

KIT502 Web Development Assignment 1 & 2

INTRODUCTION

We are developing a system called Lunch Ordering System for our client, University of Tasmania (UTAS). There are different places to get lunch on campus, Lazenbys, The Ref, Loose Goose and a few more on campuses. In discussion with the staff and students at UTAS, it was discovered that the biggest complaint was having to wait in long queues during peak times when they have just a short time to get a meal or beverage.

To address this issue, it has been decided to develop a web site where food and drink can be pre-ordered and pre-paid so that clients can quickly collect their meals.

Details

There will be a "Master List of Food & Beverages". Each shop manager will be responsible for selecting items from the "Master List of Food & Beverages" that will appear on each shop menu (*i.e. the manager for The Ref can select items to appear on the menu for The Ref, but NOT for Lazenbys or Loose Goose menus*).

The **Director** of The Board:

- will control what will be available at the UTAS shops, so will be the only people who can create and modify the master list of food and drinks.
- will be responsible for employment and security access at the shops.

Each shop will have at least 2 staff members (numbers are determined by the Director), one of whom will be assigned (by the director) to be that shops manager. Staff and managers can be rostered to work at any shop, but there can be only one manager at each shop at a time.

To use the online menu system, UTAS staff and students must first register by providing their Name, Student/Staff ID, E-mail address, mobile phone number, credit card details and password. After registering, an e-mail will be sent to the users e-mail that contains a link that is used to confirm registration (*for the purposes of testing you should use your **group's** e-mail account in **ictteach** e.g student-group-01@ictteach-www.its.utas.edu.au*).

Payment for menu items will come from a pre-paid account. All users will have an account created at registration that they must deposit funds into to purchase items from a menu (*i.e. like the caps printing system*).

When ordering from a menu, users will be able to add comments to any item ordered. This will be to specify any item specifics e.g., if ordering coffee, a description of the type of coffee may be supplied such as "large soy latte +3 sugars". Each menu is for the following day.

User ID Ranges: i.e. Director (can do all), Shop Managers (do some), the rest are customers. Only students get 10% discount.

User Type	ID format (CCnnnn)
Director of the Board	DBnnnn (e.g. DB2123)
Shop Managers	SMnnnn (e.g. CM3122)
Shop Staff	SSnnnn (e.g. SS2345)
UTAS Students	USnnnn (e.g. US3212)
UTAS Employees	UEnnnn (e.g. UE1234)

Planning & Development

Planning the site.

- Planning a site overall in the first place is a crucial step to construct a site. Understand the client's needs and plan accordingly. For example, planning a design theme for the site with variations of the theme that may be used for sub sections is a recommendation.

Develop using the appropriate tools.

- HTML 5, CSS, Bootstrap.
- JavaScript, Ajax and jQuery for client-side interactivity.
- PHP for dynamic content and server-side interactivity.
- SQLite for data storage and retrieval.
- Laravel Framework

You are NOT allowed to use any template which is available online. Images in the assignment must be copyright free.

Group Assignment

- This assignment is to be completed in a group of three (3) from your tutorial class. You will work in the same group for both assignments. Please ensure your group is [registered](#) on MyLO.
- Assignment 1: task 1: decide which each person will do, and record members' commitments in the appendix.
- Feedback Fruits is used for the students to assess whether their team met those commitments after each assignment. This will be available after due date.
- The 1st assignment is worth 20% and the 2nd assignment is worth 30% of your final grade.
- The tasks address ILOs 1, 2, and 3.

Description of Task – Assignment 1 (20%)

For the assignment 1, you are designing the web site with a database table structure. To plan and design correctly, you need to understand the functions that you are going to implement in Assignment 2. Please read the Assignment 2 Specification carefully.

HOME PAGE

This is the starting / entry point to the shop menu system which will have:

- links to each of the shop menus.
- A link to a registration page.
- login/logout section.

For Assignment 1, the login/logout section does not need to authenticate a user.

REGISTRATION PAGE

This is where new users can register to use the system. Further details are in the DETAILS section above.

Proper input validation must be applied at this point including:

- double entry password check
- valid password is according to the policy:
 - 6 to 12 characters in length
 - Contains at least 1 lower case letter, 1 uppercase letter, 1 number and one of the following special characters ~ ! # \$
- Form Validation is required by using client-side scripting

For Assignment 1 the registration page does not need to store the registration data. However, validation is done in client-side scripting.

MENU PAGE

It displays:

- The opening and closing times of the shop,
- the list of food and beverage items available at that shop,
- their cost and an initial associated order quantity of 0 (zero).

If a user **is not** logged in, they can only view the menu items. The comment and quantity fields for each item cannot be viewed, and an order cannot be submitted.

If a user **is** logged in, they can view a menu and change any items quantity in the order and submit it as an order.

For Assignment 1 the shop menu page does not need to store a submitted order (*i.e. no database access is required*).

