CSE 1325 Midterm topics/notes for Spring 15

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This is primarily a stream of consciousness list of things that have come to my mind as I start to write the midterm. Use the old tests as a guide to the type of questions I will write and use the info below as a guide to the scope of topics that I may write questions about for this exam.

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What is a Class?

What is an Object?

Components of classes

 Data fields (also called data members or member fields)

 Typical characteristics of data in a class

 Methods (also called functions or member functions or behaviors)

 Methods that should be included in every class

 How to write and why to have multiple constructors for a class

 Validating data in the methods

A Java program must have at least one WHAT and that thing must contain what method in order for the program to run?

Be able to write the Java code for :

 A class that I would describe, giving appropriate data and methods as defined in a question

 An enumeration

 A method that I would describe

 A method that does data validation

 Some lines of code to read input from the keyboard

 Some lines of code to display data in a message dialog window

 A subclass

 A class that implements an interface (if I give you the interface to use)

Be able to read and understand the Java code of a set of classes that I would give you so that you can answer questions about the code. <You can see examples of this with the questions from last semester’s tests and the associated Java classes that those questions refer to in the oldJavatest directory.>

Polymorphism

Inheritance

Data Abstraction and Encapsulation

Benefits of OO languages and OO design (compared to structured languages like C)

Interface / implements

Superclass / extends

Final

Static

Try / catch for exception handling