## Class Notes

Friday, April 24, 2015 3:21 PM

## Understanding Portfolio:

- # Used to assess your level of fluency
  - Technology Topics
  - UML Diagrams
  - Examples of Professionalism
- \* You Provide Direct Evidence to me

### Hibernate:

- 1. The Singleton Pattern
- 2. The Proxy Pattern
- 3. The Factory Pattern
- 4. HQL
- 5. Many To Many definition
- Many To Many example and diagrams
- Full Hibernate annotations declaration and description
- Many-To-One and One-To-Many Relationships
- Bi-directional One-ToMany Relationships

MC Class Sequence State

· Use case

How to use git:

• git add

git commit -m "This is my first commit"     git push hashmaps map keys tovalues
• git pusii
nashmaps map keys tovalues

## Weekly Journal

Saturday, April 25, 2015 4:55 PM

### April 25, 2015

The week has been kind of weird. I broke my arm, and I have been behind in all my work this week due to sleeping a lot from the pain meds. I am not even sure exactly what I am supposed to be doing on this class, but I am sure I will get into the rhythm this week. I am not going to type much this week considering I have only one hand to type at the moment. I think I have everything done that I need to get done this week. I hope my semester in this class is a great one. I hope to end my final semester in college on the best note that I can.

## May 2, 2015

This week I simply did what was required on iLearn. This is my first full week back after breaking my finger, and I can seriously see a LOT of the limitations that comes from typing with only 1 finger on one hand. Its really hard! Besides that, I have worked on really nothing else this week because of that. I just simple got to know a little bit more about my class.

### May 9, 2015

This week we actually got to meet our team. I was excited to see that our team was all on campus. We met together and just spent some time quickly studding UML Diagraming so that we could present on it. I did activity diagrams, only to learn that I did not need to do that.

#### May 16, 2015

This week we meet again, but I did not really do anything new. I read up on some Java Collections. I didn't really do anything else that week.

#### May 23, 2015

This week I think is my breaking point! I haven't had time to do anything in this class, and time is going to get even more tight. I need to find time to at least get to a B in this class.

## May 30, 2015

This week I feel like got a while lot done. I got most of the UML Diagramming finished as well as MVC and Hibernate. I was grateful to see that our group was willing to all work together to get at least a B in the class.

Table Mastings
Team Meetings
Wednesday, May 6, 2015 10:11 PM
May 6, 2015
Using Git HUB for the first.
6UI PWR
- drug file git pull - open Gui git push
- open GUI - comit  git push
-Sync
What will I be learns this week?
What will & be learny this week? - Java Collections - Just L the burns
Ofher Items
· whit you did holay?  Sesteway?  Tommerou?
Sesterles.
Onne 104 (

## Elevator Pitch - Project Idea

Wednesday, April 29, 2015 12:12 PM

## Wall Paper switcher

## How will it switch?

- Based on location
- · Based on time of day
- Based on battery Percentage

## How many wall papers can we switch?

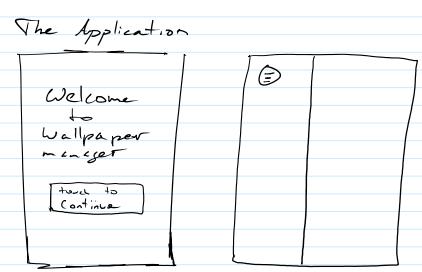
• 5 Wall papers

## Why?

- For design
- Saving battery
- Can't decide what wall paper you like

#### Other Items:

- App will be process that runs in the background
- Process that runs in the background
  - o Make sure that it runs smoothly in the background
  - o If Battery option is selected, then process should shut itself off so it doesn't continue to run the background.



Use Case Document Monday, May 25, 2015 9:45 PM

Saturday, May 23, 2015 4:12 PM

### **Class Diagrams**

- A class is basically a template for which objects are created.
- Classes define attributes, information that are relevant to their instances, operations, and functionality that the objects support. Some of the more important guidelines

