ISAD251
APPLICATION DESIGN DOCUMENT

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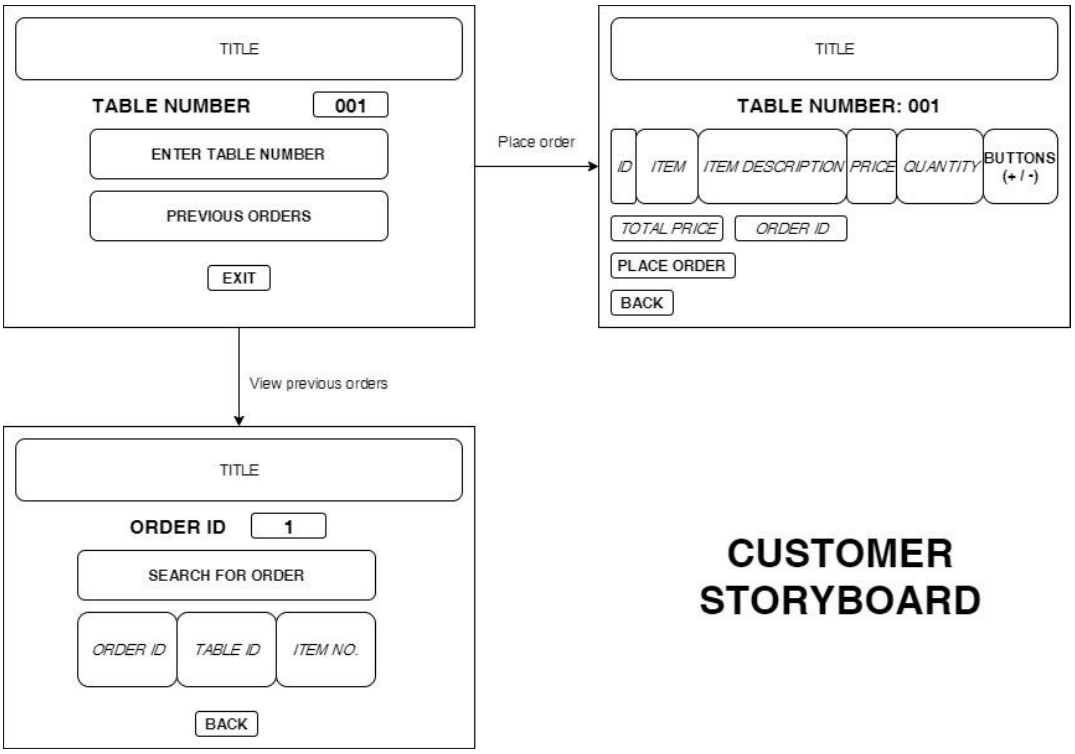
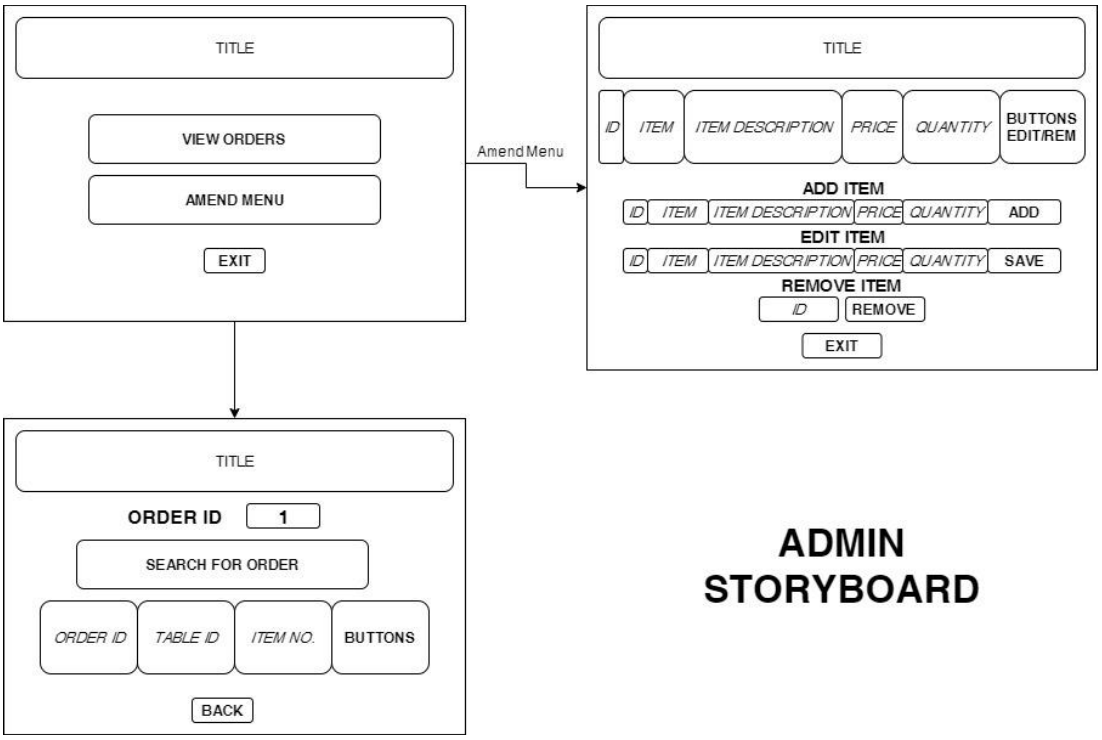
#10602402

