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
- 7. Full Hibernate annotations declaration and description
- 8. Many-To-One and One-To-Many Relationships
- 9. 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				
hashmaps 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.

June 6, 2014

Another busy week. Sadly, Friday and Saturdays are my most intense days of school work. This week I learned about JUnit, among other things. It was cool, because I have done quality assurance working for the Church for an internship, so it was cool to be able to know some of the purpose of JUnit as well as how to use it. It's basically a way to automate testing of an application. It can be very useful in testing a program, yet developers often don't take the time to use it when programming, thus leaving a lot more bugs.

June 13, 2015

I have been doing my best with my limited time each week to get several topics done. This week, i was able to learn about JSON. It was really cool leaning about it because it can compare to XML, which my field of work is critical to know. It some pretty useful stuff as it can work pretty well for collecting medium about of data and storing them in files or being able to full existing files of data. I also worked on finishing all of my UML stuff. It's been a really busy week again but I got a lot more things finished and I learned a ton as well!

June 20, 2015

It's been another week of lots of stuff. I feel like I got a lot accomplished again. Its good the semester is almost over because I am really starting to get burnt out from the load. I learned about HTTP URL connection this week, it is interesting to see how well URL links integrate with JAVA. If there is one thing i didn't know before this class is how well JAVA can integrate with a great many things like database and the internet. I also learned about threads, executioners, and handlers. It was cool to learn about how we can manually in the program control the way the program runs, and how little some programmers in android think about making their program run efficiently.

June 27, 2015

This week was crazy, i have been out of town for most of the week, my computer needed to be reformatted, and after all that I was going to get the rest of the topics in tonight, but my wife was hospitalized so that is not going to happen by tonight, tomorrow I should have it in.

July 4th, 2015

Great independence day, and the first night for months that I didn't work on hw until midnight on a Saturday! I have made much better progress this week as I worked more on java collections. I will be focusing on two more topics this week and work on getting all my professionalism for the class done.

July 11th, 2015

This has been a great week as just touching up on some knowledge about java and junit. I tried it with Chad and Casey, who is a tutor for the Java classes. I mostly just read the notes that he taught the class, but it is not in my portfolio. Then I worked on touching up my portfolio to turn in and see where I stand. It's getting extremely difficult to continue working on this now that my semester is ending.

July 18

I have turned in my portfolio and so far, hopefully that with a completed journal will get me at least a B-. I have worked my butt off this semester not just in school, but also at my job and getting another job after I graduate. I am glad I am so close to the finish line. I now have a Job lined up with Deseret book. I think I will be done now, we will see how much time I have at the end of the semester.

July 22, 2015

This is it, I think I am going to have to be done with this class. I am far too busy to continue working on it now that I have other plans to work on with finishing my current job as well as getting new job ready and graduation this week. I am grateful for the learning that I have had this semester. I think what I got most out of this class was the ability to learn and teach myself, more than the concept of Java itself. I used it immensely at work and I my journal for that looks amazing as a result. I would say that because of that, with any problem that I can be given, I can say that I have the ability to take time to research and learn about it by myself without any instructor helping me out, except for a few things here or there.

Team Meetings Wednesday, May 6, 2015 10:11 PM May 6, 2015 Using Git Hub for the first. 6UI PWR -ding file 5th pull -open Gui 5th pwsh -conit -Sync What will & be learny this week? - Java Collections - Just 1 the burgs Other Items . whit you I.I bolay? yeskels?

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?

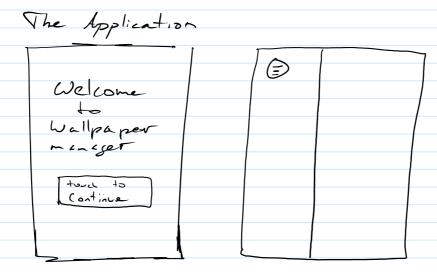
• 5 Wall papers

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.



