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http://180192779.cs2410-web01pvm.aston.ac.uk/u_180192779_db/AstonEventsHtml.html

Project Report

For this project, I have created an Aston Events website which students can use to sign up to various Aston Events. This website displays descriptions and the details of those events. The students can "like" the event and after they sign up, their details are sent and stored on a database.

I started with the main home page for this website (named AstonEventsHtml.html). It was given a title of "Aston Events", which displays as the name of the tab. I decided to use Bootstrap for the format of the page, as this gives you an easy to use layout which allows you to place objects in different sections of the page. Using this I placed the main title "ASTON EVENTS", styled with the h1 tag, in the centre of the page with the Aston University logo in the top left corner, keeping the style in line with the real Aston University website. I used a separate CSS page (named AstonEventsCSS.css) to style everything on the website. Inline CSS was used sparingly, to sections which only needed one style property changed, or were part of a class, but needed to be a little different. Using CSS, the title was made bold and written with the "Helvetica" font. A subheading was also added to provide a very brief description of what the website was for.

Under this I added a section that provides a little more detail on the different types of events available. To add a little bit of colour to the website, the background for this section was made into a dark to light purple gradient, again keeping in line with the Aston University website.

A dropdown menu was added underneath this, with labels to display all of the events available under the different types. Users can use this dropdown menu to select an event and get more information on it. They can look through the details of different events and the details of the previous events they were looking at disappear. This was done with the usage of a JavaScript page (named CS1IADjavascript.js). The display style of each section was set to "none" by default. Using a JavaScript method, whenever a user selects a section, the display style of that section is set to "block" and the rest are set to "none". This ensures that if a user selects multiple events, only the details of one of them is displayed at a time. These sections showed a brief description of the event, followed by date and time, and some pictures below that. A button is displayed below these photos which takes you to a page where you can view additional info and sign up to the event. The style of this button is kept in line with the Aston University website also, with it being a box with a purple border, white background and black text as default and changing to a box with a purple background and white text when you hover over the button. CSS was used to achieve this.

When you click this button, you are taken to a page labelled "Aston *your chosen event* Event" (named *event*EventForm.html). I created individual pages for the football event, the art event and the live music event. The others contain the same data as the football event, except for the title. Here you see the same header as the main page, with the Aston

University logo, “ASTON EVENTS” title and the subheading. Under this you have a section, with the text “Sign up to the event below” in white on top of the same gradient background as the main page. There is a back to home link which takes them to the main page in case they wish to choose a different event.
The event they have chosen is then displayed in the centre in large text, using the h4 tag to style this. Under this, there is a more thorough description of the event and what students who sign up can expect on the day. There is then a section with a large photo of supposedly the previous years event, next to some further details, including the date and time, the venue and the organiser, as well as the organisers contact information. The titles were made bold and the information was left normal, again styled using CSS. In this section, you can also see a like button, which users can use to show that they like an event. This is styled in the same way as the button on the main page (which takes you to the pages with further details). By default, it is a box with a purple border, white background and black text. When you hover over the button, it changes to a purple background with white text and when you click it, the text changes from “Like” to “Liked!”.

This is followed by the form that students can use to register onto the event. I used the HTML form element to create the form. All the different inputs were given labels to make identifying what goes in which section easier. First name(s), Surname, Student ID number, Email Address and Phone number are the sections that must be filled out. There is also a select tag displaying which event they have chosen. This is just for them to be able to confirm they are registering onto the correct event and can’t be changed from that specific page. The various inputs were also given types such as text, number, email and tel. The email is set to only accept a specific pattern which is emails ending in “@aston.ac.uk” only. There is a custom message which displays if an incorrect email is entered, which gives better information on which type of email you should use. Bootstrap was used to lay out the form in an appropriate manner. This works the same for every event page.

phpMyAdmin was used to create the MySQL database and table. I first created a new database (called coursework) and a new table (called StudentDetails). This was then given columns to store the different details. The first column is “id”, of type integer, which stores the position of the students’ details so it can easily be called upon later, if it needs to be modified. This auto increments so every student will have a different id. The next columns are the “FirstName” and “Surname”, again type variable character, which store the names of the students. The “StudentID” column, of type big interger, stores the Student IDs. The “Email” column, type variable character, stores the Aston University emails of the students, and the “PhoneNumber” stores the phone numbers of the students. This “PhoneNumber” column is given type variable character, not integer, as storing it as an integer removes the preceding zeros. I also created a second table to store the events students were registering onto called “RegisteredEvent”. Two separate tables were created to adhere to 2nd normal form.

After students fill in their details and submit them, this information is then sent over to a MySQL database through a PHP page (named SignUpFormPHP.php) using a “post” method. I used an object-oriented style for my PHP code. This PHP page connects to the localhost server and the coursework database, which is where I am storing the students’ details. An if statement is then run to make sure that it is connected, and then either ends running the

code there if it is not connected or proceeds with running the rest of the code if it is connected. It then gets the inputs of all the fields, including which event the student wishes to register to, and makes them variables of similar names so the code is easy to follow. The function “real_escape_string()” is used as it escapes special characters in a string for use in an SQL query. I used the $_REQUEST variable as this is easiest to work with. There is then some code, which performs a check to ensure that the student hasn’t already been registered onto the event, using the “mysqli_num_rows()” function. This prevents duplicates and makes the database 2nd normal form. If a student attempts to register twice for the same event, they will be met with the message “You have already been registered onto this event”. With the inputs taken as PHP variables, some MySQL code is run where it tells the database which table to store the variables into. It also tells the database, which column each variable should go into. If it successfully does this, it prints the message “You have been registered onto the event.”. If there is a problem in doing this, it will print the message “There was a problem with INSERT INTO StudentDetails (RegisteredEvent, FirstName, Surname, StudentID, Email, PhoneNumber) VALUES ('$registeredEvent', '$firstName', '$surname', '$studentID', '$email', '$phoneNumber'). Please try again.”, following by some more information on what the error is likely to be.