Aston University
BIRMINGHAM UK

College of Engineering & Physical Sciences
Assignment Brief

DC2410 Internet Applications and Techniques	Coursework: Aston Events Website
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Assignment Brief/ Coursework Content:

This coursework asks you to demonstrate your ability to design and develop a three-tier dynamic database-driven web application – Aston Events.
Your implementation should use the server-side technical knowledge covered in our module, i.e. Node.js, PHP, Laravel, MySQL, MongoDB, and combined with HTML and other front-end technologies (e.g. CSS and any templates, JavaScript and any libraries etc.). You are required to produce a short project report and to deploy your website on a host server no matter internal or external.

Descriptive details of Assignment:

General Application Scenario

This Aston Events website will be used by Aston students to promote the events organised within the university. Every student can view the events on the website and show interest to an event. A student could also register and become an event organiser who will be able to publish an event on the website.

Database

You need to design your own database to store the event organiser and event information with proper relations and constraints. In general,

- An organiser should have a name and contact information (e.g. email, phone, etc.)
- An event should include the event category, name, datetime, description, organiser, place, picture, interest ranking and other information you think proper.
- Events are classified into three categories: sport (e.g. football, swimming, cricket etc.), culture (e.g. Hindu, Jewish, Chinese etc.) and others (music, photography etc.).
- One organiser can organise multiple events but one event only has one organiser.

You should populate the tables (manually or automatically) filling these tables with some data entries for testing purpose.

Functional Requirements

Students can:

S1. List the basic event information (name, description, time) for all events
S2. List the basic event information by one of the three catalogues.
S3. List the basic event information ordered by the interest ranking.
S4. Click an event to view more details of the event (basic info + picture, organiser contact, venue etc.) and showing your interest to this event (e.g. by clicking a button) which should increase the interest ranking by one.
S5. Register to become an organiser.

Event organisers can:

E1. Login/out the system.
E2. Add a new event to the system.
E3. List all events organised by you (the current organiser).
E4. Update an event organised by you (the current organiser).

Interface design

The user interface must be easy and convenient to use. E.g., on each page, it should have links pointing to the main page or related pages; the page should be readable with appropriate text font, size, colour and background colour. The webpage should be clean and tidy. The names of the links should be descriptive; the output and information should be in adequate descriptive text and neat, clear format. You could use CSS and relevant templates although no mark will be given to such interface design.

Security

Security is important in all web applications. Some necessary security measures are required in your coursework development. For example:

- Authentication/Authorisation
- Form validation
- Handle injections (SQL/HTML)
- Hash password
- Restrict file upload to only images
- Cross-Site Request Forgery
- ……

Stretchers

This is a list of things that will help you get the maximum number of marks. For example,

- Allow for the displaying tables to be sorted based on headings. (e.g. by date, name).
- Allow an event to have multiple pictures.
- Allow a student to send an email to an event organiser.
- Allow an organiser to link one event to another relevant event and/or another web sources.
- Other extra relevant functions and features.

Project Report

You must submit a project report (PDF format) which should be no longer than 3 pages and be written in clear English. The report MUST include the following items in the order of:

- Basic information:
  - Your name and student ID
  - A hyperlink to the entry page of your system on a host server.
  - One organiser's username and password.
  - If applicable, an open GitHub (or to others) web link for your source code.
- Brief description of the key technologies and structure of your system.
- List the required functions you have implemented and the main corresponding source file(s) so examiners could find them when needed.
- List the security features you have used and point out the main corresponding source file(s) so examiners could find them when needed.
- List the stretchers you have implemented and point out the main corresponding source file(s) so examiners could find them when needed.
- List your database schema specifying your tables, the key table structures and relations/constraints you have setup (could use an ER diagram).
- Other things which need the examiner's attention when running your system should also be described if applicable.
- You should avoid including the screenshots of your web site in the report.
- Missing the required information and unclear description in the report could lead to some mark deduction.

Recommended reading/ online sources:

- The guidance documents about deployment have been published on the coursework folder on Blackboard.
- FAQ can also be found on the coursework folder on Blackboard.

Key Dates:

21/05/2021	Coursework set
01/06/2021	University host server and guidance documents about deployment
26/07/2021	Submission date
23/08/2021	Expected feedback return date

Submission Details:

You need to submit your work on the Blackboard as well as deploy your web application to a host server before **23:59 26th July 2021**.

- Submit your coursework report in PDF format on Blackboard. If you do not submit your report on Blackboard, you work will not be marked. If you do not have the required information in the report, your mark could be deducted by up to 40%.
- Submit a separate ZIP file containing the main source code and database on Blackboard. You need to zip your main source code and a DB file (e.g. a SQL file) together into one ZIP file. Alternately, you could list a GitHub (or to others) link in your report which can be checked by examiners.
- Deploy your application on one host server (either the internal or external ones). The guidance documents about deployment have been published on Blackboard. If you fail to put your website/database on a host server, your work will not be marked.
- Your web application will be checked using the **Google Chrome** browser. You need to make your system work in Chrome.
- Standard lateness penalties will apply for late submission based on the University regulations.
- Your submission must be your own effort. Copying and sharing work is forbidden. If you are found to have copied or shared your submission your mark may be reduced or set to zero (or worse).

Marking Rubric:

The marking scheme will generally follow:

- Functions for student users – 26%
- Functions for event organiser – 22%
- Database creation and operations – 10%
- Stretchers – 12% (3 marks for each stretcher)
- Security –10% (2 marks for each security feature)
- Report – clear and well written report including all the required information – 10%
- Interface – friendly/easy-use user interface – 5%
- Good coding practise – 5%