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

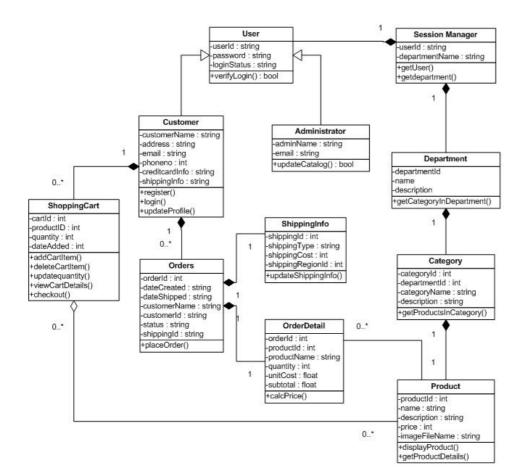
- Purpose of a use case diagram is to capture the dynamic aspect of a system.
- Use case diagrams are used are used to gather the requirements of a system including internal and external influences.

Class Diagram:

Useful Links:

• http://people.cis.ksu.edu/~reshma/798 ClassDiagram.htm

General Notes:



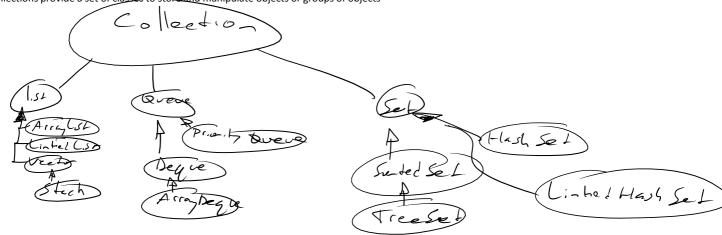
JAVA Collections

Wednesday, May 13, 2015 1:05 PM

- https://docs.oracle.com/javase/tutorial/collections/intro/index.html
- https://docs.oracle.com/javase/tutorial/collections/interfaces/map.html
- http://www.tutorialspoint.com/javaexamples/collection-sublist.htm
- https://docs.oracle.com/javase/tutorial/collections/
- http://www.java2novice.com/java-collections-and-util/
- http://www.tutorialspoint.com/javaexamples/java collections.htm
- http://math.hws.edu/javanotes/c10/s4.html
- https://www.youtube.com/watch?v=mkCTxtLe7XU
- http://docs.oracle.com/javase/7/docs/api/java/util/Collections.html
- http://docs.oracle.com/javase/7/docs/api/java/util/Collections.html

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

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

exploses

Hibernate

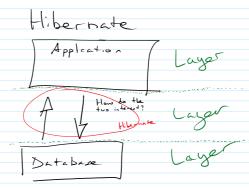
Tuesday, May 19, 2015 10:47 PM

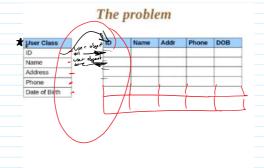
Useful Links:

- 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/
- http://www.javaworld.com/article/2072999/data-storage/get-started-with-hibernate.html

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
 - o 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

