

Guidance for Students

Introduction

Welcome to the `virtual-robot-maze` project! In this repository, you will work on various tasks, ranging from basic programming exercises to controlling a virtual robot. This document provides an overview of how to navigate the project, use GitHub Codespaces, and work with multiple Rust projects.

Getting Started with GitHub and Codespaces

1. Fork the Repository

- Go to the main repository on GitHub.
- Click the **Fork** button at the top right to create your own copy of the project.
- You can find the forked repository under your GitHub profile.

2. Open GitHub Codespaces

- In your forked repository, click the **Code** button and select **Codespaces**.
- If you don't have a codespace yet, create one by clicking **New Codespace**.
- Once it loads, you'll have a development environment with Rust pre-installed, ready for coding.

Working with Multiple Rust Projects

The `virtual-robot-maze` repository contains multiple Rust projects, each focused on different tasks:

- **Basic Programming Tasks:** These are located in the `basic-programming` directory and are designed to teach fundamental Rust programming concepts.
- **Virtual Robot Tasks:** These tasks are found in the `src` directory and involve controlling a virtual robot using Rust.

Switching Between Projects

As you work on different tasks, you'll need to switch between Rust projects. Here's how:

1. **To switch to the basic programming tasks:**

- Navigate to the `basic-programming` directory:

```
1 cd ~/workspaces/virtual-robot-maze/basic-programming/basic_syntax
```

- Use `cargo run` to run the code in the basic programming project.

2. **To switch to the virtual robot tasks:**

- Navigate to the `src` directory:

```
1 cd ~/workspaces/virtual-robot-maze/src
```

- Use `cargo run` to execute the virtual robot code.

General Workflow Tips

- Always use the terminal to navigate between project directories before running commands.
- Use `pwd` (print working directory) to check which directory you are currently in.
- Save your changes frequently and use `git commit` and `git push` to save progress to your GitHub repository.

Next Steps

Once you understand how to navigate the project and switch between tasks, you can start working on the stepping-stone tasks or proceed directly to the virtual robot tasks. Refer to specific task documents for detailed instructions.