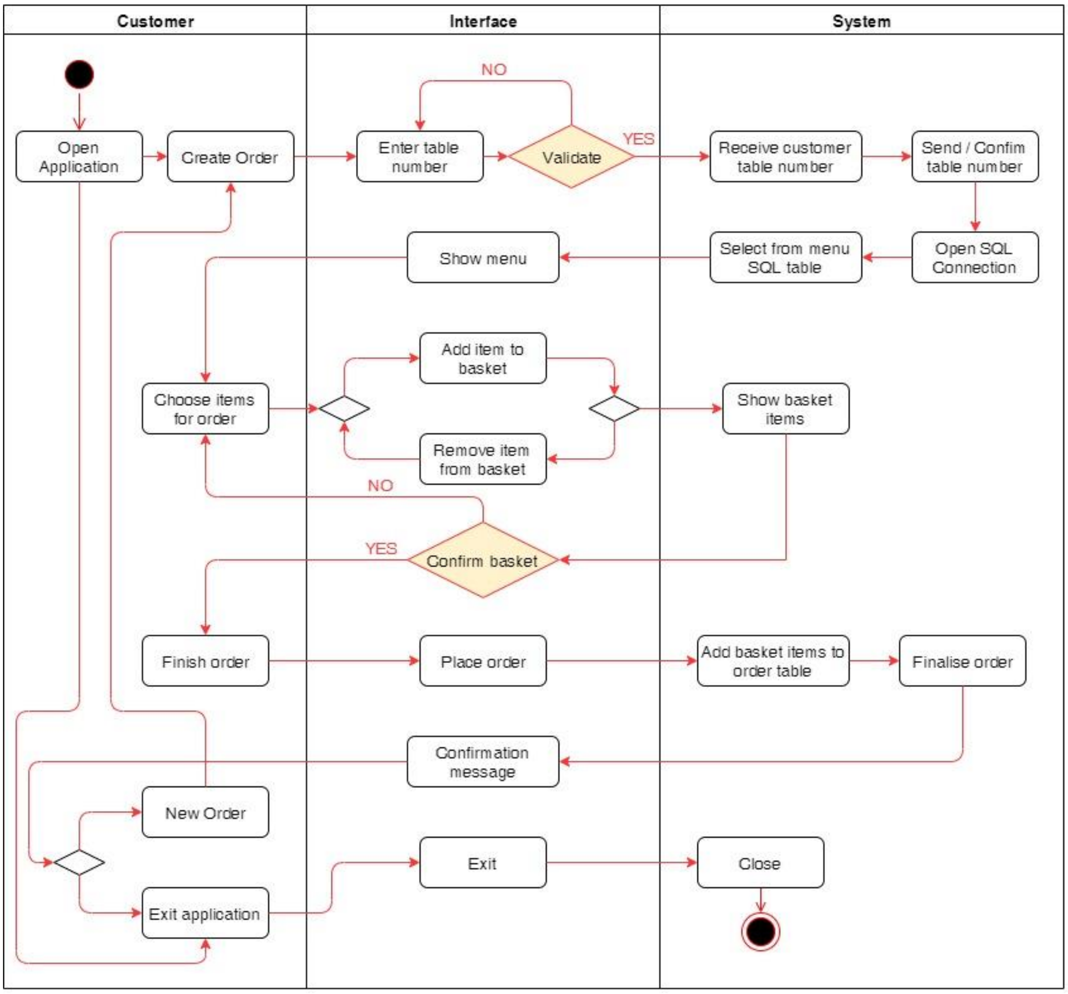
(1) Storyboards



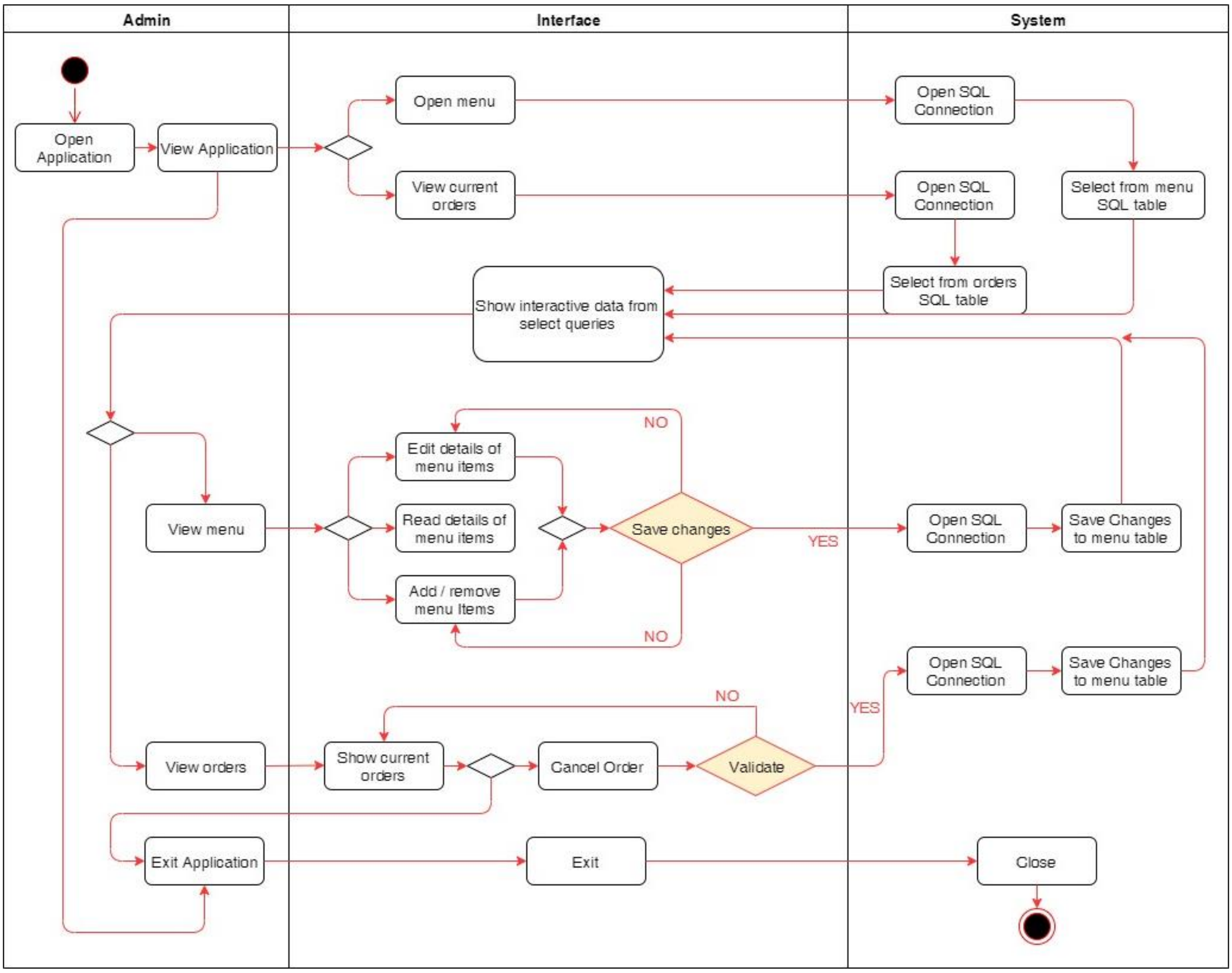


(2) Diagrams

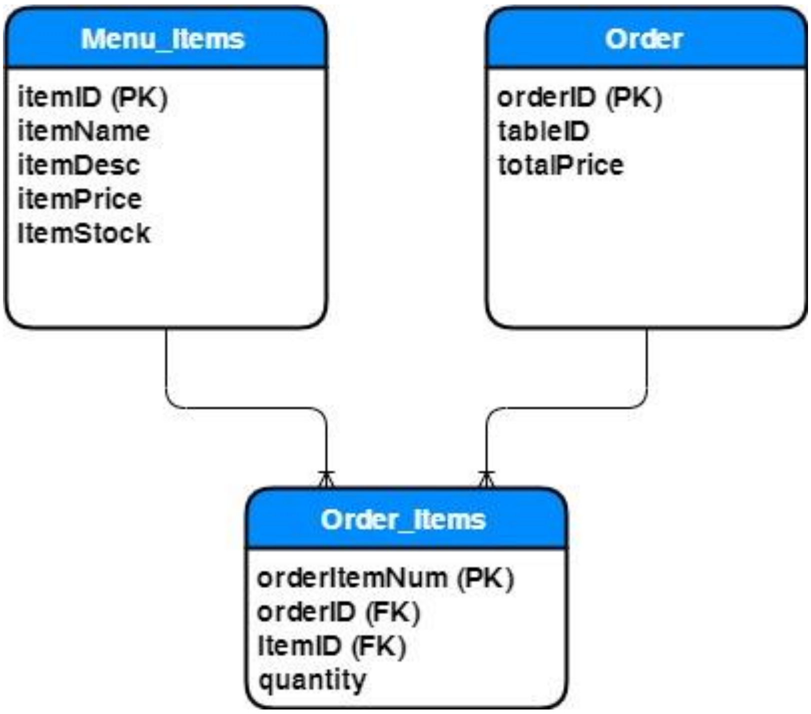
Customer UML Action Diagram

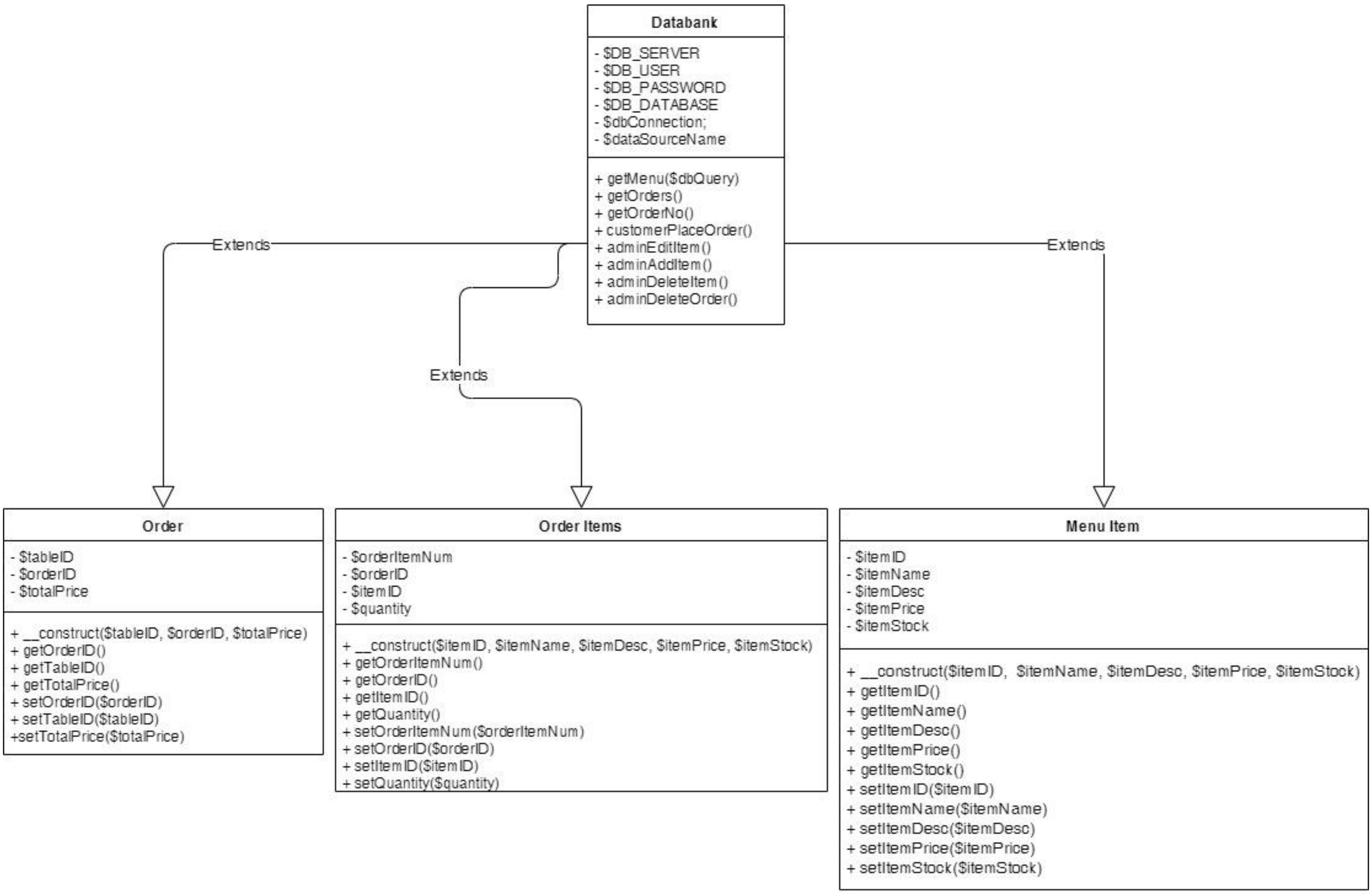


Admin UML Action Diagram



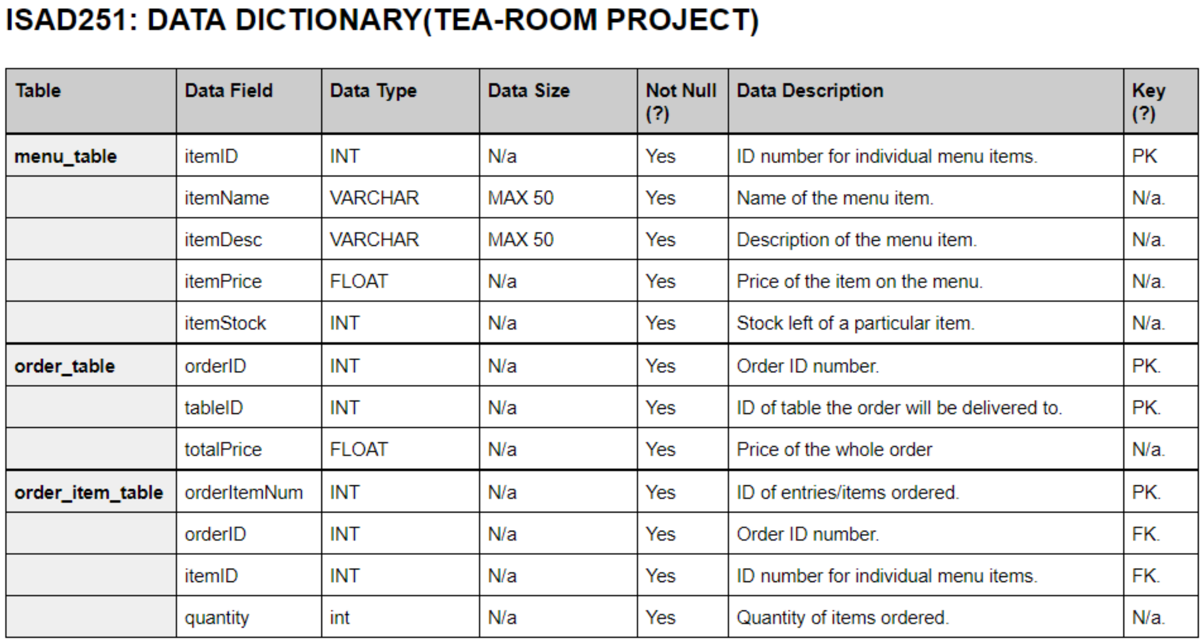
ERD Diagram





UML Class Diagram

(3) Data Dictionary



ISAD251: DATA DICTIONARY(TEA-ROOM PROJECT)

Table	Data Field	Data Type	Data Size	Not Null (?)	Data Description	Key (?)
menu_table	itemID	INT	N/a	Yes	ID number for individual menu items.	PK
	itemName	VARCHAR	MAX 50	Yes	Name of the menu item.	N/a.
	itemDesc	VARCHAR	MAX 50	Yes	Description of the menu item.	N/a.
	itemPrice	FLOAT	N/a	Yes	Price of the item on the menu.	N/a.