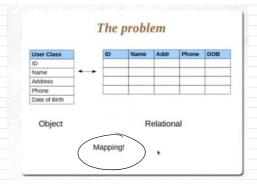


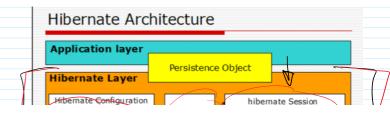


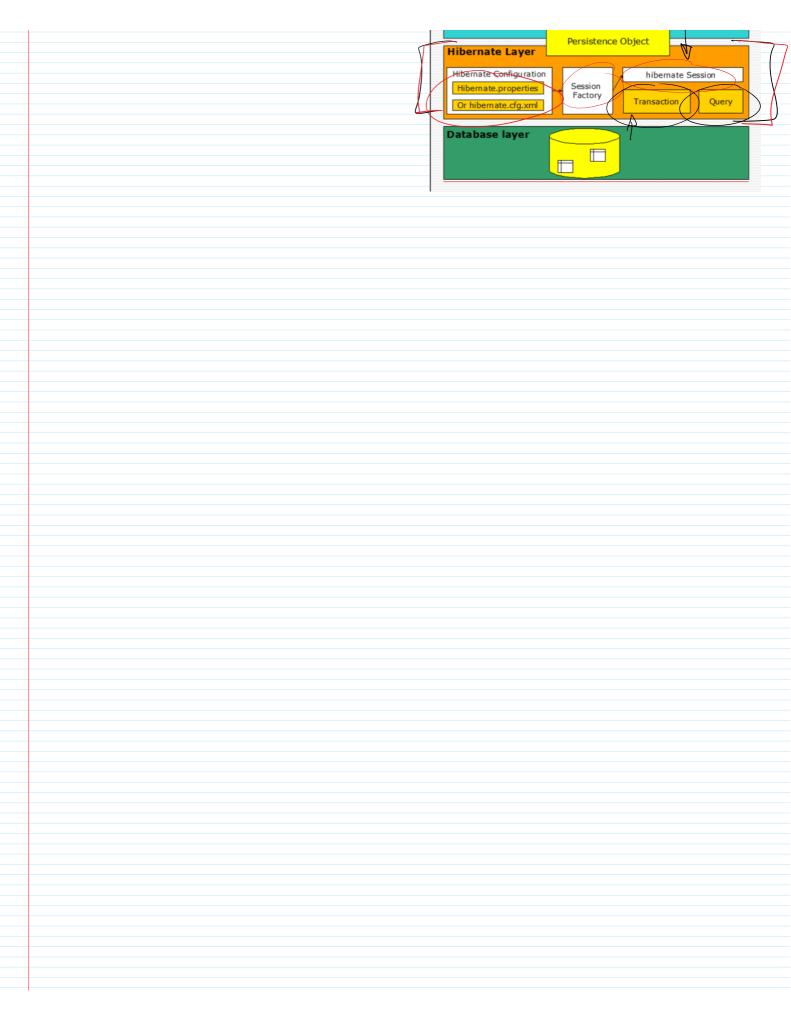
eX/- user object #1 is save !
As Tow #1

• A class corresponds to a table, an object corresponds to a row in that

sposlem is object there is join, no object of me database is what is a pain







JSON

Monday, May 25, 2015 12:28 PM

- JavaScript Object Notation
- see examples!

MVC (Model View Controller)

Monday, May 25, 2015 4:17 PM

Useful Links:

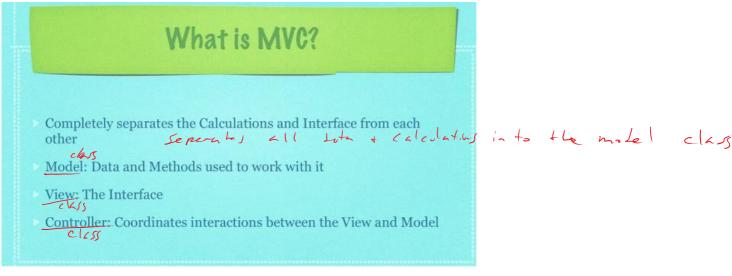
http://www.newthinktank.com/2013/02/mvc-java-tutorial/

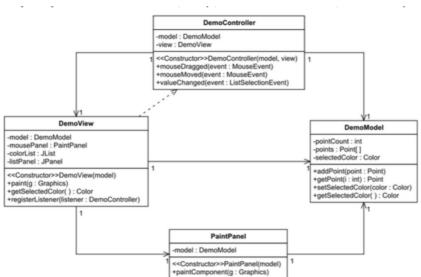
http://www.cs.utsa.edu/~cs3443/mvc-example.html

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

Design

General Notes





- 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:

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

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:

- http://json.org/
- https://www.youtube.com/watch?v=GF8yRG04-60
- https://www.youtube.com/watch?v=LDzA17uruAo
- Jsonlint.com

General Notes:

- JSON (JavaScript Object Notation) a lightweight data interchange format.
- Is a syntax for storing and exchanging data
- · Easier to use alternative to XML
- Lightweight data change format.
- Easy for humans to read and write. Easy for machines to parse and generate.
- Based on a subset of JavaScript
- Storing JSON data creates an object, that we can access using a variable.