## Use Case Diagram

#### **Useful Links:**

• http://www.agilemodeling.com/artifacts/useCaseDiagram.htm

#### **General Notes**

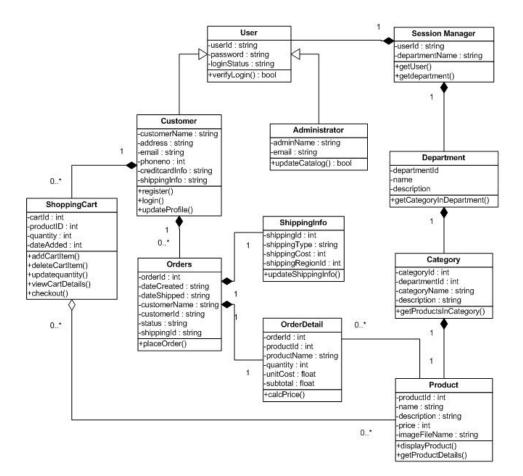
- Purpose of a use case diagram is to capture the dynamic aspect of a system.
- Use case diagrams are used are used to gather the requirements of a system including internal and external influences.

## Class Diagram:

#### **Useful Links:**

• <a href="http://people.cis.ksu.edu/~reshma/798">http://people.cis.ksu.edu/~reshma/798</a> ClassDiagram.htm

#### **General Notes:**



## JAVA Collections

Wednesday, May 13, 2015 1:05 PM

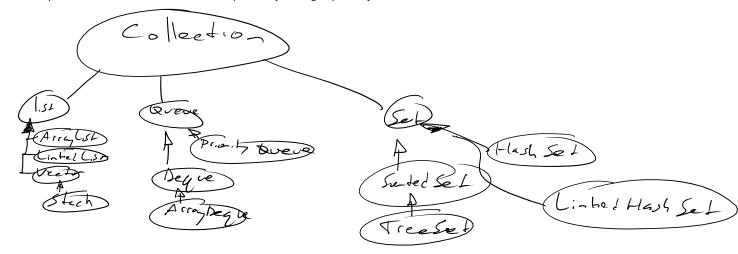
#### From https://docs.oracle.com/javase/tutorial/collections/intro/index.html

 Java Collections can sometimes be called a container. It is simply an object that groups multiple elements into a single unit.

#### Other resources

- https://docs.oracle.com/javase/tutorial/collections/
- http://www.java2novice.com/java-collections-and-util/
- <a href="http://www.tutorialspoint.com/javaexamples/java">http://www.tutorialspoint.com/javaexamples/java</a> collections.htm
- <a href="http://math.hws.edu/javanotes/c10/s4.html">http://math.hws.edu/javanotes/c10/s4.html</a>
- <a href="https://www.youtube.com/watch?v=mkCTxtLe7XU">https://www.youtube.com/watch?v=mkCTxtLe7XU</a>
- http://docs.oracle.com/javase/7/docs/api/java/util/Collections.html
- http://docs.oracle.com/javase/7/docs/api/java/util/Collections.html

Collections provide a set of classes to store and manipulate objects or groups of objects



- what is a collection??

. Similar Stuff

to collection of any thing

exployee

## Hibernate

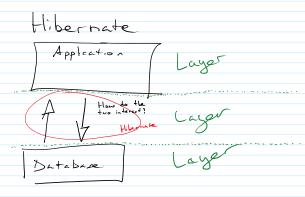
Tuesday, May 19, 2015 10:47 PM

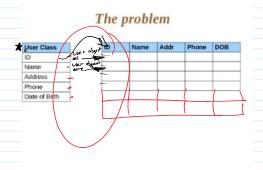
#### Useful Links:

- http://en.wikipedia.org/wiki/Hibernate %28Java%29
   Used in the data layer of applications
- http://www.theregister.co.uk/2005/12/06/hibernate\_object\_relational\_mapping\_2/
- https://www.youtube.com/watch?v=66XbyTM7tM4
- https://www.youtube.com/watch?v=wNT-EZsaC98
- http://www.vnrgroups.com/articles/java-hibernate-tutorial-part-1/
   http://www.vnrgroups.com/articles/java-hibernate-tutorial-part-2/

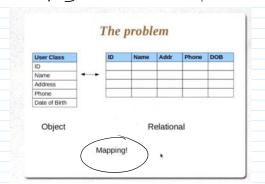
#### General Notes

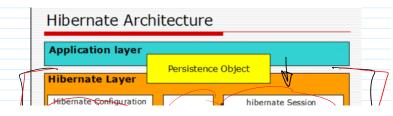
- An object relational mapping framework for the Java language, providing a framework for
- · an object-oriented domain model to a traditional relational database
- It is an ORM tool
- Used in the data layer of applications, meaning the layer in which the applications interact with the data
- Impliments JPA Java Persistance API Persistance impliment
- $\circ \quad \text{More portable if not wanting to use hibernate} \\$
- The problem they are trying to solve
  - Saving data in a relational Database
  - o Each of these objects data would have data for a particular user
- Need to use hibernate configuration in xml file

