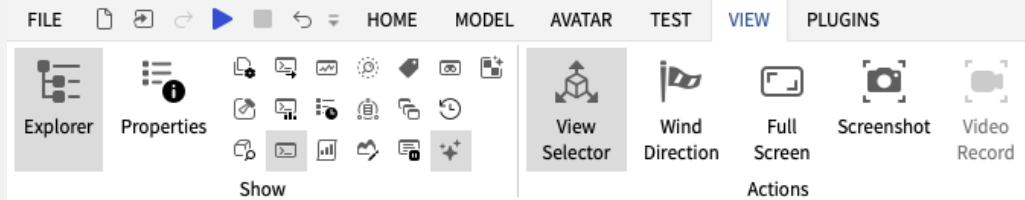
1. Click the part closest to the green starting point. It will be highlighted in blue when selected.



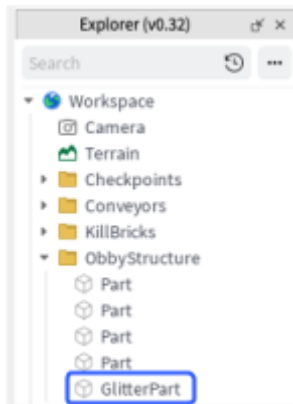
2. On the right side of the screen, called "Explorer", you will see the part you selected highlighted in blue.



If you do not see Explorer, go to the **VIEW** tab and click on the name of the window you want to open. In this case click “Explorer.”



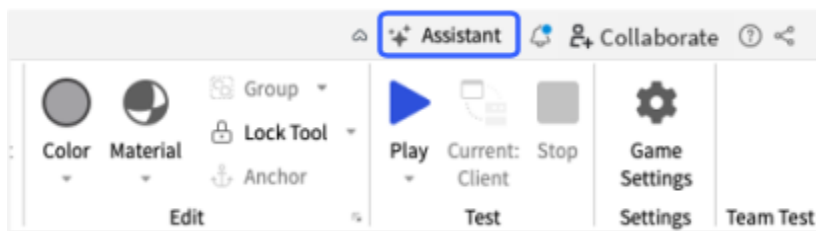
3. Right-click the highlighted part and select **Rename**.
4. Type **GlitterPart** and press **Enter**.



Opening Assistant

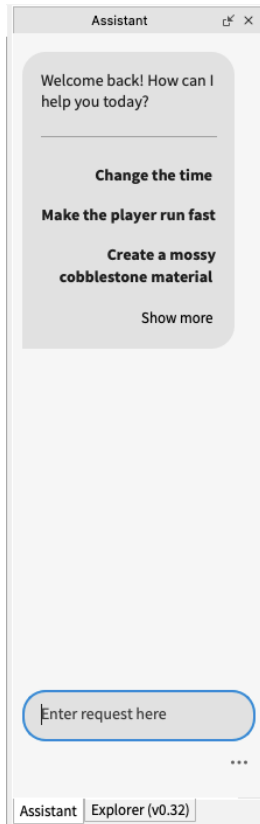
To access Assistant from Studio:

1. Click the **Assistant** button in the top-right corner.

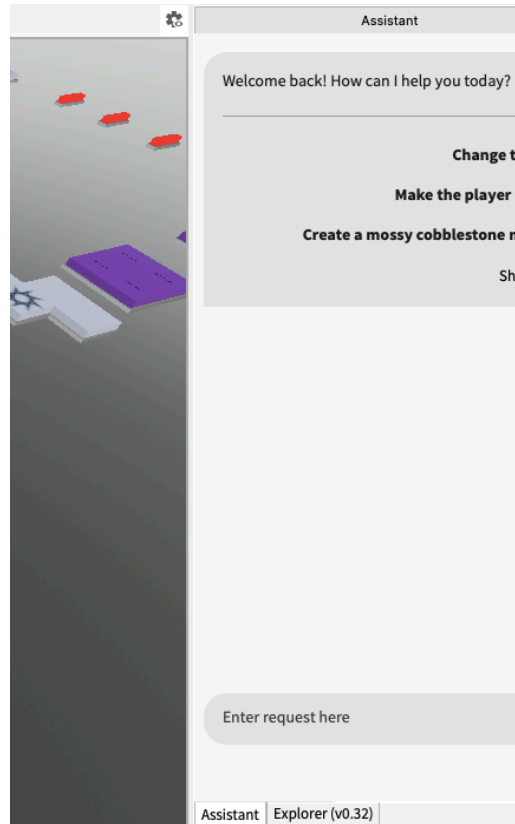


Assistant will open bottom right. When first opened, it can be narrow and hard to see everything. Drag the edge of the window to make it a little larger.

