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| **Cookies, Passwords, HTML, CSS etc** | | | | |
| **Year** | **No.** | **Question** | **Marks** | **Answers** |
| 18/19  (Main) | 6 | The local College for Fashion Design wants you to develop a web site for a fashion design contest. From an initial meeting with the College you learn the following:  The contest will be run in two stages. In the first stage students should be able to upload pictures and videos of their creations. Parents and other family members should be able to create an account where they can login, leave comments and vote for their favourite design. In a second stage the ten best designs from the first stage are presented on the World Wide Web to a general audience who also then votes the designs up or down (no login required). For the College it is important that the contest seamlessly integrates with the existing web sites in terms of ‘look and feel’. As the contest should also serve to recruit new students it is important to track where votes are coming from and what other parts of the College’s web site are visited by the same person.   1. In this scenario, discuss in detail the role that html [4 marks], CSS [4 marks], JavaScript [6 marks] and php [6 marks] may play. 2. With reference to the scenario above, discuss in detail how cookies [10 marks], IP addresses [5 marks] and passwords [5 marks] could be used to establish online identity. | 40 |  |
| 18/19  (SEM2) | 6 | A local furniture shop wishes to host a competition ‘my home office’ to promote their new range of desktops. Assume that you are a web developer and from an initial meeting with the owner of the shop you receive the following information: visitors of the furniture shop should register on the web site and upload pictures of their home office. The pictures will be presented as an online gallery in the format of a slide show and the public will vote online for the most functional design. It is important that the web site has a similar ‘look and feel’ than the other web sites of the furniture shop. The competition should also generate further revenue via targeted advertising. In addition, you are told that only people living locally should be allowed to participate.   1. In this scenario explain how html [4 marks], CSS [4 marks], JavaScript [6 marks] and php [6 marks] help to implement the web site. 2. With reference to the scenario above, critically discuss in detail how cookies [10 marks], IP addresses [6 marks] and passwords [4 marks] could be used to establish online identity. | 40 | Q6a:  **HTML**  The HTML is used for creating the front-end of the application which is a graphical view of the web site and how user see it and feel it. As mentioed above, to create register page, to upload pictures and to present as gallery the HTML will be used.  **CSS**  The use of CSS is to manage the layouts, colors and fonts in the website. In the above scenerio CSS can be used for arrange photo gallery, change padding, layout the images and manage font color, styles and font family.  **JavaScript**  JavaScript is a a scripting language that enables to create dynamically controll media, animate images etc., in this scenario JavaScript is uses for create the slide show and other dynamic changes such as make this furniture site responsive and validate the registery. Whe registration can be done using forms which is provided by the JavaScript and validate the user inputs along with database.  **PHP**  PHP is a server scripting language which is used for crate Static or Dynamic web sites. Handle the voting system, store the data in the database, retrieve the data from the database and handle the back-end of the application can be done by the use of PHP and also through the PHP this site can be host in the webserver.  Q6b:  **Cookies**  When visiting web sites there are messages that web servers pass to the web browser. Those messages called Cookies and main purpose of this cookies is to identify users and save login information. In above scenario when enter a web application using cookies, the user has to provide user name, email address and may be interests. This information packed into cookies and pass it to the browser to store it for later use. Next time when login into same web application the browser sends those cookies to the web server and present this information with customized web pages.  **IP Address**  Internet Protocol Address (IP Address) is a label assigned for web sites. When the domain name typed into browser address bar, it communicates with the DNS system to find the location of the server where the website is hosted. The correct location will be identified via the IP Address.  **Passwords**  Since the above web application contains user accounts, pictures, and votes, it should be a secure site to avoid unauthorised access. Provide the password along with username will ensure the security of the website as well as user’s privacy. |
| 17/18  (Main) | 5 | The local council asks you to develop a web site for the contest ‘My Beautiful Garden Shed’. From an initial meeting with the council you learn the following: residents are invited to register on the web site and upload pictures and descriptions of their sheds; the pictures will be presented as an online gallery and the public will vote online for the most beautiful garden shed; the winner’s garden will be featured in the local newspaper and the web site will then eventually have a slideshow of the ten most beautiful garden sheds; it is also important for the council that the web site has a ‘look and feel’, similar to other web sites of the council (use of the same fonts and colours etc); finally, some revenue should be generated via targeted advertising.   1. In this scenario discuss the role that html [4 marks], css [4 marks], javascript [6 marks] and php [6 marks] may play. 2. With reference to the scenario above, discuss in detail how cookies [10 marks], IP addresses [5 marks] and passwords [5 marks] could be used to establish online identity. | 40 |  |
| 17/18  (SEM2) | 5 | Chairford University wants you to develop a website for an essay writing contest. From an initial meeting with the University you learn the following: staff and students can register on the web site and upload an essay of up to 1500 words about why studying at Chairford University is fun; essays that are longer than 1500 words should be automatically rejected by the system. It is important for the University that the web site of the contest has the same ‘look and feel’ as the other web sites of the University. When all essays are uploaded the public can read these essays online and vote for the best one. The winner’s essay will then feature on the main University website. As the contest should also serve to recruit new students it is important to track where votes are coming from and what other parts of the University’s web site are visited by the same person.  a) In this scenario discuss the role that html [4 marks], css [4 marks], javascript [6 marks] and php [6 marks] may play.  b) With reference to the scenario above, discuss in detail how cookies [10 marks], IP addresses [5 marks] and passwords [5 marks] could be used to establish online identity. | 40 |  |