MASTER FOOD & BEVERAGE LIST PAGE

This is where the director creates, edits or removes items in the list of food and beverages that will be available for selection by the shop managers to use in their menus.

The director also allocates the purchase price for each item and sets the date that the menu applies to.

For Assignment 1 the master food and beverage list page does not need to store any changes to the list or the items in it. The structure of the web page to be marked.

Entity Relation DIAGRAM

Planning database structure is done.

Assignment 1 Deliverables

- Working website with at least 4 pages with client-side scripting ONLY.
 - Home Page
 - Registration Page
 - Menu Page
 - Master Food & Beverage List Page
- Entity Relation Diagram (E-R Diagram) in PDF

No server-side programming included. No database interaction is needed.

Description of Task – Assignment 2 (30%)

The outcome of assignment 2 is to produce a fully functional website with the required functionalities including the interaction with database.

HOME PAGE

For Assignment 2 the login/logout section **with** authenticating user.

REGISTRATION PAGE

For Assignment 2 the registration page needs to store the registration data in a database.

Shop staff and managers do not register, they are added to the system by the Director. Once added to the system, shop staff can also use the menu system to order food and beverages. You provide the Director's credential in Readme.docx for marking.

SHOP MENU PAGE

It displays a total cost of all items selected to be ordered. It also displays a user's account balance which will decrease or increase in value as menu items are added or removed from an order.

The user also can add additional request in the order such as the choice of milk (Oat, low-fat milk, etc.,) or adding extra sugar or shots.

There must be an order collection time selected from a drop-down list. All order collection times will be on the quarter hour e.g. 8:30am, 10:45am, or 12:30pm. All order collection times must be at least 30 minutes after opening and at least 60 minutes before closing.

It will not allow a user to order more than their account balance can pay for.

For Assignment 2 the shop menu page needs to store a submitted order and update a user's account balance as required.

USER ACCOUNT PAGE

This page can only be accessed while a user is logged in. Here a user can view their account balance and deposit more funds. The user also can change their credentials including contact details (mobile or email address) and password. To change the password, the verification of the password is required. i.e., the user needs to input the initial password first, then if it matches, the user can set the new password.

In this page, the user also can view the history of orders she/he has made before.

MENU MANAGEMENT PAGE

This page can only be accessed while the shop manager is logged in.

Here the shop manager can add or remove items from the menu and can change the shop opening and closing times. Opening and closing times must be on the quarter hour.

USER MANAGEMENT PAGE

This page can only be accessed by the director. In this page, the director can 1) add or remove shop staff and manager, 2) allocate shop staff to be managers and 3) allocate staff to a shop.

MASTER FOOD & BEVERAGE LIST PAGE

This page can only be accessed by the director and shop manager.

The directors can do everything described under Assignment 1 (MASTER FOOD & BEVERAGE LIST PAGE). In addition to this, the shop manager can modify the menus using the list of food and beverages that is updated by the director (i.e., once the director updates the list of food and beverages, the shop manager can see all lists to add it into their menu. The shop manager then add it into the menu displayed for the customers).

Each shop can have different list of food and beverages in their menu.

SHOP ORDERS PAGE

This page is only available to the shop staff and shop manager, with lists of all orders and the order details placed. Only the current days orders will be visible.

Due Date

Assignment 1 (20%): Week 6 Friday 11:58PM (August 19, 2022)

Assignment 2 (30%): Week 13 Friday 11:58PM (October 14, 2022)

Submission method

Server environment

Visit <https://icteach-usermin.its.utas.edu.au> and login with your UTAS username and password. You can access your web storage space via the *File Manager*, which is available within the *Usermin* tab.

All your website files should be placed in the `/var/html/groupwork/<student-group-#>/` directory.

- Your website URL (for this directory) is: <https://icteach-www.its.utas.edu.au/groupwork/<student-group-yourgroupnumber>>

Each group member will have their own account on the server, so you will need to discuss amongst your group how you will manage development. Please ensure that the final version of your group's database is available on the server account of the submitting group member.

The submission of your work needs to follow below:

- 1) The web page on Usermin under your group account;
Your Assignment Group number is created for your assignment work on Usermin.
Student-group-01 (= Assignment Group 01 on MyLO)
- 2) The submission of Readme file via MyLO.
You do not require to upload the code for your assignment work on MyLO but you need to submit the Readme.docx file on MyLO.

By submitting this assignment, you will be deemed to have agreed to the following declaration:

We declare that all material in this assignment is our own work except where there is clear acknowledgement or reference to the work of others. We are aware of that my assignment may be submitted to plagiarism detection software, and might be retained on its database. I have read and complied with the University statement on Plagiarism and Academic Integrity on the University website at www.utas.edu.au/plagiarism. We will keep a copy of this assignment until results have been finalised.