Before

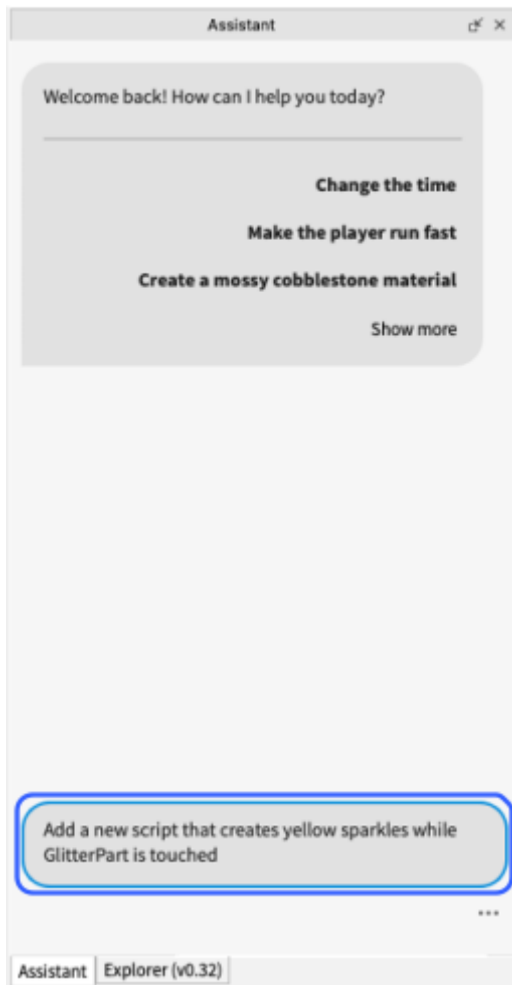


After



2. Where it says "Enter request here", type: *Add a new script that creates yellow sparkles while GlitterPart is touched.*

Warning: You can use a different color, but using different words might change the results.



