### **COM409 Group Work Specification**

## Part 1: Project Plan and Design(Semester I, 10%) To be submitted by 7pm on Friday Week 12 Semester 1

# [REMEMBER THAT Blackboard ALLOWS ONLY <u>ONE</u> SUBMISSION OF THE FINAL FILE BY ANY ONE MEMBER OF THE GROUP - once that is submitted no other submission is allowed by the system]

You are to submit a <u>Project proposal document</u> based on the selected scenario, addressing the following topics:

- Group membership and project idea
- Project aims and objectives (Details of what the system will achieve)
- Requirements specification (Your system <u>MUST</u> cover all the requirements specified below as a bare minimum. Additional requirements are expected based on the scenario)
- System Design.
- Testing and Evaluation Plan.
- Workload distribution (How the project will be distributed amongst the group members)

### This document should not be longer than 15 A4 pages.

Feed back on your project plan will be given Week1 Semester 2.

### **General Requirements:**

Your proposal should cover the following requirements as a bare minimum:

- A database (Including Database Design and sample data) tailored to your specific scenario.
- A public area to describe your application's purpose
- A registration area for new users, including a section on security
- Secure area for registered users
- Custom content in the secure area, tailored to the user logged in and the specific scenario

#### Marking Criteria:

The next page of this document is a sample feedback form you will receive for the project proposal document. The marking criteria and corresponding weighting is detailed in this page.

### Assessment of GroupWork part 1 – Project Plan

Group Number:	Scenario	

Criteria upon which the assessment is based	Scale	Mark
Presentation with bonus marks for effective use of the medium in communicating your report in this assessment	V.Poor, Poor, Satisfactory, Good, Excellent  1 2 3 4 5 (x 2)	
System Details. Marks assigned for the depth and breath of the details provided, as well as for the feasibility of implementation in the time frame available.	V.Poor, Poor, Satisfactory, Good, Excellent  1 2 3 4 5 (x 5)	
Requirements coverage. Marks are awarded according to how well does your system cover all requirements as established in the Group Work Specification Document	V.Poor, Poor, Satisfactory, Good, Excellent  1 2 3 4 5 (x 5)	
System Design. Marks are awarded according to the specific design and coverage of customer specifications, as requested in the scenario.	V.Poor, Poor, Satisfactory, Good, Excellent  1 2 3 4 5 (x5)	
Testing and Evaluation. Marks are awarded according to the specific details on system testing and evaluation strategy.	V.Poor, Poor, Satisfactory, Good, Excellent  1 2 3 4 5 (x3)	
Comments on how this work could be improved.		
	Total	

### Part 2: Implementation (Semester 2) to be submitted by lunch time Friday week 10 Semester 2:

REMEMBER THAT Blackboard ALLOWS ONLY <u>ONE</u> SUBMISSION OF THE FINAL FILE BY ANY ONE MEMBER OF THE GROUP (once that is submitted no other submission is allowed by the system)

You must submit a Zip file named with your Group Number (e.g. Group10\_GCW.zip). This file must contain:

- An exported database sql-file with Group Number (e.g. Group10.sql);
- All files necessary for the correct function of the website (HTML, PHP, INC, etc);
- A written report containing:
  - Design details (relationship justifications/assumptions, ER Diagram, Linked Relational Schema, any necessary details about the system) highlighting any alterations from the Project proposal document submitted in Semester I;
  - o A valid username & password for your system;
  - Bibliographical reference of any code taken from another resource (e.g. URL of webpage) along with details of how you have adapted this code (use Harvard Standard);
  - A statement from individual members of the group regarding group work load share and participation.

A NOTE ON PLAGIARISM: You should <u>not</u> copy code from another student. However if you have used any substantial code from another source such as the Internet you MUST give the source details (e.g. URL) plus details of how the code was adapted – i.e. what part of the code was added or altered by you. Otherwise if you do use code from another source that is <u>not</u> referenced and accredited, you are claiming that you wrote the code, which then would become a plagiarism offense under the University plagiarism rules. It is obviously better from a mark point of view to write the code yourself, but credit can also be given for a working system that has adapted referenced code from elsewhere, particularly if you have adapted it substantially.

