University of Technology, Jamaica

School of Computing and Information Technology

**Enterprise Computing II**

Final Group Project

**Given:** Week of8/03/2011 **Due:** Week of11/04/2011

**Please Note: this copy is subject to change**

**Objective:**

Students are required to develop a social networking application that encompasses features that are offered by the current Facebook application. The application based on Multi-tier Architecture .NET platform, which provides features such as:

* A wall where users and their friends may leave comments
* A Photo Album Sharing – Users may post their pictures and users may leave comments on the photos
* Privacy Settings - A user may determine what areas of his account are viewable to his friends and to the public.
* Profile Details – Here a person may post personal details about themselves
* Friends Page – A user may send and receive requests to be friends

**Method of development:**

This is a group project. Number of students for each project cannot be more than 5. Within each group there has to be assigned one leader, who is responsible for development of the project and the coordination between all parts of the project developed by other students.

**Requirements:**

1. A database should be designed to store the information.
2. The user should be presented with a page to login or sign up

* No user should access the service unless they are a member
* For a user to search for friends they must be logged in
* Users should receive emails to confirm their registration

1. The main page should use Multi-Views to display the following features:
   1. Wall – friends of the user and the user can leave comments. The comments should be organized by time
   2. Private Settings – The user is able to determine who can see the wall, pictures or leave comments. The private settings should also determine if persons who are not on the user friend’s list are able to view their information.
   3. Profile Details – The user is able to update their personal details.  
        
      Personal Details are:  
      - Relationship status   
      - Current country  
      - City of residence  
      - Last Educational Institution  
      - Professional Category  
      - Date of Birth  
      - Name
   4. Outside of multi-views the main page should display the person’s profile data and status message.
2. Friend Manager – Users are able to search the entire application for other user and send friend requests. Users are also uses the feature to receive and approve requests. Users should further be sent emails of friend requests in addition to the Friend Manager.
3. Photo Album – Users are able to upload pictures where other users can comment on the picture. The user may also comment on their picture.
4. The should be an API developed using Web Services where other applications may use your authentication to validate their users. The API should additional allow users to export their contact or friend’s list to another application using a flat file format of your choice.
5. An RSS feed for your application should be used to keep users up to date with features developed by your site.

**Process of development and tools:**

Students are to develop the system using following programming languages, tools and technologies. Each Control or technology should be relevant to a required feature for the marks to be allocated:

|  |  |  |
| --- | --- | --- |
| **#** | **Project components** | **Marks** |
| ***Database design and database programming*** | | |
| 1 | *Database/databases design* | 5 |
| 2 | *Stored procedures to update and create data* | 2 |
| 3 | *Views to retrieve data* | 3 |
| ***ASP.NET programming*** | | |
| 4 | *Develop and automated RSS Feed ( Should be Demonstrated)* | 10 |
| 5 | *Using Profiles* | 5 |
| 6 | *Using Multi-View controls* | 10 |
| 7 | *Sending an e-mail by application* | 5 |
| 8 | *Using custom error handling including HTTP status codes* | 5 |
| 9 | *Using web parts to build portals* | 5 |
| 10 | *User Controls development* | 5 |
| 11 | *API development with Web Services (Should be demonstrated)* | 10 |
| 12 | *Implementation of Requirements* | 10 |
| ***Security of the Web application (use a form-based authentication and cookies)*** | | |
| 13 | *Web Site Administration Tool: managing Users/Roles/Access rules.* | 5 |
| 14 | *Using Login (1 mark),* *LoginStatus (1)*, *LoginName (1), CreateUserWizard (2), PasswordRecovery (2), ChangePassword (2), and LoginView (1) security controls* | 10 |
| 15 | *Good Aesthetic Design* | 10 |
|  | ***Total:*** | 100 |
| 15 | ***Bonus Marks – Use The Facebook API for authenticating users*** | 10 |
| 16 | ***Bonus Marks – Use of Technology that wasn’t taught in the course*** | 10 |

***Notice:***

* **Each group must submit the project to the Enterprise Computing lecturer (not to Students’ affairs unit or to the secretaries!) on a CD-ROM (write IDs and names of the students on the CD-ROM) by the due date as stated above.**
* Projects are due in the Lab Time.
* If the project is submitted to lecturer after the due day the evaluation interview will still be conducted, but a penalty is attracted for every late day. **Each day after due day (including Saturdays and Sundays) will attract a 15% accumulative penalty which will be deducted from the total mark of project.**
* Each CD-ROM must have an instruction manual (*read.me* file, all usernames and passwords for Login procedure) on how to launch the application.
* Presentation of the final project will be based on “face to face” discussion individually with each member of group.
* Timetable of presentation will be issued at least one week before presentation. If you miss your presentation time (that includes being late, not at a time assigned for your group or did not come at all), you need to write a report to the Head of School of Computing & Information Technology (SCIT) explaining your reasons – the next available interview time will be assigned through Head of SCIT and Programme Director, not by the lecturer.
* If a student provides a solution and is not able to explain programming code – 80 marks will be taken from project’s item marks.
* It is possible (and is recommended) that each developer should be responsible for a section of project. However, developers must be familiar with other parts of project in great detail.
* It is not acceptable for a student to know only their part of project but has no knowledge about other parts or how their part integrates with the application.