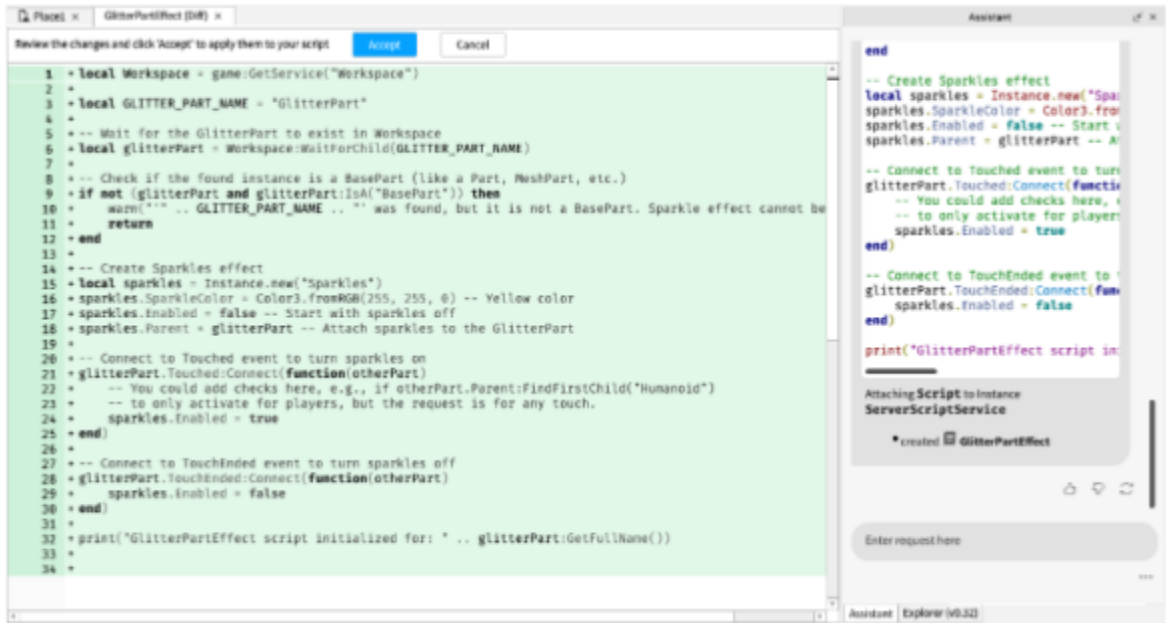
Teaching Note

This Assistant request is written in English to produce a specific and reliable result. Slight changes in grammar and word choice may cause different outcomes.

When using Studio in other languages, carefully test phrases to make sure they work as intended.

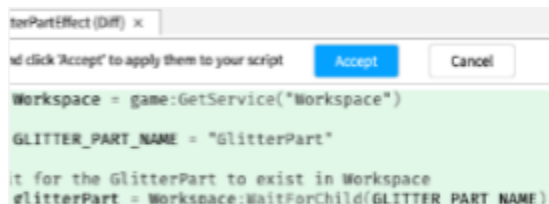
3. Click **Enter**. Assistant will run the request, and a window with the suggested code similar to below should appear.

Assistant is constantly learning, so it might not always produce the same results for the exact same request.

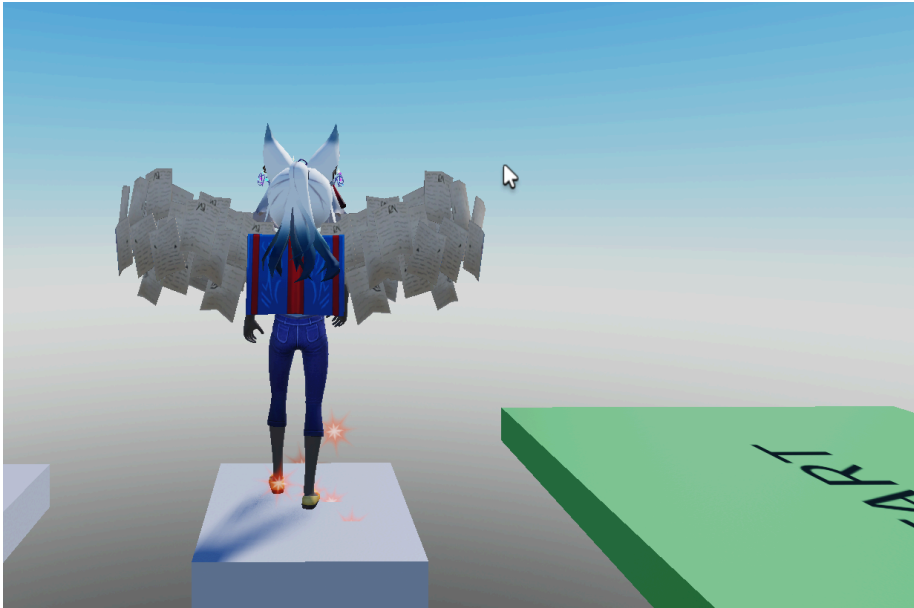


4. As you learn more about coding, you can better judge if the Assistant produced code that works as you intended.

- For now, click **Accept**.



5. Playtest the game to check the results. Yellow sparkles should appear when you jump on GlitterPart.



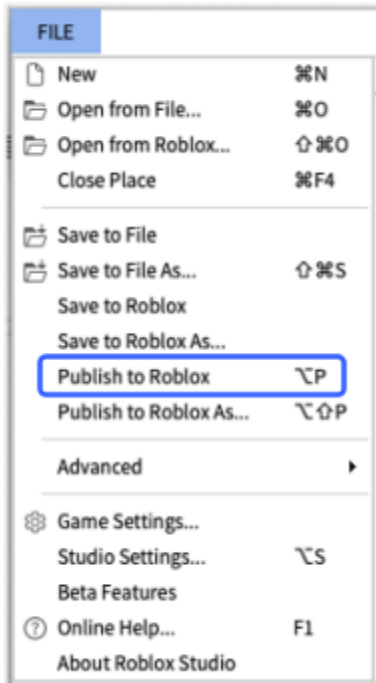
6. Remember to stop your playtest.

