

Design and Realization

**IS 101Y/CMSC 104Y
First Year IT**

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- **Questions**
- **Announcements**
 - **Office hours today only until 12pm**
 - **Asst 3 due Tues**
- **Names**

Exercise: Socks

- **With team, write pseudocode for sorting a pile of socks. Be prepared why your approach the best way to solve the problem.**

- **Sort by color**
- **Sort by size**

Abstraction

- **An abstraction reduces information to focus on relevant concepts.**
- **Examples of abstraction:**

- **Identifying appropriate abstractions for data, relationships, and actions is key design decision**

Semester Game

- **Basic scenario**
 - Player makes choices about how to allocate time in each of 15 wks
 - Game simulates outcomes
- **Possible choices for outcomes**
- **Possible choices for time (for 168 total hrs/wk)**

Modeling Influences/Outcomes

- **Hrs worked outside school**
 - Range?
 - Effects?
- **Hrs attending class**
 - Range?
 - Effects?
 - Describe effects as equation
- **% class actively participating**
 - Range?
 - Effects?
 - Describe effects as equation

Abstraction Exercise 1

- **In your group, discuss the following choice:**
 - Hours spent studying/working on assts
- **For this choice,**
 - specify a reasonable range
 - Model the effect on each outcome with an equation
- **Be prepared to report out your model and argue why it is superior to other models.**