Results of Example Code:

```
Enter Student name: Paul
Enter course name: Java
Enter grade: 89
{"courses":[{"grade":89,"name":"Java"}],"name":"Paul"}
BUILD SUCCESSFUL (total time: 14 seconds)
```

Client and Server Sockets and their I/O streams

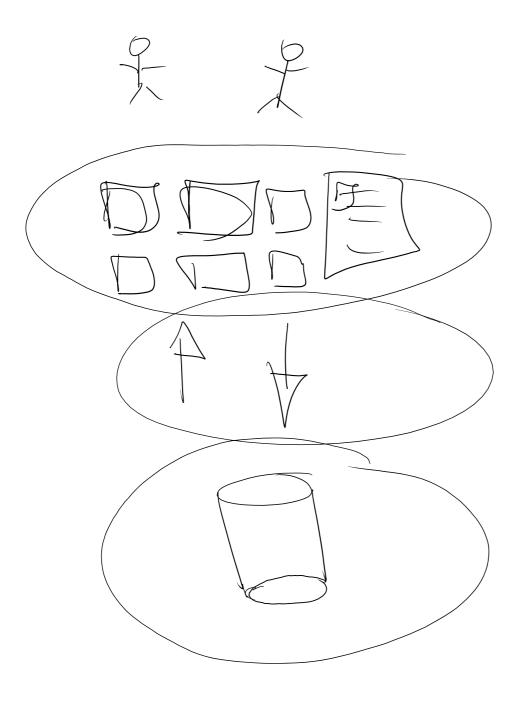
Wednesday, May 27, 2015 7:00 PM

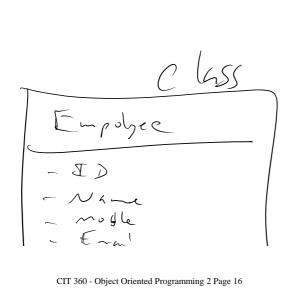
Useful links:

• https://www.youtube.com/watch?v=pr02nyPqLBU

General Notes

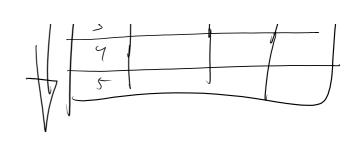
- What is a stream? Whenever you connect to someone else's computer through networking using Java. The way we communicate is through steams; two main streams: the output stream and the input steam. The output stream is what flows away from the computer and to your friends computer
 - Output goes way 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.





_	10	Name	mo Sile	[Fund
	2			
	3			
	9.			





Threads, Executors, Runnables, Android Handlers

Tuesday, June 16, 2015 10:43 PM

Useful Links:

- http://stackoverflow.com/questions/21194762/what-is-the-different-between-handler-runnable-and-threads
- https://developer.android.com/training/multiple-threads/run-code.html
- http://developer.android.com/reference/java/util/concurrent/ThreadPoolExecutor.html
- https://www.youtube.com/watch?v=LJ pUIWzGsc handler
- http://android-developers.blogspot.de/2009/05/painless-threading.html
- http://examples.javacodegeeks.com/android/core/os/handler/android-handler-example/

Notes

- Runnable separates code that needs to run asynchronously, from how the code is run. You code is kept flexible this way. Asychronous code for example ina runnable can run on a threadpool, or a dedicated thread.
- Threads
 - They occupy a lot of memory
 - A threadpoolexecutor takes a task from the queue and runs it on the thread.
- A handler
 - Allows to post runnables to execute on a specific thread. Behind the scenes, runOnUi
 Thread queues the runnable up with Andriod's UI handler so that the runnable can execute safely on the UI thread.
- Executor
 - Is an object that executes submitted runnable tasks. The interface provides a way of decoupling task submission from the mechanics of how each task will be run, including details of thread use.

•

HTTP URL Connection

Thursday, June 18, 2015 8:56 PM

Useful Links

- http://developer.android.com/reference/java/net/HttpURLConnection.html -
- https://www.youtube.com/watch?v=h3ErxnJKzZU
- https://www.youtube.com/watch?v=JcZwlpV1rMc watch this one
- https://www.youtube.com/watch?v=ryY7Dy3z-7Q
- https://docs.oracle.com/javase/tutorial/networking/urls/readingWriting.html

HTTPURLConnection - ann http url connection used to send and receive data over the web.

