Assignment 2

Important Notification

Plagiarism and Cheating:
Practical assignments are used by the Discipline 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 your own.

Working with others
One effective way to grasp principles and concepts is to discuss the issues with your peers and/or friends. You are encouraged to do this. We also encourage you to discuss aspects of practical assignments with others. However, once you have clarified the principles *of the question*, you must express the algorithm and program entirely by yourself. In other words, you must develop the algorithm to solve the problem and write the program which implements this algorithm yourself. You can discuss the question, but not the solution. Assistance with the solution should be provided by staff.

Cheating

- Cheating occurs if you claim work as your own when it is substantially the work of someone else.
- Cheating is an offence under the Ordinance of Student Discipline within the University. Furthermore, the ICT profession has ethical standards in which cheating has no place.
- Cheating involves two or more parties.
    - If you allow written work, computer listings, or electronic versions of your code to be viewed, borrowed or copied by another student you are an equal partner in the act of cheating.
    - You should be careful to ensure that your work is not left in a situation where it may be used/stolen by others.
- Where there is a reasonable cause to believe that a case of cheating has occurred, this will be brought to the attention of the unit lecturer. If the lecturer considers that there is evidence of cheating, then no marks will be given to any of the students involved and the case will be referred to the Head of Discipline for consideration of further action.

Due date

Assignment 1	3 PM Wednesday Week 6 (01/04/2020) – 15/04/2020
Check point	During the tutorial time Week 10
Assignment 2	3 PM Wednesday Week 13 **NO EXTENSION**

Submission Method

Submission will be via MyLO. You will submit a **.zip file** named with user name and ID number which must include all the files for your assignment. For example, **syeom123456.zip**
By submitting this assignment, you will be deemed to have agreed to the following declaration:

I declare that all material in this assignment is my own work except where there is clear acknowledgement or reference to the work of others. I am aware 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.
I will keep a copy of this assignment until results have been finalised.

Our Client – University of DoWell

Introduction

We continue work for the project with the client. We also have received some feedback on the prototype. We are going to make the website fully functional with the required functions from the client.

Details

UDW has three different campuses:

- Pandora
- Rivendell
- Neverland

UDW offers four study periods:

- Semester 1
- Semester 2
- Winter School
- Spring School

The site serves as a comprehensive portal with information on timetables, unit details, academic staff and functions such as tutorial allocation and unit enrolment.

Students, teaching team of Unit Coordinator (UC), Lecturers, and Tutors as well as the Degree Coordinator (DC) are the main users.

There will be two Master lists: Academic Staff and Units.

Master list of academic staff contains the list of the UC, lecturers and tutors. Master list of Units contains the list of units offered by the UDW. The degree coordinator may manage both master lists of academic staff and units.

Each UC will be responsible for selecting tutors from the “Master List of Academic staff”. This will be included in the Unit details. (i.e., the list of tutors of each unit)

Each unit will have at least 2 academic staff (numbers are determined by DC), one of whom will be assigned to be the UC by the DC. Lecturers and tutors can be rostered to work at any unit, but there can be only one lecturer at each campus for each unit at a time.

To use the CMS, staff and students must first register by providing Student/Staff ID, Name, E-mail address, and password for mandatory information. Address, Date of Birth, and Phone number are optional.

Each class has a maximum capacity of students in the class. If a class is full, students cannot enrol into it. They instead must choose another available class. For example, if the capacity of tutorial is a maximum of 20 people, then students cannot join that tutorial once the tutorial is full. Also, different labs have different capacities which will be applied when students are allocated.

