Beat this Pandemic Together

Free Programming Course Series - 4th Course
Java Foundations

Brought to you by VEX Robotics Team - VRC 99909A Rising Phoenix
- 2017 VEX Robotics World Championship - Excellence Award (the highest award)
- 2016 and 2019 VEX Robotics World Championship - Design Award
- 2018 VEX Robotics World Championship - Create Award
- 2016, 2018, and 2019 VEX IQ Robotics Virginia State Champion

Join us on *"Team 999A Rising Phoenix"* YouTube Channel every Friday at 8:00 PM for free programming classes starting July 30th, 2021! *(Age 8 - 14)*

Class Syllabus

We will introduce Java, an Object-Oriented Programming (OOP) language, in this course. In high school, the ComSci foundation course and AP CompSci are both taught/tested in Java. In addition, Java is one of the most robust programming languages used for developing small applications to large end-to-end enterprise software.
In this course we will cover:
- Procedural Programming vs. Object-Oriented Programming
- Dynamic Typing vs. Static Typing
- Java Basics
- OOP Principles
- Java GUI (Swing)

At the end of this course, you should be able to create a Java application with simple GUI.
Github repository for course materials:
https://github.com/CapitalRoboticsClub/Programming_Courses/tree/master/Java_Foundations

Programming Course Series

1. Python Basics (12 lessons - completed)
2. Practice Python with CodingBat.com (20 lessons - completed)
3. Mini Python Projects (20 lessons - completed)
4. Java Foundations (this course)
5. RobotC Intro (Programming language for Vex IQ Robotics Competition)
6. C++ (PROS) intro (Programming language for VRC Robotics Competition)
7. Fusion 360 (CAD design) + Cura (Slicer) + 3D printing