- Data may be of any type and length
- This class may be used to send and receive streaming data whose length is not known in advance

AsyncTask - used in order to do long running tasks In the background, important job;

In application going to download application

//main purpose is to demonstrate an async task and how to connect to the internet

Application Controller Pattern

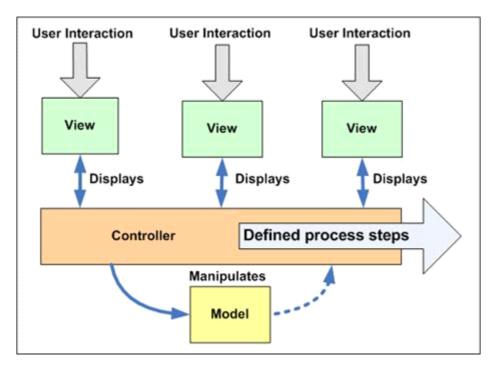
Tuesday, June 23, 2015 12:25 PM

Useful Links:

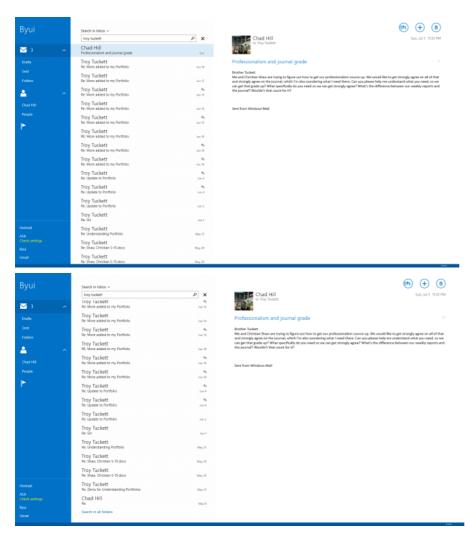
- Difference Between application controller and model view controller -http://stackoverflow.com/questions/120781/what-should-an-application-controller-do
- http://www.developerfusion.com/article/9450/controller-patterns-for-aspnet/
- http://martinfowler.com/eaaCatalog/applicationController.html

General Notes:

- Application controller is a centralized point for handling screen Navigation and the flow of an application
- It controls the UI transition logic in a central place
- I centralizes the flow of application and screen navigation, so you can change the flow or the logic in a single location, with minimal changes or no changes to the source code of views
- For a complex process we can define multiple controllers



Proof of communication



Video Links to our Group Videos

https://www.youtube.com/watch?v=aMI9mSCJOmA

https://www.youtube.com/watch?v=gk5bF4hdB6g

https://www.youtube.com/watch?v=-8zBXyk8Pul

https://www.youtube.com/watch?v=yQTTQOZB1PI

https://www.youtube.com/watch?v=iqBTJUa-uZk <<<< this video we invited other groups to join us, but only Derek hodges did, but that counts interacting professionally and helpfully with other teams

Parts in my videos where I am helping others out

Fat S 111 Thy Video 5/28 9:00 p.m. group meeting Christian UMLState - 12:00 Use - 13:30 Sequence - 14:35 A: 16:55 Class Diagram - 17:40 Client Server Socket and I/O - 18:00 Client Server S JUnit - 19:30 Q:23:30 MVC - 26:40 Q: 41:40 Q 47:30 Q 56:20

5:00 p.m. Meeting Overview Christian 5/25 5:00p.m. Meeting Q-A: 13:40 A: 17:07 Q-A: 21:40 Q-A: 25:00 Hibernate - 26:50 A: 31:22 Use Case - 46:50 A: 51:56

Here are our group discussions using Socials media to organize meetings



Lyle Palagar

Hey guys I reviewed over this weeks item list that we got to do and one of the major things that he ask for we kinda touched base on, I just want to talk about it again 57, 3.57n the evenin'