Save Your Work (2 minutes)

Before moving to the next section, take a moment to save the project. Publishing saves your game to your Roblox account, but it does not make it public yet. Once published, a project can be edited from any computer. Note: "Save to File" saves your project to your local computer. This is good for backups.

It is a good idea to publish every ten minutes while you are working or after a big change.

1. Select **File** (top left of Studio) and click **Publish to Roblox** to open the publishing window.



If the Publish button is grayed out, make sure you have stopped the playtest.

2. Enter a **name** and an optional **description**.

A screenshot of the Roblox publishing form. It has two main sections: 'Name' and 'Description'. The 'Name' section has a text input field containing 'Untitled Game' and a character count '13/50'. The 'Description' section has a larger text area and a character count '0/1000'.

3. When happy with the name and description of your project (you can always go back and change it), click **Create**.

The screenshot shows a settings dialog for creating a Roblox project. It includes sections for 'Devices', 'Team Create', and 'Data Sharing'. The 'Devices' section has checkboxes for 'Computer', 'Tablet', 'VR', 'Phone', and 'Console'. 'Computer', 'Tablet', and 'VR' are checked, while 'Phone' and 'Console' are not. The 'Team Create' section has a green toggle switch turned on, with the text 'Enables collaboration and autosave to cloud' and a 'Learn more' link. The 'Data Sharing' section also has a green toggle switch turned on, with a longer explanatory text and a 'Learn More' link. At the bottom right, there are two buttons: a grey 'Cancel' button and a blue 'Create' button.

Next time you want to save your work, go to **File → Publish to Roblox** or use the hotkey (Alt+P).

Getting Better at Working with Assistant (5 Minutes)

There is more than one right way to make any particular request, but every word counts. If you make a request and do not get the results you want, rephrase the request and try again.

Below are examples of how slightly different word choices can produce different results.

Original: Add a new script that creates yellow sparkles while GlitterPart is touched.

Request Variation

Possible Results

~~Add a new script that~~ creates yellow sparkles while GlitterPart is touched.

Assistant might show you the code, but not make a new script. It might also add the code to a random existing script.

Make purple sparkles when the part named GlitterPart is stepped on.

Assistant might make sparkles before GlitterPart is stepped on, or make only a few sparkles.