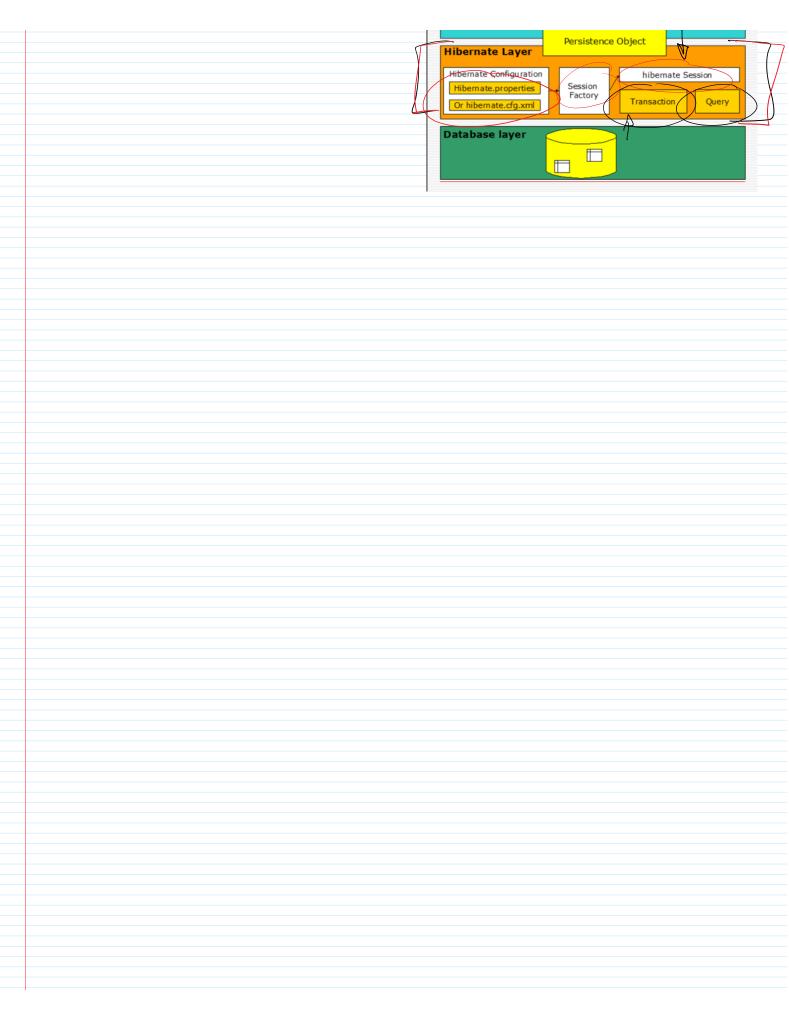




ex//- user object #/ is save!
A Class corresponds to a table, an object corresponds to a row in that no object on database many mapping is what is a pain







# **JSON**

Monday, May 25, 2015 12:28 PM

JavaScript Object Notation

## MVC (Model View Controller)

Monday, May 25, 2015 4:17 PM

#### **Useful Links:**

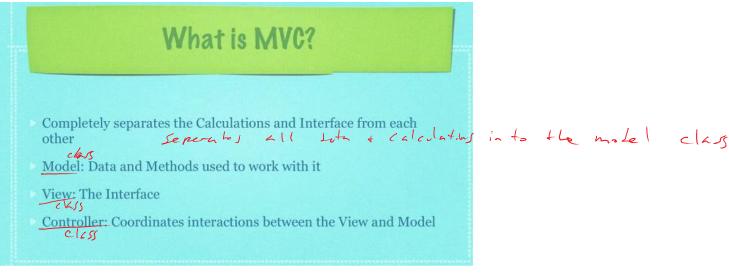
http://www.newthinktank.com/2013/02/mvc-java-tutorial/

http://www.cs.utsa.edu/~cs3443/mvc-example.html

http://www.codeproject.com/Articles/25057/Simple-Example-of-MVC-Model-View-Controller-