Lyle Palagar

Create a portfolio on your personal githfub repository including two types of sandbox code. The first type are code examples you received from a team member or that you downloaded from the web. Put these in projects in eclipse, get them to compile, run them, study them, and understand them. Do this for the 2 - 3 coding topics from the Topics and Resources your group assigned listell for this week. The second type of sandbox code included in the portfolio is code you have written yourself based on what you learned from your team member's or internet sandbox code. Your code should include experiments in using the topics beyond what you found on the internet or were given by your team. These experiments should include using the topic code correctly and abusing it. This way you will know what to expect when your and other's code goes wrong. Treat the topic code baddly! The last items in the portfolio are links to some of your team's meetings. For each link include time-stamps that show you teaching your team mates, answering team mates questions, and asking questions of your own. These links and time stamps will be used to partially assess you for the prostonials morning grade.

this can be found in your Lesson 2 > 2.07 Initial Understanding Portfolio



Lyle Palagar

in summary. Got to your git hub account create your personal git hub repo (if you need help i can show you how to do this) in your github repo create three folders one name "personal work" second folder name it group work (i think we should discuss how we can safely organize our code so that we can make this an easy process, maybe talk about this in our next meeting briefly?) create the last folder name it "video meetings" and in that folder it should contain all of the personal video meetings we record and time stamps showing "you teaching your teammates, answering team mates questions, and asking questiosn of your own" own weep in mind not all meetings you would need to do this just 2 / 3 would be fine.

5/7, 4.03in the evenin'



Lyle Palagar

example of video meeting could be like: https://www.youtube.com/watch?v=yQTTQOZB1PI taught my teammates: [00:01] asking questions: [6:24] answering questions: [7:26] CIT 360 1st Meeting



Chad Hill

Created 5/7, 4:21in the evenin'

Lyle Palagar

perfect!

for everyone else here is what i was saying https://github.com/lyleRpalagar/cit-360-objp2

hey make sure everyone has eclipse downloaded as well



5/8, 2:30in the evenin

Christian Shaw

Hey Matt what's your Gmail?



Matt Brandt

Bra12010@byui.edu or xospheriac@gmail.com

onth o' May 9

5/9, 2:37in the evenin

Matt Brandt

Chad Hill

What time should we meet?

Matt Brandt I'm in lab till 5

I am available after that

5/9, 3:01in the evenin

Lyle Palagar

Is anyone doing doing cit 353?

Ethan Nelson

After 8 works best for me

Lyle Palagar

5/9, 4:38in the evenin

Chad Hill

Chad Hill Alright. I got some use cases done and I'm ready to explain them for tonight 5/9, 7:00in the evenin'

Lyle Palagar

Same with class diagrams 5/9, 7:12in the evenin'

Lyle Palagar

Hey guys want me to start the Google hangout on air meeting at 8? I can provide the link here

5/9, 8:01in the evenin

Matt Brandt



Lyle Palagar

I set up the google hang out meeting

matt can you hear me?

• 5/9, 8:11in the evenin Chad Hill https://www.youtube.com/watch?v=-P5oR99XDLQ

5/9, 8:11in the evenin' Chad Hill CIT-380 - Your Understanding Portfolio
This video is about CIT-380 - Your Understanding Portfolio youtube.com 5/9, 8:20in the evenin'
 Chad Hill it wont let me rejoin

5/9, 8:20in the evenin Lyle Palagar Lyle Palagar https://plus.google.com/hangouts/_/hoae ent/AP36tYeMTZTtSPLCmutZlBquE0ZzvoYzDT9vZfAbs84_HaPw2LQztQ?authuser=0&hl=en accounts.google.com Lyle Palagar wats your gmail

5/9, 8:22in the evening Chad Hill Lyle Palagar
ill restart it

5/9, 8:23in the evenin Chad Hill okay

5/9, 8:23in the evenin'