Role Description

Role	Description

Degree Coordinator (DC)	• Will decide
	  ○ what units will be available at each semester; and
	  ○ who will be teaching for each unit
	• Will responsible for
	  ○ giving access level to casual staff (assignment 2)

Unit Coordinator (UC)	• Will decide
	  ○ who will be a lecturer for the unit for each campus;
	  ○ the lecture time; and
	  ○ the tutorial times
	• Can add or remove tutor/students

Lecturer	• Can view the student list of the corresponding unit • Can add or remove tutor/students
Tutor	• Can view the student list of the corresponding tutorial
Student	• Can enrol unit and tutorial

Description of Task (30%) = Checkpoint (5%) + Assignment 2 (25%)

The assignment aims to build Course Management System (CMS) for UDW which allows the University to manage unit enrolment, and tutorial allocation. CMS provides the following functions:

- The management of units
- Tutorial allocation management
- Student management
- Academic staff information

Home Page

Access: all
The login/logout section include authentication of a user (i.e. database access is required)

Registration page

Access: all
The registration page WILL need to store the registration data (i.e. database access is required). When the registration data is stored to the database, password encryption is required. The crypt() function and/or using salt is expected for encryption. DO NOT USE MD5 or SHA1 for password encryption – if used, mark will be deducted.

Master List Page - academic staff

Access: DC
For the master list page for academic staff will need to modify the list of academic staff that will be available for selection of the lecturer and allocate tutors into the tutorial time. (i.e. database access is required).

- The degree coordinator can
  - View the academic staff unavailability
  - Add or remove academic staff

- Allocate academic staff to be lecturer
- Allocate tutor to a unit

Master List Page - Unit

Access: DC
In this page, the DC can add, remove or edit the units for the course including the offering semesters, campuses and its description.

Unit Detail Page – Unit Description Page

Access: all
In this page, the descriptions of the unit is displayed with a basic information including the corresponding unit coordinator, the offering semesters and the offering campus.

Unit Enrolment Page

Access: student
It will display available units for each student to enrol. In this page, students can enrol themselves into the unit and change their enrolment.
For Assignment 2 the unit enrolment page WILL need to store a submitted unit enrolment request and update user account as required (i.e. database access IS required).

Individual Timetable page

Access: individual student
It will display the student's timetable (including lectures and tutorials) that a user has enrolled in.
If a student has not enrolled any unit, it will display empty timetable.

User Account Page (additional page from Assignment 1)

Access: all
For assignment 2 the user account page needs to retrieve and update a user's account details as required (i.e. database access IS required). User also can change their password, mobile number or e-mail address, etc.,as the design of the form from Assignment 1.
Here a user can view their class timetable with the units they have enrolled in. USUABILITY must be considered.

The academic staff can

- Add, remove or update their unavailability

Unit Management / allocating teaching staff (additional page from Assignment 1)

Access: DC, Unit Coordinator
Here the UC can add or remove and consultation and tutorial time /location for the unit. The UC also allocates the lecturer for the unit (UC can be the lecturer or can allocate other staff members as a lecturer) and the tutor in the corresponding tutorial. Tutorial time must start on the hour or half-hour. i.e. a tutorial can start at 9:00, 9:30, 10:00, 10:30, or so on.

Tutorial Allocation Page

Access: student
Student choose his preferred tutorial time for each enrolled unit.
The user must enrol themselves in the unit through unit enrolment page to allocate them into the tutorial.
It will not allow a user to enrol the tutorial that exceed the maximum capacity.

For Assignment 2 the tutorial allocation page WILL need to store a submitted tutorial allocation request and update a user's account as required (i.e. database access IS required)

Enrolled Student Details Page (additional page from Assignment 1)

Access: DC, UC, lecturer, tutor

This page is only available for the DC, UC, lecturer and tutor (Students cannot access to this page), and the list of students and their allocated tutorial time details placed. Only the current student in each class will be visible.

Additional Features

- ⇨ Pre-requisite check for enrolment
- ⇨ Password reset option with additional information (a couple of questions) from initial registration. Mailto is not available in alacritas at the moment. You can make a function to handle it. You can make your own way to reset password.
- ⇨ the enrolment list can be displayed for DC, UC, or tutors with an option of export to an Excel file

Deliverables

- Web site with required functionalities
- "ReadMe": any information if you want to share with marker such as DC's credential. This can be a text document, Word, or PDF. e.g.) ReadMe.txt