Design

#### **General Notes**



DemoController -model : DemoModel <<Constructor>>DemoController(model, view)
+mouseDragged(event : MouseEvent)
+mouseMoved(event : MouseEvent) +valueChanged(event : ListSelectionEvent) DemoModel -model : DemoModel -mousePanel : PaintPanel -pointCount : int points : Point[ ] selectedColor : Color -colorList : JList -listPanel : JPanel +addPoint(point : Point) +getPoint(i : int) : Point +setSelectedColor(color : Color) <<Constructor>>DemoView(model) +paint(g : Graphics) +getSelectedColor() : Color +getSelectedColor(): Color egisterListener(lis er : DemoController) model : DemoModel <<Constructor>>PaintPanel(model) +paintComponent(g : Graphics)

- Can think of this a data interface coordinator
- Software developmet method that keeps it when not in use, helps all developers in the world figure out what is wrong with apokication

## **JUnit**

Wednesday, May 27, 2015 2:35 PM

## **Useful Links:**

- <a href="https://netbeans.org/kb/docs/java/junit-intro.html">https://netbeans.org/kb/docs/java/junit-intro.html</a> a turtorial that goes through all of this
- http://junit.org/
- <a href="http://hamcrest.org/JavaHamcrest/javadoc/1.3/org/hamcrest/Matchers.html">http://hamcrest.org/JavaHamcrest/javadoc/1.3/org/hamcrest/Matchers.html</a>
- <a href="http://www.vogella.com/tutorials/JUnit/article.html">http://www.vogella.com/tutorials/JUnit/article.html</a>
- <a href="http://junit.sourceforge.net/doc/testinfected/testing.htm">http://junit.sourceforge.net/doc/testinfected/testing.htm</a>

## **General Notes**

- To test if the return value equals a specific value use return assertTrue()
- Start by making our tests with @test
- Junit defines how to structure your test case and provides the tools to run them.

# **JSON**

Friday, June 5, 2015 8:11 PM

Useful Links: <a href="http://json.org/">http://json.org/</a>

**General Notes:** 

JSON (JavaScript Object Notation) - a lightweight data interchange formate.

# Client and Server Sockets and their I/O streams

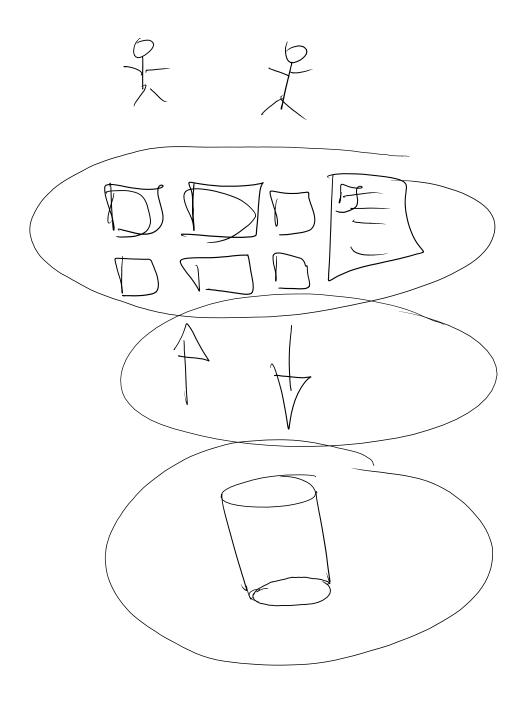
Wednesday, May 27, 2015 7:00 PM

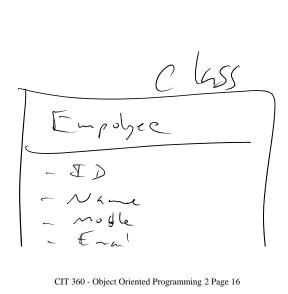
## Useful links:

• <a href="https://www.youtube.com/watch?v=pr02nyPqLBU">https://www.youtube.com/watch?v=pr02nyPqLBU</a>

#### **General Notes**

- What is a stream? Whenever you connect to someone else's computer through networking using
  Java. The way we communicate is through steams; two main streams: the output stream and the
  input steam. The output stream is what flows away from the computer and to your friends
  computer
  - Output goes way from you in put goes to you
  - Whenever we type text and press enter, that text is packed up and sent out and put into someone's computer.
  - Whenever some friend puts text and presses enter to send you message, that text is put into a 'package' and sent to my computer in a text stream.





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