

Intro to Programming

Objectives

- Understand what programming is all about
- Introduce concept of pseudocode

Agenda

- What is Programming?
- What is Pseudocode?
- Class Exercise: Thermostat
- Group Exercise: Rock, Paper, Scissors
- Class Exercise: Color Scheme Switcher
- Lab: Traffic Light

PB&J Exercise

What is Programming?

- List of instructions that a computer needs in order to complete a task
- Instructions are provided in a syntax (or language) that the computer understands

What is Pseudocode?

- Process of writing a program without using the syntax of a programming language
- Mixture of natural language and high-level programming concepts

Class Exercise: Thermostat Logic

- We're going to use pseudocode to describe basic functionality of a smart thermostat

Group Exercise: Rock, Paper, Scissors

What can Javascript do?

- Adds interactivity to your websites?
- Makes web based software feel more like desktop software
- Improves user experience

Class Exercise: Color Switcher

Lab: Traffic Light

- Fix the broken code
- Use "pattern matching" to identify what needs to be changed / added