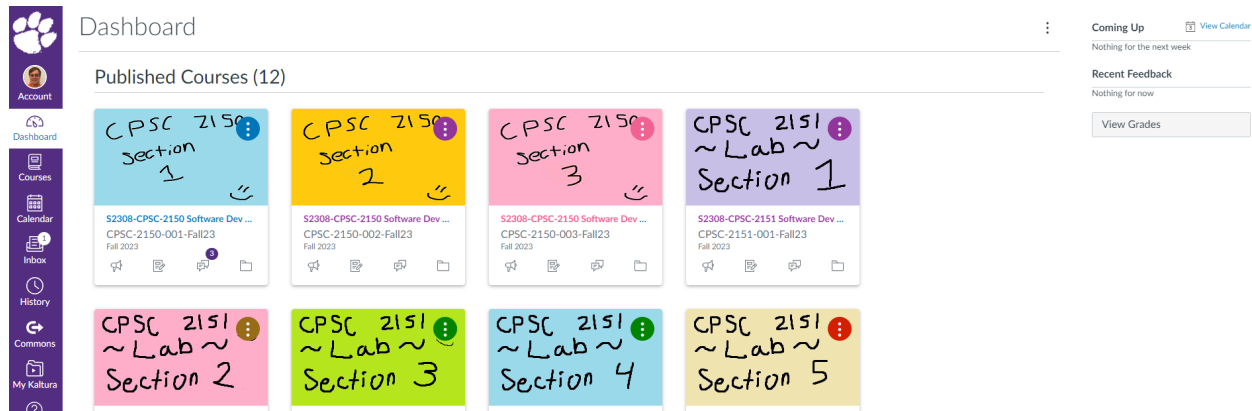CPSC 2150 – Lab exam 1 – Parts 1 and 2

This must be completed **individually.**

Requirements Analysis:

Navigate to Canvas. Just the landing page for canvas itself, not the homepage for 2150. This page:

Write 15 Functional Requirements of Canvas. These must be in **user-story** format. If they aren't it will be counted as if they don't exist at all.

1. As a student, I need to be able to see all my courses so that I can access all the needed materials for them.
2. As a student, I need to be able to see any announcements so that I can know what is currently happening in my classes.
3. As a student, I want to be able to see the calendar with all my course work so that I will know when my assignments are due.
4. As a student, I want to have an inbox through Canvas so that I can message my professors and receive messages from them.
5. As a student, I need to be able to see my grades so that I can know how I am doing in each of my classes and what I need to improve on.
6. As a student, I need to see what people are in my class so that I can know who my TA's are and be able to message them if I need help.
7. As a student, I need to have a place to turn in my assignments after I finish them so that I can get a grade/feedback on them.
8. As a server admin, I want to be able to get feedback from users of Canvas so that I know what needs to change to appease the users and give a better learning experience.
9. As a server admin, I need access to all functions of Canvas so that I can change anything that needs to be adjusted.
10. As a server admin, I need to be able to remotely see what a professor sees for a class in Canvas so that I can assist in resolving issues.
11. As a professor, I need to be able to see all my sections so that I can post assignments to my students.

This must be completed **individually.**

12. As a professor, I need to be able to look at work that students turn in so that I can grade it.
13. As a professor, I want a notification over the inbox icon so that I can see when my students try to contact me.
14. As a professor, I need to be able to see the students that are in each section so that I can take attendance.
15. As a professor, I need to see which courses I have published or not published so that I know what my students can see.

Now write 10 Non-Functional Requirements of Canvas. These don't have to be in user-story form. As a sort-of hint, I highly doubt that canvas was "written in java".

1. Canvas must be able to handle large amounts of web traffic.
2. Canvas must keep confidential information hidden.
3. Canvas must have a username/password login.
4. Canvas must be easy to repair should a problem arise so users can get back to their work quickly.
5. Canvas must work with all operating systems.
6. Canvas must have language accessibility for people who speak in a different language.
7. Canvas must be fully accessible on and off campus when accessed with a secure device.
8. Students must be able to see only their current published courses.
9. Students must not be able to change their grades themselves.
10. Only teachers should be allowed to add/remove assignments.

UML Diagrams:

After a very successful trip to the career fair, you were hired as a software developer for a major pizza restaurant chain, Re's Pizzeria. Re's needs you to develop the back-end code that will eventually be used alongside their mySQL database to store information about their orders. Re's has two options for orders: dine-in and delivery. All orders have customer names (first and last), a date for when the order was made, a means of tracking whether an order was completed or not, the cost of the order, and a credit card number used to pay for that order. Dine-in orders specifically track which table the customers sat at, and delivery orders specifically track the address that the order was delivered to.

You, being the smart software developer you are, realize that one of the best things to do before writing any code is to write the UML diagrams for your class files. You determine that you need to write 3 UML diagrams. Each of the different things Re's wants their program to track is going to need some way to access all that data, and some way to change the data should the Re's employee enter it in wrong the first time.

CPSC 2150 – Lab exam 1 – Parts 1 and 2

This must be completed **individually.**

TODO:

Write the UML diagrams needed to complete the job assigned by Re's Pizzeria. Be sure to do them in diagrams.net. If you hand-draw them, we won't grade it. Once you draw them, add them to this doc somewhere neatly below this text. **Ideally, you put them all in one image…** If you need to rotate the image to make it fit on a page and still be readable, that's fine.

Order

- firstName: string

- lastName: string

- day: int

- month: int

- year: int

- completed: boolean

- orderCost: double

- cardNumber: string

+ getFirstName(void): string

+ setFirstName(string): void

+ getLastName(void): string

+ setLastName(string): void

+ getDay(void): int

+ setDay(int): void

+ getMonth(void): int

+ setMonth(int): void

+ getYear(void): int

+ setYear(int): void

+ getOrderCost(void): double

+ setOrderCost(double): void

+ getCardNumber(void): string

+ setCardNumber(string): void

Extends

Dine-In

- table: int

+ getTable(void): int

+ setTable(int): void

Extends

Delivery

- street: string

- city: string

- state: string

- zip: int

+ getStreet(void): string

+ setStreet(string): void

+ getCity(void): string

+ setCity(string): void

+ getState(void): string

+ setState(string): void

+ getZip(void): int

+ setZip(int): void