

School of Engineering and Built Environment

ASP.NET Web Development 2

Level: M

Module Code: MMG413411

Coursework

This coursework comprises 50% of the overall mark for the module.

Hand-in date: 30th November 2012

Attention is drawn to the university regulations on plagiarism. Whilst discussion of the coursework between individual students is encouraged, the actual work has to be undertaken individually. Collusion may result in a zero mark being recorded for the coursework for all concerned and may result in further action being taken.

ASP.NET Web Development 2 Coursework 2012-2013

Note that this coursework should be completed by **each student individually**.

Survey creation web application

You should design and implement a web application to enable registered users to design surveys and make these available to respondents. Users should be able to view the response data for their surveys. For simplicity, survey questions will all be of the same format, each consisting of a question rubric and a Likert scale for responses. Unlike some popular survey applications, such as SurveyMonkey, this application will be moderated - while users can create surveys freely, each survey must be approved by an administrator before it goes "live".

The functional requirements for the application are as follows:

- User should be able to register
- User should be able to log on/off
- User should be able to view a list of his or her own surveys
- User should be able to create a survey
- User should be able to add a question to a survey
- User should be able to request approval for a survey
- User should be able to view a summary of the responses to a survey
- Administrator should be able to view a list of surveys pending approval
- Administrator should be able to approve and publish a survey
- Guest should be able to respond the questions in a survey

Non-functional requirements are as follows:

- The application should be responsive and easy to use
- The application should be robust and secure
- The application should be designed for testability and unit tests should be included

The application should be built using ASP.NET MVC, which may provide the entire presentation layer, or may provide a service layer to support a client-side presentation layer, or may be used in some combination of these. In any case, the focus in this assignment is on the use of ASP.NET MVC, and so any client side code should be implemented as simply as possible. Similarly, you may use any technology you choose to provide business and data access layer functionality, but it is recommended that you avoid unnecessary complication in the architecture of these layers.

You should submit the following:

Documentation:

You should provide a report which documents the design process which you followed. Your report should consider key areas in your design, which may include the following:

- Routing
- Controllers and actions
- Models and model binding
- Validation
- Division of functionality between client and server
- Security, including authentication and authorisation

Your report should include an **evaluation** of your design and its implementation. This should consider the way in your key design decisions contributed to your success or otherwise in meeting the application requirements.

Implementation:

The implementation should provide a complete web application which meets the specified functional and non-functional requirements. Credit will be given on the basis of an overall judgement of the extent to which these requirements have been met, and may include recognition of particularly elegant or comprehensive solutions to specific problems. The implementation should be submitted as a Visual Studio project comprising your application and any other resources required for running the application, including libraries and data storage.

Submission:

All submissions should be electronic, through the Assignments section for this module in GCULearn.

MARKING SCHEME

Design documentation	20
Implementation	25
Evaluation	5
Total	50