

Criterion A - Planning

Definition of the problem:

My client is David who is doing an application for the Bratislava School Debating Competition (BSDC). He is a passionate programmer and is familiar with programming the front-end of the applications. He asked me to code the back-end of the application and an administrator panel as his part is already enough demanding and time consuming. The application will help the organizers of the competition and ease their work as they will be able to perform many of their responsibilities with using the application on their device instead of performing the work physically. This includes, for instance, informing the contestants about any unexpected changes in the program, providing the contestants important information about their debates instead of printing it out, giving them contact details if they have a problem etc. My client will need to work with a lot of data that will be stored in the database. The back-end part will include communication of the application with the database. This will be mainly required for the contestants' login to the application as well as for sending some tables in the application. The administrator panel should provide the user with the possibility to upload and download chosen files and send a notification.

Rationale

This application is a bespoke software that is designed specifically for the BSDC. There is not a similar free application that could be used for these purposes. The application is important because it should make the flow of the competition easier and increase contestants' awareness in ongoing debates and events in the program.

I decided that the administrator panel will be a webpage coded in HTML with the use of Cascading Style Sheets (CSS) to adjust its design. The functionality of the administrator panel as well as all communication with the MySQL database will be provided by PHP code. It will be possible for the user to upload and download .csv files into and from the database. The reasons for my proposed solution are:

Coding in the mentioned programming languages will be very educational for me, as I do not have any practical experience with any of them and will have the possibility to learn a lot of new things.

The website can be used by device connected to internet. It will be protected by the password and username.

Success criteria

1. The website is clear, easy to understand and use.
2. The website is protected by a username and password.
3. User will be automatically log out of the website after a certain time of inactivity has elapsed.
4. User will be able to choose a .csv file to upload into the database.
5. The website will display time when the file was lastly updated.
6. User will be able to download a .csv file of latest upload from the database.
7. User can send a notification which will be stored in the database.
8. My client's application will be able to communicate with all of the proposed tables that will be stored in the database. The proposed tables will include schedule of the competition, debate schedule, contacts on the referees, information about the contestants and description of the city map.
9. The communication between the database and the application will be always verified by device id.
10. The communication between the database and the application will be only performed if the data stored in the application is not up to date with the data stored in the database.

Word count: 380