Checkpoint (Week 10) Rubric

Progress on Key Components	Excellent progress 1.25 point	Good progress 1 point	Some progress 0.75 points	Little or no progress 0 point	
Database connection	Essential table design is done	The criterion works with a minor point for further work to complete	Some progress at least one or two table(s)	Little or no progress	/1.25
Access level (State management) • **New user can register with correct for validation** • **Existing user can sign in and out**	Fully functional	The criterion works with a minor point for further work to complete	Some done	Little or no progress	/1.25
Database Interaction - A couple of functions are done (e.g. enrolment, tutorial allocation, unit management	insert, delete, retrieve functions work with table	The criterion works with a minor point for further work to complete	Some done	Little or no progress	/1.25

timetable generation, etc.)					
Password Encryption	Done	The criterion works with a minor point for further work to complete	Planned, not implemented	Little or no progress	/1.25

Rubrics Assignment 2 - **KIT202**

Criteria	HD+	HD	DN	CR	PP	NN	NN-
Overall (ILOs 1, 2, and 3) 10%	points Have implemented a functional site with requirements of both the site operator and user.	points Have implemented a site that provides the functions that best support the users needs using current best practice	points Have implemented the majority of the requirements in a manner that makes the site functional and easily accessible	points Have fully implemented the basic functions required for the site to an acceptable level and / or not all functions are implemented or operate correctly	points Have identified and attempted to provide only the basic functional requirements, and / or not all functions are implemented or operate correctly	points Have not included enough requirements to meet the basic functional requirements and / or the majority of the functions are not implemented or operate correctly	0 points Little work completed for the site and / or have not produced a site implementing the required functions and / or a site of an adequate standard
Functionalities - registration, sign-in and sign-out, different access levels (ILOs 1 and 2) 20%	All the requirement completed in professional manner	Registration, sign in, sign out, the different access level is working with some error	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 - • Enrolment (Lecture and tutorial) • Allocation of academic staffs • Unit detail management • Changing users account detail • Registration • Session management (Sign in and out) • Different access level • Creating enrolled student list • changing class times • creating timetable, (ILOs 1 and 2) 40 %	Implemented all required functions in a professional manner	Implemented all required functions with a minor error	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	Little work completed
Functionalities - • header, footer • Pre-requisite check for enrolment • Password reset option with additional information (a	points All of the required functions are implemented to a high, professional, standard	points All of the required functionalities are correctly implemented	points All of the required functionalities are compactly implemented with minor improvements	points Majority of the required functions are implemented and work correctly; database shows evidence of using	points At least half of the required functions are implemented and work correctly, and evidence of some	points Less than half the required functions work correctly and / poor planning	0 points Missing major functions

couple of questions) from initial registration. Mailto is not available in alacritas at the moment. You can make a function to handle it. • the enrolment list can be displayed for DC, UC, or tutors with an option of export to an excel file (ILOs 1 and 2) 20 %	including diffe rent access level of different users and fully functional management of enrolment and posting.		can be done to meet professional standards	good design processes, but require further development	planning process used in developing it		
Design of site and User experiences • Consistency • Usability • Sufficient comments in coding • Works for different devices	points Have completed all the requirements to a high level, with a	points Have designed and completed all the require-ments to	points Have a site that has a consistent tone and style with each section divided	points Have divided the content of each section in a logical and meaningful way	points Have divided the content of main sections in a logical and meaningful way	points Some attempt to apply design principles evident, but not to the	0 point Required design principles not adhered to and / major requirements

• Readme.txt file including DC's credential, any other optional information (ILO3) 10 %	consistent, professional look and feel throughout. In addition to useful and meaningful comments in the code, human readable comments included for better maintain-ability	a high standard. Have provided logic al and meaningful implemen-tation with minimal mistakes and minimal incorrect spelling/typing errors Useful and meaningful comments included for all key aspects of the code	logically and meaningfully Useful and meaningful comments includ ed for the majority of the key aspects of the code	Some useful and meaningful comments included in the code	Some meaningful comments included in the code	required standard and / or not consistently applied with no clear separation of design and content. A few meaningful comments included in the code	not implemented of working correctly. No or meaningless comments included in the code