Make GlitterPart sparkle

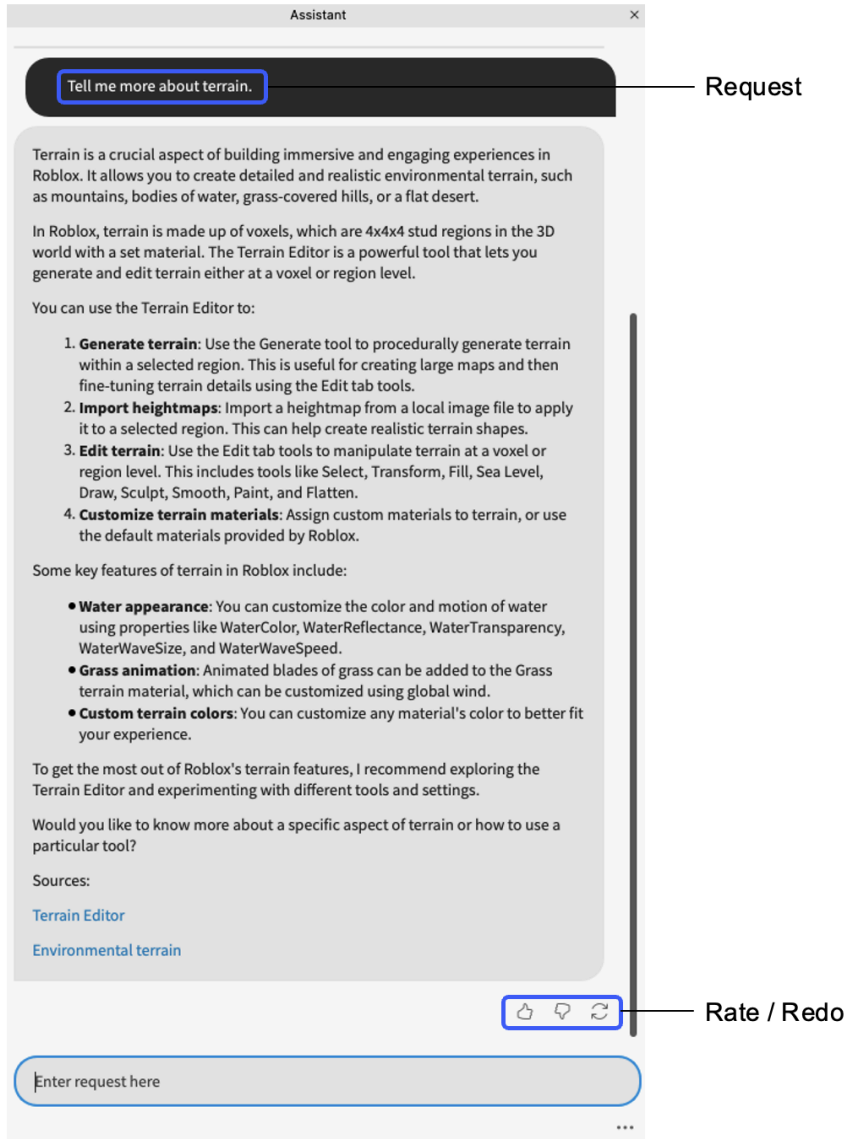
Instead of adding a script, Assistant will just add a particle emitter (the object which makes sparkles) to GlitterPart. Which can be good if you want it to sparkle at all times.

Undoing Bad Results

- If you do not like Assistant's results, press Ctrl/Cmd + Z to undo them.
- If Assistant made a script:
 - You may click on the script's name in the Assistant Window. This will highlight it in Explorer.



- Press BackSpace or Delete to remove the unwanted script and start fresh.
- Assistant is always learning how to better help you. You can thumbs up or down to tell it if it did a good job or not.



Learn Coding Logic to Create Better Assistant Requests

Like many AI systems, Assistant is a helpful tool, but you must always check the results of your request to make sure they generate the outcomes you intended. The fewer details you provide, the more unpredictable the results. We will try an example.

1. Make sure you have stopped the playtest. It is always important to click the red stop square after a playtest.

2. Request: "Make parts sparkle when you touch them." What do you expect to happen when you playtest again?



Teaching Note

Students will likely guess that it will make all the parts sparkle when touched. However the phrase "Make parts sparkle when you touch them" is unlikely to work that way.

3. If Assistant asks you to accept new code, accept it.
4. **Playtest** and compare what you think would happen with what actually happens.

Although Assistant is constantly learning and getting better, it sometimes produces results that are other than you intended. Possible outcomes for "Make parts sparkle when you touch them":

- The resultant script may not work at all
- Only a single random part may work
- Parts may sparkle before they are touched

Get better results by learning to speak like computers do. Code is the language computers speak, and the more you can speak in the computer's language, the easier it will be for Assistant to help you. The following request uses words from several coding concepts to get a more reliable result:

- Try the following request: "Add a new script. For all objects in the workspace, if a player touches a part then make the part sparkle"

Recap (5 minutes)

Discussion Questions:

- Why is it still important to learn how code works if AI is so useful?
 - Answers: AI does not always generate the code for actions you intended. Learning to code can help you talk to AI and generate better results.
- What types of jobs do you think there are at gaming companies?
 - Answers: Engineers, artists, musicians, organizers (project managers), accountants, moderators. People who train AI.

Lesson Recap:

- Today we learned about:
 - Roblox, Roblox Studio, how to test games, and why you need to learn more about coding even with helpful AI like Assistant.
 - Next lesson we will:
 - Build our own obby from the beginning
 - Learn about user testing
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