



Welcome Back!

Overview

- Catching Up
- What is FRC
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- Why 5549
- Why Programming
- Updates
- Curriculum
- Software Needed
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What is FRC

- FIRST Robotics Competition (FRC)
 - Organized by FIRST
 - Nonprofit organization aimed at advancing STEM education
- Build a Robot for Game
 - Game Changes Yearly
- Compete with Other Teams
 - 3 v 3
 - Chesapeake Region
- 2 Competitions Yearly
 - Offseasons
- Starts in January and Ends in March/April

Who is 5549

- George C. Marshall Robotics Club
 - Don't call us that
 - Not really a club associated with the school
 - We use school facilities and share teachers/students and...that's it
 - No funding or support
- FRC Centered
 - Year Round
- “5549”
 - Pronunciation
 - FRC Number Designation

Why 5549

- One of Marshall's largest activities
- Build cool robot
- Learn a lot
 - You'll learn more in this club than others
- Dedicated members
- Intelligent People
- Get you through the day

Why Programming

- Adds functionality to robot
- Can't have a robot without mechanical
- Hunk of metal without electrical
- Robot with drivetrain without programming
- Ease of use for driver
- Outperform other teams
- Easiest way to improve a robot
 - Driver training
 - Programming to help driver

Updates

- Virtual
- Smaller In-Person Meetings (Future)
- No full team meetings
- Creative ways to do robotics
 - Without
 - Cost
 - Large Meetings
- Switch to Java
 - RobotPy Third Party
 - Less Documentation
 - Harder to Find Resources
 - Deal-breaker as student-run team

Curriculum

- Basics
 - Print Statements
 - Reading Input
 - Variables
 - Calculating Numbers
 - Conditional Statements
 - Loops
 - Lists
 - Errors
- Object Oriented Programming
 - Classes
 - Methods
- FRC
 - Command-Based Programming
 - File Layout
 - **Git**
 - PID
 - Hands On Learning
 - Mock Game / Robot

Items Needed

- Computer
 - Personal Preferred
 - Can use School
 - Repl.it
- Java
- Discord
- IDE
 - Visual Studio Code
 - IntelliJ
 - Atom
 - Repl.it
 - ~~Vim~~



Questions





Ideas





Invite People!