Marking Information

If you use your computer or your own server to develop the assignment, please test your work in the usermin server using the available browsers in our lab before submission. **If your work does not work properly in the**

USERMIN server with the same version of a browser in our lab, the work will not be marked.

You are NOT allowed to use any template which is available online. Images in the assignment must be copyright free.

Late Submissions

Late assignments will only be accepted if the proper procedures have been followed as outlined in the School of ICT School Policy for Late Assessment (see the link below). Assignments that are submitted late without Lecturer's approval will be subject to mark penalties as outlined in the School ICT School Policy for Late Assessment.

The Application for extension of time for in-semester assessment is available from the ICT office or may be downloaded from the link below. Requests must be accompanied by suitable documentation and should be submitted before the assignment due date.

Downloads:

- Policy for Late Assessment - [Available Here](#)
- Application for extension of time for in-semester assessment [Available Here](#)

Plagiarism

Practical assignments are used by the School of ICT for students to both reinforce and demonstrate their understanding of material which has been presented in class. They have a role both for assessment and for learning. It is a requirement that work you hand in for assessment is substantially your own. Refer to the unit outline for further information.

Criteria for Assignment

Assignment 1

Criteria	HD	DN	CR	PP	NN
Overall structure is clear and functions with the given specification are completed (ILO 1) 50%	Have implemented a site that provides the functions that best support the users' needs using current best practice. All of the required functionalities are correctly implemented	Have implemented the majority of the requirements in a manner that makes the site functional and easily accessible.	Have fully implemented the basic functions required for the site to an acceptable level and / or not all functions are implemented or operated correctly.	Have identified and attempted to provide only the basic functional requirements, and/or not all functions are implemented or operate correctly.	Have not included enough requirements to meet the basic functional requirements and /or the majority of the functions are not implemented or operate correctly.
Design and implement a web site to meet the specification. Right tools used for appearance. (ILO 2) 20%	Have designed and completed all the requirements to a high standard. Have provided logical and meaningful implemented with minimal mistakes and minimal incorrect spelling/typing errors. Useful and meaningful comments included for all key aspects all the code.	Have a site that has a consistent tone and style with each section divided logically and meaningfully. Useful and meaningful comments included for the majority of the key aspects of the code.	Have divided the content of each section in a logical and meaningful way. Some useful and meaningful comments included in the code.	Have divided the content of main sections in a logical and meaningful way some meaningful comments included in the code.	Some attempt to apply design principles evident, but not to the required standard and / or not consistently applied with no clear separation of design and content. A few meaningful comments included in the code.
Database design in ER diagram (ILO 3) 30%	Have considered all necessary data and it can be stored in successfully. Fully ready to convert it to SQL statements	Have considered all necessary data and it can be stored in successfully. Fully ready to convert it to SQL statements with minor issues	Have considered most of possible situations. A little adjustment could be possible	Have considered fundamental tables. Major adjustment may be recommended	Fail to provide the database tables

Assignment 2

Criteria	HD	DN	CR	PP	NN
Overall structure is clear and functions with the given specification are completed; Accurate use of chosen framework (ILOs 1, 2, and 3) 20%	Have implemented a site that provides the functions that best support the users' needs using current best practice	Have implemented the majority of the requirements in a manner that makes the site functional and easily accessible	Have fully implemented the basic functions required for the site to an acceptable level and / or not all functions are implemented or operate correctly	Have identified and attempted to provide only the basic functional requirements, and / or not all functions are implemented or operate correctly	Have not included enough requirements to meet the basic functional requirements and / or the majority of the functions are not implemented or operate correctly
Access management: <ul style="list-style-type: none"> Registration sign-in and out different access levels (ILOs 1 and 2) 20%	All the requirement completed in professional manner	Registration, sign in, sign out, the working fine and attempted to implement the access level	Registration, sign in, sign out completed	Registration, sign in completed	Registration completed
Functionalities <ul style="list-style-type: none"> Form validation All functions specified (ILOs 1 and 2) 50%	Implemented all required functions in a professional manner	Implemented any 70% of the functions	Implemented any 60% of the functions	Implemented any 50% of the functions	Attempted or implemented any one of the functions
Design of site and user <ul style="list-style-type: none"> Consistency Usability Sufficient comments in coding Works for different devices Readme.txt file including login credential, any other optional information File structure No spelling errors (ILO3) 10%	Have completed all the requirements to a high level, with a consistent, professional look and feel throughout. In addition to useful and meaningful comments in the code, human readable comments included for better maintainability	Have a site that has a consistent tone and style with each section divided logically and meaningfully Useful and meaningful comments included for the majority of the key aspects of the code	Have divided the content of each section in a logical and meaningful way Some useful and meaningful comments included in the code	Have divided the content of main sections in a logical and meaningful way Some meaningful comments included in the code	Some attempt to apply design principles evident, but not to the required standard and / or not consistently applied with no clear separation of design and content.