	itemStock	INT	N/a	Yes	Stock left of a particular item.	N/a.
order_table	orderID	INT	N/a	Yes	Order ID number.	PK.
	tableID	INT	N/a	Yes	ID of table the order will be delivered to.	PK.
	totalPrice	FLOAT	N/a	Yes	Price of the whole order	N/a.
order_item_table	orderItemNum	INT	N/a	Yes	ID of entries/items ordered.	PK.
	orderID	INT	N/a	Yes	Order ID number.	FK.
	itemID	INT	N/a	Yes	ID number for individual menu items.	FK.
	quantity	int	N/a	Yes	Quantity of items ordered.	N/a.

(4) Peer Reviews

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Review 1

Date:

22.10.2019

Peer Review carried out by:

Nick.

Task conducted:

Placing an order as a customer. (Storyboard).

Was the task easy to carry out? (If not, say why)

Yes the task was easy to complete.

Did you encounter any errors? (If yes, please explain what)

No implied errors to be suspicious of the storyboard.

Did the author have to explain how to use anything? (If yes, what?)

What happens after you place an order? Does it alert you of your purchase? Direct you to another page? Turns out to just be an alert with information to be memorised.

Did you gain any inspiration for your own practice? (If so, what?)

Carry on the place order to a next page.

What constructive advice would you give the author for presenting their work/code in future?

Be prepared with other pieces of the storyboard that illustrate what exactly happens on certain button presses.

(No changes made to my storyboard based on this criticism)

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Review 2

Date:

07.01.2020

Peer Review carried out by:

Dan.

Task conducted:

Adding and removing an item as an admin. (Program).

Was the task easy to carry out? (If not, say why)

Yes.

Did you encounter any errors? (If yes, please explain what)

No.

Did the author have to explain how to use anything? (If yes, what?)

Only as to why the editing text box fields have to be unlocked before editing selected fields of data, and they are locked as a 'Confirmation' that you in fact want to edit these fields.

Did you gain any inspiration for your own practice? (If so, what?)

N/a.

What constructive advice would you give the author for presenting their work/code in future?

Alerts of changes.

(Changes made to my application based on this criticism).

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(5) Web Accessibility Initiative

Admin and Customer Usability Across Platforms

Thanks to the use of bootstrap and good <div>'s, the prototype application can be used through a fun (not without its own challenge), but it is doable. An example of a challenge being the customer place an order table (through an iPhone X), One must scroll to the right to view the add and remove quantity buttons.

Admin and Customer Navigation

The application can be navigated via the buttons, which have been designed with the W3CSS Bootstrap, which caters to bright and easily readable interfaces. The buttons are be large enough to reach and cover with a mouse easily.

