

2024-2025 Pre Season Project

This project is for new members and those who want a refresher on robot code

Project Goals

We will have a simple one motor system to test this code on.

What you want to do with this project is make code that spins a motor while a button is pressed down. For example, if you hold the X button on the xbox controller, it should spin, and once you let go, it should stop.

In this project, you have to:

- Create a constants file which includes:
 - The motor ID (TBD)
 - The port for the XBOX controller (0)
 - The motor input value (1.0)
- Create a subsystem for a motor which has:
 - Class fields
 - A constructor
 - A method to move the motor
 - A method to stop the motor
- Create a command for that subsystem which has:
 - Class fields
 - A constructor
 - The built in parent class methods for the command to run
- Inside robot container:
 - Initialize the xbox controller
 - Initialize the motor command
 - Bind the motor to spin when a button is pressed

If you need help

Remember to review the lessons on the website if you need a review on commands, subsystems, or robot container - we will be going over constants on 12/5/2024, and if you need help on those feel free to ask online.

There are also hints in the files in the Samples repo if you get stuck - if you want an extra challenge, try and do it without the Samples repo and the hints

If you do not have a home laptop, either do it on notepad or work with someone else who has a home laptop. It'll be useful to have WPILib for the code and the documentation that's already on your computer.

If you have any questions, feel free to ask. Try and finish this by 12/12/2024 (it's not really due until the other sub-teams finish the board bot but try and finish it early so we can debug it)

Once you finish

If you finish the project early, DM a previous member of the code team or a code lead to review your work - it's okay if you don't get it first try