

MODULAR PROGRAMME ASSESSMENT SPECIFICATION

Module Details

Module Code UFIEUS-20-2	Run 10SEP/1 AY	Module Title Web Programming
Module Leader Prakash Chatterjee	Module Tutors Prakash Chatterjee	
Component and Element Number B1		Weighting: (% of the Module's assessment) 50%
Element Description Individual work supported by group/class discussion on a structured task		Total Assignment time 24 hours

Dates

Date Issued to Students 8th February 2011	Date to be Returned to Students 13th May 2011
Submission Place PROJECT ROOM - 2Q30 (Help Desk open 9.00 - 6.00pm)	Submission Date 24th March 2011
	Submission Time 2.00 pm

Deliverables

See attached specification

Module Leader Signature

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UFIEUS-20-2 - Web Programming UFIEKG-20-3 2010/11

Assessed Coursework

1. Learning objectives

- Build a web application that supports transactions and persistence.
- Use a range of web oriented software architecture and design principles.
- Refactor a lightweight PHP based web framework.
- Understand and implement both static & dynamic software patterns.
- Model and implement persistence and transactions via sessions, cookies & DBMS.
- Use and integrate a Restful Web Service.
- Understand & apply some security and integrity principles.
- Experience and learn from the team oriented and individual components of software construction

2. Requirements

2.1 Overview

You are required to select an exclusive domain from the list provided and then to design, build and implement an application by using, extending and refactoring the provided PHP framework.

Once completed, the application must be made available for viewing and use within the UWE / BIT domain where the base url must of the form: **<http://www.cems.uwe.ac.uk/~yourusername/wp/assignment/>**

For database functionality, your application must make use of a MySQL database.

2.2 Domain Selection

You must select one of the domains from the following list.

Organic Fruit & Veg Supplier

A eWidget Store

Bonsai Specialist

DVD/CD/Games Exchange

Pet Care Service

Gardening Service

Flat and House Rental Search

Sci-Fi Book and Film Supplier

Fair Trade T-Shirt Supplier

Baby Sitting Service

Art & Craft Supplier

3. Deliverables

3.1 Models & Components (70%)

- A conceptual E-R model and a MySQL instantiation of the domain data.
- A user registration and authentication component.
- An account and cart management component.
- A component to consume the RESTful card authentication service using the api-key provided.
- A search component.

Application components are required to be created and implemented using the provided framework, php, mysql, xhtml, xml, javascript & css. You are free to make use of any open source resources such as javascript and php libraries, css skins, etc. but these must be properly acknowledged. **Your implementation must make use of the provided [PHP framework](#) but you can modify, extend and refactor it as much as you require.**

3.2 Analysis & Evaluation Component (30%)

An analysis, evaluation and prototype implementation of how your application can be made more robust and/or extended using **one** of the following :

Web 2.0 Services

View Templating

Data Backup & Contingency

Refactoring

Security & Integrity

4. Resources

A zip file containing the [PHP Framework](#) and other required files.

A [api-key generation & registration page](#).

A guide to using the [REST based card clearing service](#).

5. Marking Criteria

D1 - Working Application (20%)

- Accessible within UWE site
- XHTML is valid
- User Interface & Usability is appropriate for the functions supported

D2 - Design & Implementation (30%)

- Overall systems architecture
- Database design and implementation (including adequate dataset)
- Implementation of required functions and components
- Adoption, use and consistent extension of configuration file

D3 - System Documentation (20%)

- All E-R Models and SQL DDL & DML listings supplied

- All program and data listings supplied
- All mark-up listings & CSS listings.
- All listings are well-formed and readable
- All scripts include appropriate comments
- Code is readable and well-structured, using functions and library files as appropriate.
- Code and images, including functions and sections of code which have not been written by you must be properly acknowledged

D4 - Analysis & Evaluation (30%)

Assessment for this component will be based on the analysis, discussion & evaluation of your chosen domain and how the service can be re-factored and improved using one of the topic areas listed in 3.2. A prototype implementation should also be developed and included / discussed for assessment.

Overall assessment criteria

D1 - D3 (70%)

0 - 39 (fail) for an attempt which does not work, is documented only by listings of dubious provenance and which fails to show any learning in the technologies required.

40-49 for an attempt which has a few basic functions but is poorly documented. Parts of the application may not work, but this can be seen to be because of a simple problem and there is evidence of some good work despite the failure to work as a whole.

50-59 for a basically functioning system with some documentation.

60-69 for a system with most functions working, a basic interface and good documentation.

70+ for a fully functioning, well-documented system.

80+ for a system of sufficient quality to be used to promote the module in Open Days.

D4 (30%)

0 made little or no effort overall

0 - 34 some effort evident but with poor report.

35 - 49 minimal effort with basic report

50- 59 reasonably well documented and clear report

60 - 69 well coded and documented with interesting / relevant report

70 + major contribution of effort and ideas, insightful report

Tutor support

Tutor help can be requested for any aspect of the coursework such as the overall design, PHP / MySQL coding problems. Please ask for assistance after a bit of a struggle with the problem rather than get stuck.