Chad Hill • 5/9, 8:23in the evenin' Lyle Palagar heres a new one 5/9, 8:23in the evenin' Lvie Palagar https://plus.google.com/hangouts/_/hosevent/AP36tYec1QYF2aPgAdVYyN853zOd0A7GSsfqEsaxWY_j39TPXDlvKQ?authuser=08hl=en Sign in - Google Accounts
accounts.google.com • 5/9, 9:29in the evenin' Lyle Palagar https://www.youtube.com/watch?v=-8zBXyk8Pul ^^ this weeks meeting video Month o' May 19
5/19, 10:56in the evenin' Christian Shaw socooo Chad and I are freaking out • 5/19, 10:56in the evenin' Lyle Palagar Christian Shaw coding is destroying us, 5/19, 10:57in the evenin Lyle Palagar

Lol wait wut 5/19, 10:57in the evenin

Chad Hill
Lyle we need a hug
5/19, 10:57in the evening Lyle Palagar Lol. I'm up for an all day thing if u guys want to get ahead of this class

\$\int_{5/19, 10.58\text{lin}} \text{ the evenin'}\$ Christian Shaw so is this new job, lol. no we are fine, i think we are just freaking out because we still dont have much done 5/19, 10:58in the evenin Chad Hill Christian Shaw i am ALLLL for that

5/19, 10:58in the evening Chad Hill I'll buy food • 5/19, 10:58in the evenin Lyle Palagar Sweet yes ,Chad I love you

5/19, 10:58in the evenin' Christian Shaw ill buy desert

5/19, 10:58in the evenin Lyle Palagar As long as you don't mind me b4inging my little one for about 2 hours I can do that

• 5/19, 10:59in the evenin' Chad Hill I dont mind

• 5/19, 10:59in the evenin' Christian Shaw i might have to do the same how old is yours?

• 5/19, 10:59in the evenin' Mine is only 6 months but she loves older kids Have to watch her later in life

5/19, 10:59in the evenin' Christian Shaw mine is 8, and he eats little kids, this will be perfect 5/19, 10:59in the evenin' Lyle Palagar Lol ...but okay Chad or Chris y don't u guys set it up when and where Christian Shaw sounds good to me Sounds good to me
 5/19, 11:01in the evenin' Lyle Palagar Coolio My kid taste terrible just do u know Okay. University Village 1303&1305 Monday @ 10am till when ever. Everyone is invited, ill provide the beer... I mean root beer and pizza, or whatever else we want. 5/19, 11:02in the evenin' Christian Shaw haha we can provide deserts Chad Hill matt and Ethan you are welcome as well just bring beer

5/19, 11:04in the evenin' Lyle Palagar But for sure I'll bring stuff as well We also discussed our methodology's and what we are going to do for out project in our chat sessions • 7/5, 3:34in the evening

CIT 360 - Object Oriented Programming 2 Page 24

Ah I C , well I am getting started on our java projects if you guys are still interested we can all get on skype or google hangout and just work on the project

7/5, 3.35in the evenin'

Lyle Palagar

Chad Hill

Um sure, but im not so sure ill be much help Chad Hill 7/5, 3:35in the evenin if sunday is not the best fit and I know some of you guys are busy mondays for family home evening thats fine we can continue it on tues the more brains the better

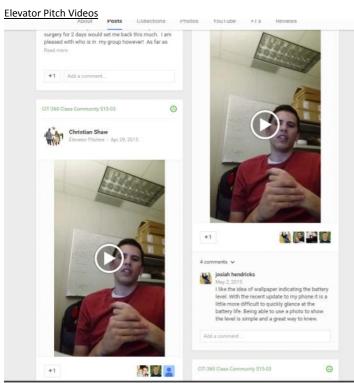
7/5, 3:35in the evenin' Chad Hill How long you think it'll take Lyle Palagar HAHahahahah ahah haha funny question... idk I was just going to do a span of 2 -3 hours
7/5, 3:37in the evenin' Chad Hill Sure starti Ng right now? 7/5, 3:38in the evening I dont care im just going to be researching some stuff that we might need to know before i create the game, so if you want I can start a hangout but idk if i will be saying much maybe tues i can put something together

