MODULAR PROGRAMME ASSESSMENT SPECIFICATION

Module Details

Module Code	Run	Module Title
UFIEKG-20-2	10SEP/1 AY	Data, Schemas and Applications
Module Leader	Module Tutors	
Chris Wallace	Prakash Chatterjee, Paul Matthews, Dan Buzzo, Margaret Mccarthy	

Component and Element Number	Weighting: (% of the Module's assessment)
B1	25%
Element Description	Total Assignment time
Group work on a structured task	12 hours

Dates

Date Issued to Students	Date to be Returned to Students
To be supplied	20th January 2011
Submission Place	Submission Date
Via online submission - to be advised	09th December 2010
	Submission Time
	2.00 pm

Deliverables

As define in the specification

Module Leader Signature

UFIEKG-20-3 - Data, Schemas and Applications 20010/11

Coursework 1

This is a group assignment with an individual component

Learning objectives

- Reading and generating XML files
- Linking software components with function calls and HTTP GET
- Understanding XHTML,RSS and KML XML vocabularies
- Creating Yahoo Pipes and PHP scripts
- Designing an XML file format and using it to create 2 files
- Creating an XML meta-data file and validating it against a schema
- Integrating information from other scripts into a single HTML page
- Experiencing team software construction

The Application

Overview

Many Towns in the UK are twinned with other towns in Europe and around the world. For example, the towns which Bristol is twinned with are listed in Wikipedia. The idea of this site is to encourage interest in twinning by showing information about the Town and its twins on the same page. The site will be for a specific town but the scripts should be generalised, with the specific details about the town and its twins either held on an XML file or gathered dynamically from other sites on the internet. The site should display, on one or more pages, at least news, weather information and a map of the locations.

To allow the scripts created to be generalised to any town, you are to design the structure of an XML configuration file to hold the data specific to a town, such as its name and location in latitude and longitude, the names and locations of its twin towns and any other data necessary to enable the data to be retrieved from the web. There is no requirement for the user to be able to create or edit that configuration file but you must provide two configuration files for two different towns and their respective twins.

Your example town can be any UK town EXCEPT Bristol (because I will use that for examples). It would be good to get a wide coverage of the UK, so choose someone's hometown, or holiday destination.

Group working

You will work in groups of three and each group member will be responsible for at least one of the components. However, all group members are expected to have an understanding of the whole application and all members will be involved in the design of the configuration file at the heart of the application.

Groups are required to be formed and notified to your tutor by the 20th November. Groups will be formed by students in a tutorial group.

Tutor support

This first coursework is seen as providing a learning experience in the tools used on the module. Support for this coursework will be provided over the next few weeks in tutorial time. Tutor help can be requested for any aspect of the coursework such as the overall design, PHP coding problems or XML structuring. Please ask for assistance after a bit of a struggle with the problem rather than get stuck.

There is a page on the module wiki which will provide more detailed guidance in constructing this application. This points to useful resources and will be added to as the work progresses.

Application Components

- A component to create a display of the current and forecast weather for the town and its twins.
- A component to generate a KML file to show the location of the town and its twins.
- A component to search a selected media site, RSS feed or Atom feed for news relevant to the towns.
- Another component chosen by the group but checked with the tutor for suitability.

- One or more web pages to integrate the separate information displays. This may be static or generated.
- A configuration file to define the data sources to be accessed and other configuration parameters.

Application components are required to be created using PHP, XML, Yahoo Pipes or CSV.

Deliverables and Marking Criteria

D1 – Working Application

Marking criteria

- Accessible within UWE site
- XHTML is valid
- Supports the required functions
- Demonstrates originality on choice of data sources and good design in the way information is presented
- Clearly acknowledges the sources of the different feeds used

D2 – System and Project Documentation

An XML document must be created for each group which describes the application and the role of group members on the application. The document must conform to the supplied XML Schema and be electronically submitted via the designated interface (see the wiki for details).

The XML file should contain the following sections. It is advisable to use oXygen or another XML-aware editor.

Application

Main page URL

For each student

Studentid number

Number of hours spent on assignment

Report – a brief (500 words) report on lessons learnt.

This may be formatted using HTML and embedded in a CDATA section in the XML file.

For each component which the group have constructed

Component Title

A short descriptive title for the component

Component Source URL

To enable the tutor to review the source

Language of component

HTML, Yahoo Pipe, PHP, XML, CSV,CSS, JavaScript, XMLSchema

Component purpose

A brief description of the purpose of this component

Person leading the development of this component

Studentid

Problems

Any problems or difficulties encountered in the development or remaining

Marking Criteria

- All program and data listings able to be inspected via the supplied URIs
- All scripts and data files to be well-formed and readable
- All scripts include appropriate comments
- Code is readable and well-structured, using functions and library files as appropriate.
- System architecture is appropriate
- Code and images, including functions and sections of code which have not been written by one of the group must be properly acknowledged

Overall assessment criteria

Group (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. Teamwork is evidently absent.

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

50-59 for a basically functioning system produced by a team working together, with some documentation. The configuration file will be used but some parts of the application may be hard-coded.

60-69 for a system with functions working, a basic interface and good documentation, driven by the configuration file.

70+ for a fully functioning, well-documented system, with the site fully determined by the configuration file, with an appropriate and well-implemented additional component.

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

Individual (30%)

Based on the individual report section in the XML Documentation and the individual contributions made.

0 made no effort to engage with the group, no individual report

0 - 34 peripheral role in group, poor individual report.

35 - 49 minimal contribution, basic individual report only

50- 59 good contribution to one component, clear report

60 - 69 – good team contribution, interesting report

70 + major contribution of effort and ideas, insightful report

Frequently Asked Questions

This section will be maintained in the wiki and will be expanded during the work on the assignment.