Additionally you must submit either a file or a link to a file holding a Screencast of the final product. See Screencast section below for details on the screencast.

The following is a general breakdown of marks for the final submission of the project:

### 1. Database Design & Creation (10%)

You will need to design and create a database for your allocated scenario. As a refresher these are the steps you should follow when creating your database:

- Create an ER Diagram (see notes COM147 for ER Diagram notation).
- Justify each relationship in BOTH directions.
- For each entity type choose a sensible primary key plus at least 3 other appropriate attributes.
- Use the relational mapping rules to **create a set of linked tables**
- Implement the database in MySQL (through phpMyAdmin) using appropriate data types, with primary and foreign keys specified
- Add a reasonable number of records ensuring that the relationships are expressed through the data.

#### 2. Website basics (30%)

You are expected to provide a simple hierarchy of pages (representing a small website) with:

- A welcome page and public section of the website. This can include things like news section, quick links, FAQ, About Us pages, etc. These can be any mixture of dynamic and static pages. The welcome page <u>must</u> include a login/password form leading to a member area, and a link to a registration page for new members.
- A registration page with the following checks and appropriate error messages:
  - o Existing Username
  - o Password length (minimum 8 characters)
  - Password strength (Passwords should have at least a capital letter, a number and a symbol or punctuation mark)
- Sessions set on login to ensure that pages are not accessible unless logged in as a valid
  user
- A login page implemented with login check and appropriate error messages
- A logout link that destroys sessions & returns to the welcome page
- Your website must use a consistent style across all pages.

#### 3. Advanced features (50%)

The group will decide on the added functionality to provide on the website according to the scenario described. The advanced features will be marked according to:

- Level of overall effort evident
- Code layout, structure, elegance, suitability, naming convention and comments
- Data validation
- Usability and accessibility
- Evidence of enthusiasm and interest both in the project and the written report.

### 4. Screen Cast (5%)

The group will showcase the software produced to the teaching team via a Screencast. It is expected that all group members participate in the creation of the Screencast. The Screencast will be no longer than 10 minutes and must show both front end and back end of the application. It is expected that each member of the group will be responsible for explaining a section of the code, and demonstrate its use during the Screencast.

### 5. Individual assessment of Group Work (5%) (To be submitted Via Blackboard no later than Friday week 12 Semester 2)

Students must complete an online form assessing the individual contributions to the overall work. This form is individual and confidential. Responses will affect the total mark of the group work for individual members.

Remember this assignment represents a substantial piece of work. You have from week 2 of semester 1 to work on it, giving you essentially 20 weeks (not counting Christmas or Easter breaks) to produce a work of <u>quality</u>. Your submission MUST represent an equivalent of at least 100 hours of independent work. This has to be evidenced in both the written report and the software produced. The next page is a <u>sample</u> of the feedback form you can expect to receive for your final submission. This feedback does not take into consideration individual adjustments received as a result of poor engagement or individual assessment and should <u>not</u> be considered a final mark for the submitted work.

COM409 Client-Server Application Development – GroupWork – Part 2 Feedback Sheet

Group Number		Scenario:							
Comments: (C=Complete success; P=Partial success; M=Missing)									
Database Design & Creation (10%)	Comm			Comm	MARK				
ERD Present		Relation	nships Justification						
Appropriate Data Types		Relationships expressed through data							
Appropriate Records									
Website (10%)	Comm			Comm	MARK				
Welcome Page		Member Area							
Login		Design							
Registration and Sessions (20%)	Comm			Comm	MARK				
Username Check		Approp	riate Error Messages						
Password Length		Passwo	Password Strength						
Use of Sessions		Logout							
Data Validation		User Se	gregation						
Advanced Features (50%)	Comm			Comm	MARK				
Code layout		Quality of Code							
Comments		Accessibility							
Usability			Complexity of features						
Screencast Mark (5%)			Total Mark (95%)						