Admin and Customer Visuals

The user interface for the application remains a calm and simple prototype UI. With the lack of background images being a bonus for any users that find it hard to focus on background subjects behind things such as buttons or input areas.

Admin and Customer Keyboard Input

The customer side of the prototype application can potentially be used entirely without the use of a keyboard. Using 'number' input types, numbers can be clicked for when submitting a table ID, as well as – or instead of, typing. Users can also click to add items to their basket, and place an order without using a keyboard.

As an admin, users can use about 50% of the functions available. The only functions unavailable to non-keyboard users being: editing and adding data.

Admin and Customer Audio Transcripts

No audio is used for this application. Meaning no transcript is required for those without hearing.

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(6) What if I…

…had more time?

If I had more time, I would finish off the final 3 things on my list which were:

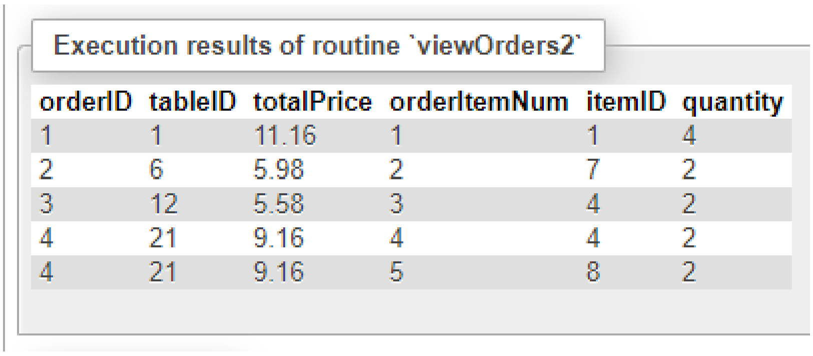
1. Get the '**Place order**' function working for customers.
2. Get the '**Search order**' function working for customers.
3. Make the **order table** more in depth.

The **place order function** has been a struggle for a long time. It was difficult to figure out a way to bridge what was being added to the order to a table from the customer menu. Time ran out and instead of working on that, finished, or tidied up other factors of the project.

The **search order function** was a large frustration. The Model, View, Controller and SQL procedure was there, and ready to be used – but the correct order for how to structure this complex command was difficult to figure out. And something that will be missed at it's a value piece for customers to find their orders.

The **order table** only carried the tableID, orderID and totalPrice of orders being placed. To go hand in hand with the **place order function** and **search order function** and also connect the **order table** and **order item table** together for order views.

Procedure Example:



Execution results of routine `viewOrders2`

orderID	tableID	totalPrice	orderItemNum	itemID	quantity
1	1	11.16	1	1	4
2	6	5.98	2	7	2
3	12	5.58	3	4	2
4	21	9.16	4	4	2
4	21	9.16	5	8	2

…changed the UI?

If the decision was made sooner, the prototype would not have been so barebones in terms of UI. It took a while to get a hold of Bootstrap and how it worked, a template could've helped but the simplicity helped the design.

…activate and deactivate items?

As an alternative to the heavy-handed solution of removing an item entirely, a Boolean value to trigger if an item was up for sale or not would be much more user friendly and efficient to remove items from the menu, as alternative to permanent removal.

(7) Links

GITHUB: https://github.com/DANSKI423319/ISAD251Coursework.git

Video demo: https://youtu.be/24fRWnZVJUs

Style sheet: https://maxcdn.bootstrapcdn.com/bootstrap/3.4.0/css/bootstrap.min.css

API output 1: http://cent-5-534.uopnet.plymouth.ac.uk/ISAD251/dskillman/ISAD251Coursework/src/API/API_printMenu.php

API output 2: http://cent-5-534.uopnet.plymouth.ac.uk/ISAD251/dskillman/ISAD251Coursework/src/API/API_printOrders.php

Application Start Point: http://cent-5-534.uopnet.plymouth.ac.uk/ISAD251/dskillman/ISAD251Coursework/src/View/VIEW_index.php