| 16/17 | 5 | When accessing the website http://www.ox.ac.uk/ for the first time a message shows “We use cookies to help give you the best experience on our website. By continuing without changing your cookie settings, we assume you agree to this. Please read our cookie policy to find out more.” (Figure 1) Explain what ‘cookies’ are [10 marks] and critically discuss what advantage a University might have by using cookies on their web site. [10 marks] | 20 | When visiting websites there are messages that web servers pass to the web browser. Those messages called Cookies and main purpose of this cookies is to identify users and save login information such as user name, email address and password remember option. This information packed into cookies, and pass it to the browser to store it for later use. Next time when login into same web application the browser sends those cookies to the web server and present this information with customized web pages.  In above scenario when enter a web application using cookies, the user has to provide user name, email address and may be other information. For above scenario, Persistence is a one of the best advantages because when the cookie is set on the client’s browser, it will persist for days, months and years. Therefore, save user information, visit information, and keep track of these information for every time is easy. Since that information stored in user’s hard disk, if the university server crashes, they are still obtainable. The other advantage of using cookies in above site is Transparent. Cookies can work transparently without user’s awareness and cookies are lighten. |
| 16/17 | 3 | You are asked to develop a web site for a club of cat lovers. Users of this web site can register and then search the club’s archive of cute pictures of cats.  In this scenario discuss the role that HTML [4 marks], JavaScript [8 marks] and PHP [8 marks] may play. | 20 | HTML  The HTML is used for create the front-end of the application which is graphicle view of the web site and how user see it and feel it. As mentioed above, to create register page, to manage cat’s pictures the HTML will be used.  JavaScript  JavaScript is a a scripting language that enables to create dynamically controll media, animate images etc., in this scenario JavaScript is uses for create the slide show and other dynamic changes such as sreach function and validate the registery. Whe registration can be done using forms which is provided by the JavaScript and validate the user inputs along with database.  PHP  PHP is a server scripting language which is used for crate Static or Dynamic web sites. Handle the voting system, store the data in the database, retrieve the data from the database and handle the back-end of the application can be done by the use of PHP and also through the PHP this site can be host in the webserver. |
| 16/17 | 3 | You are asked to develop a web site for a news agency. Customers can register and then search the agency’s news archive.  In this scenario discuss the role that HTML [4 marks], JavaScript [8 marks] and PHP [8 marks] may play. | 20 |  |
| 14/15 | 25 | A typical three-tier distributed software architecture consists of client, server and database.  a) Discuss in detail how you would use  i. html [7 marks],  ii. javascript [8 marks]  iii. php [8 marks]  to implement contents and software on this three-tier architecture.  b) Suggest an alternative to php. [2 marks]. |  |  |
| 15/16 | 3 | You are asked to develop a web site for a local grocery store where customers can register and order vegetables online. There will be a database of customers’ purchases. In this scenario discuss the role that html [6 marks], javascript [8 marks] and php [8 marks] may play. What would be an alternative to php? [3 marks] | 25 |  |
| 14/15 | 3 | A book seller wants you to set up a web site so as to sell her stock online. Returning customers will be greeted with a personalized welcome message and they should be able to share their reading experience with other customers. a) Discuss the role of  i. cookies [5 marks]  ii. IP addresses [5 marks]  iii. passwords [5 marks]  to assign state and virtual identity in client/server applications.  c) Based on this discussion provide specific advice to your client, the bookseller, how cookies, IP addresses and passwords should be used for their web site to establish the identity of her customers. [10 marks] | 25 |  |
| 13/14 | 3 | When visiting the website http://breo.beds.ac.uk for the first time the site will ask you to agree to accept cookies from this site. With reference to the example of http://breo.beds.ac.uk describe what cookies are (7 marks) and how they work (9 marks). Then further discuss how web sites that are financed via advertising attempt to increase their revenue using cookies. (9 marks) | 25 |  |
| 13/14 | 4 | Discuss the roles played by html (7 marks), javascript (9 marks) and php (9 marks) when implementing a classical three tier architecture consisting of a user interface, an application server and a database? | 25 |  |
| 13/14  Preston | 3 | Many websites such as breo.beds.ac.uk or google.com use cookies. Describe what cookies are and how they work (7 marks) and then critically discuss the reasons why and for whom cookies are useful. In doing so distinguish between where passwords are used and those where they are not used (9 marks each). |  |  |
| 13/14  Preston | 4 | Booksbymichelle.com is an online book seller whose service is implemented in a classical three tier architecture that includes a web site that the customer can browse and a database that links to the book seller‟s stock management system. Explain the role that html (6 marks), javascript (8 marks) and php (8 marks) may play in this scenario and how these three languages interact with each other. (3 marks) | 25 |  |
| 11/12 | 5 | When browsing the Internet many websites store small pieces of data on the file system of the user, so called ‘cookies’. What is the purpose of these cookies? | 2 | The main purpose of a cookie is to identify users and possibly prepare customized Web pages or to save site login information for you.  <https://www.webopedia.com/DidYouKnow/Internet/all_about_cookies.asp> |