

LEC 10

CSE 122**Advanced OOP**

Questions during Class?

Raise hand or send here

sli.do #cse122



BEFORE WE START

*Slido vote & chat with neighbors:**What is your favorite cold food?***Instructor:** Ivory**TAs:** Connor
Yang
Dani
Rohan
Colin
Wesley

Lecture Outline (1/5)

- **Announcements** 
- Recap
- More Instance Methods
- Static Methods
- Expanding Our Example

Announcements

- Programming Assignment 2 due August 4th 11:59pm PT
- Keep an eye on end-of-quarter timeline!
 - Quiz 2 (Nested Collections, Objects, Interfaces) on Thursday, August 13th
 - Final Exam on Wednesday, August 19th *and* Friday, August 21st

Lecture Outline (2/5)

- Announcements
- **Recap** 
- More Instance Methods
- Static Methods
- Expanding Our Example

Encapsulation

We *always* want to declare our fields as **private**!

We define *instance methods* for users to interact with our fields.

Instance methods give us *control* over how users can access and modify our ShoppingCart's **private** fields.

Lecture Outline (3/5)

- Announcements
- Recap
- **More Instance Methods** 
- Static Methods
- Expanding Our Example

Lecture Outline (4/5)

- Announcements
- Recap
- More Instance Methods
- **Static Methods** ◀
- Expanding Our Example

Static Methods

- These are methods we used to write!
- If a method is not an instance method, then it is a static method :)
- A static method cannot access instance variables (fields) or call other instance methods!

Lecture Outline (5/5)

- Announcements
- Recap
- More Instance Methods
- Static Methods
- **Expanding Our Example** 

Item class

An item could have:

- Price
- Quantity
- Name
- Weight
- etc.

We could just keep adding instance variables to our `ShoppingCart`, but encapsulating everything item-related into a class gives us more readability and flexibility.