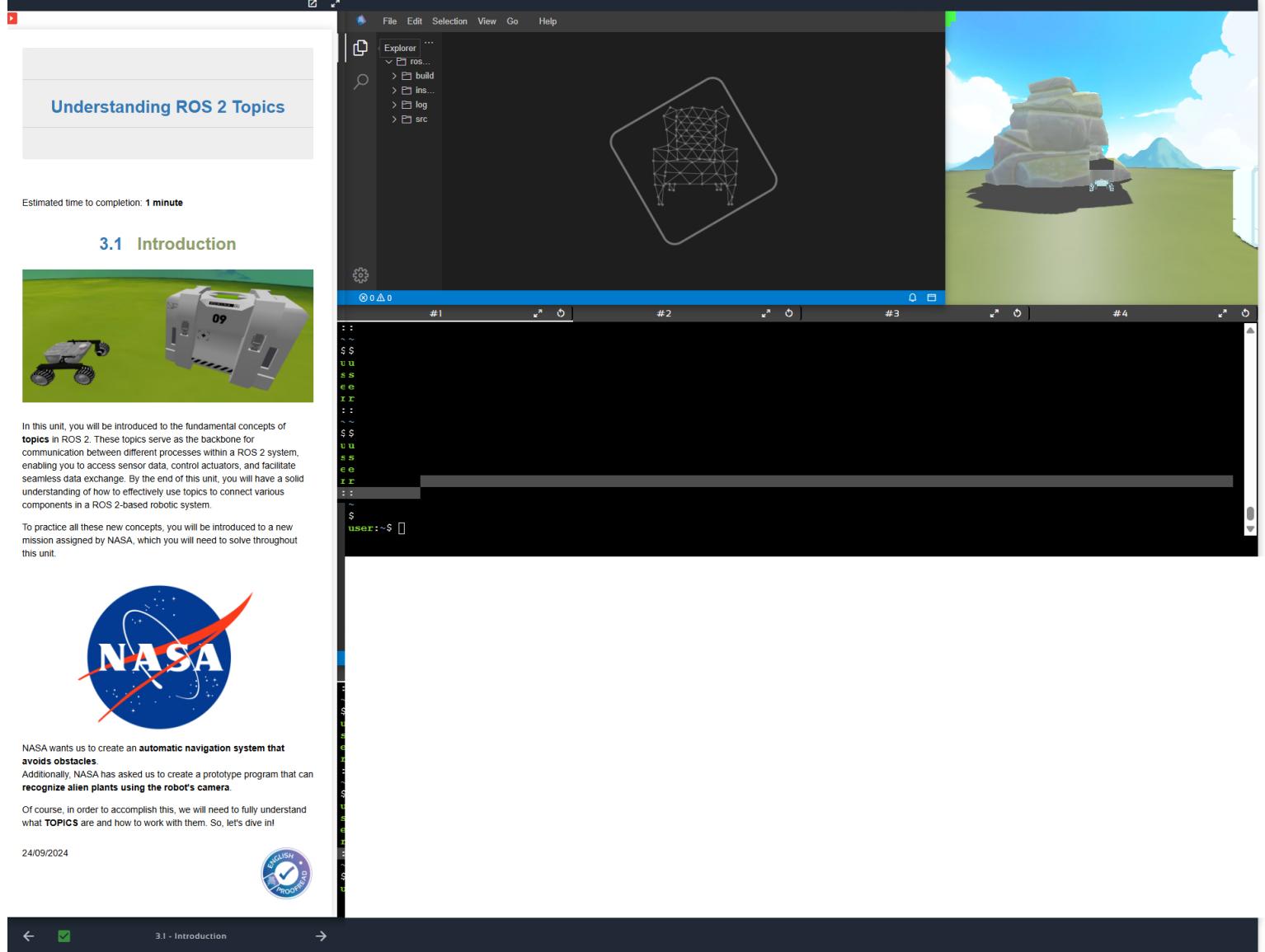


Understanding ROS 2 Topics

Estimated time to completion: 1 minute

3.1 Introduction



In this unit, you will be introduced to the fundamental concepts of **topics** in ROS 2. These topics serve as the backbone for communication between different processes within a ROS 2 system, enabling you to access sensor data, control actuators, and facilitate seamless data exchange. By the end of this unit, you will have a solid understanding of how to effectively use topics to connect various components in a ROS 2-based robotic system.

To practice all these new concepts, you will be introduced to a new mission assigned by NASA, which you will need to solve throughout this unit.



NASA wants us to create an **automatic navigation system that avoids obstacles**. Additionally, NASA has asked us to create a prototype program that can **recognize alien plants using the robot's camera**.

Of course, in order to accomplish this, we will need to fully understand what **TOPICS** are and how to work with them. So, let's dive in!

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