7/5, 3:42in the evenin' Chad Hill

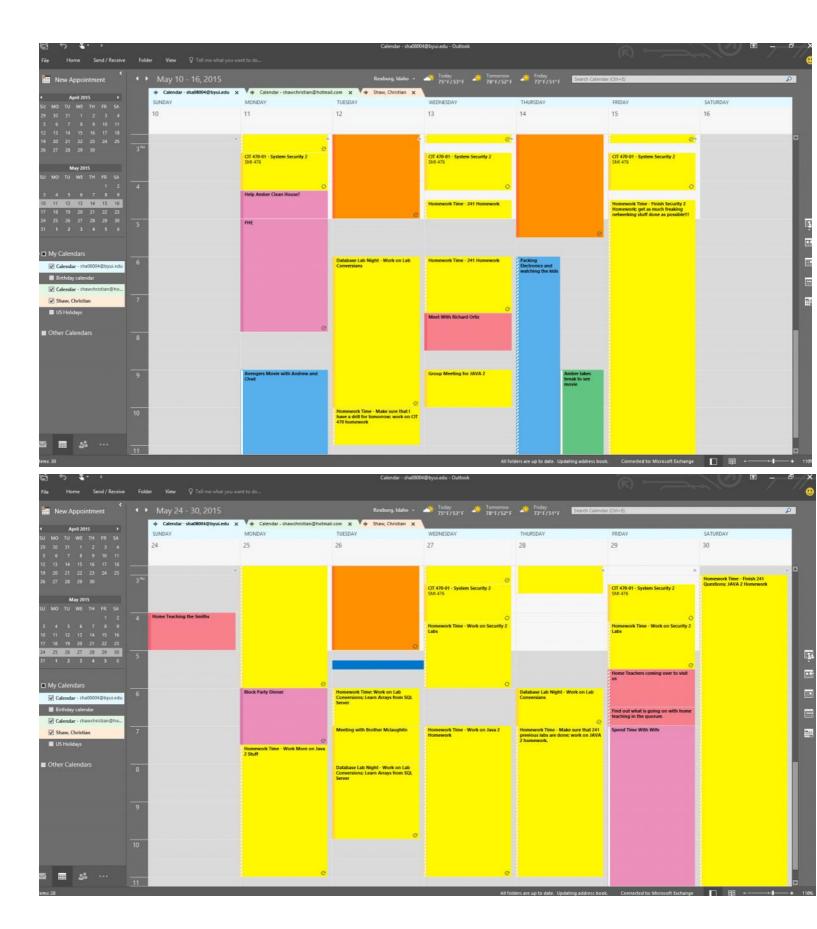
K Tuesday then and Christian will join us. 7/5, 3:48in the evenin'

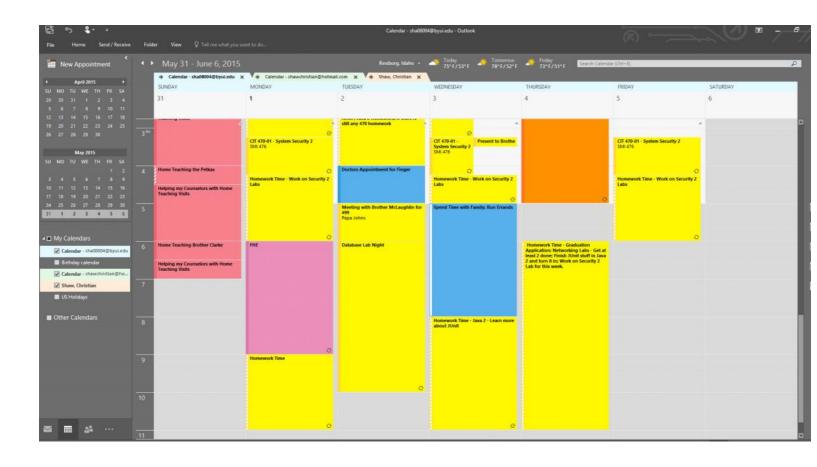
Lyle Palagar

Christian Shaw



Proof of Scrum/helping each other out in our meetings





Application Notes

Wednesday, July 8, 2015 10:00 PM

Useful Links:

• Creating a Java Game: http://www.edu4java.com/en/game/game1.html