CLICKER WEB APPLICATION

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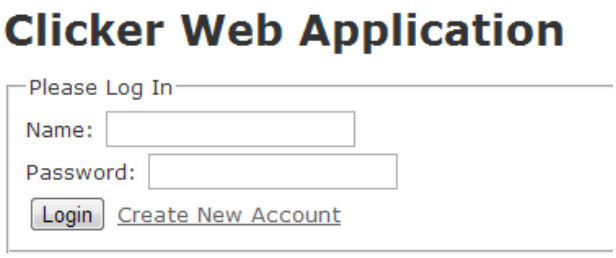
Project Description:

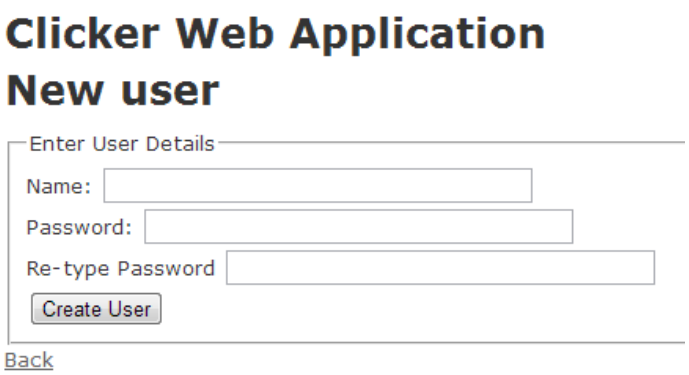
This Web application allows students to respond, via a web service on a cloud, to questions that are posed by an instructor or speaker. The application allows the instructor/speaker to create questions, along with responses, and save them for later use. Later, on demand, the instructor gathers responses to the questions through the application, and presents a summary of the responses. Ideally, these responses could be integrated in real-time into presentation slides but it has not yet been developed. A more advanced version would allow an instructor to supply an image, and the responses could be gathered by tapping at various locations on the image. This application simulates the operation of Clickers used in schools and colleges to get immediate responses and feedback from users. It is similar to an online survey where each question has 4 choices and the user has to make one choice and submit it. Teachers use these systems to informally assess student's knowledge of a topic before lecturing, to see whether students understand a point after it has been explained, and to ask survey or opinion questions. They can also use the application to conduct a surprise quiz during a lecture.

Function of the Application:

To use the app, the user has to login as a user. If the person does not have an account, then they are required to create a new account. The account will be displayed as follows:

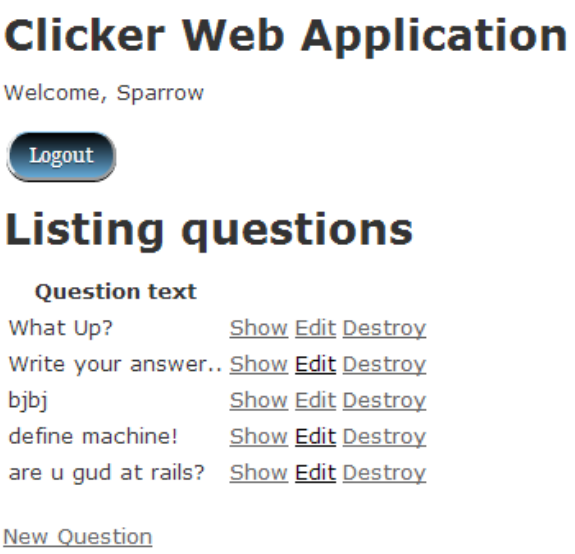


Login Page

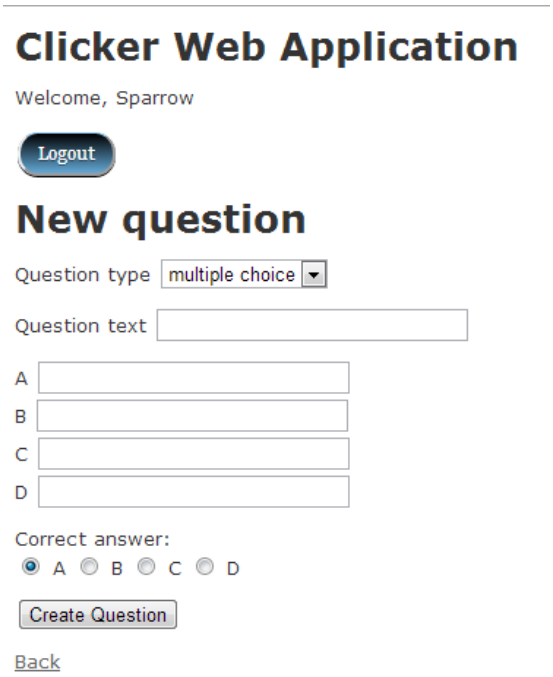


New Account Creation Page

The next step is to have the instructor create the questions. The instructor can login into their account and the following page appears. The following image shows a list of already previously saved questions. Only the instructor has the permission to Edit or Destroy the questions. The page would look a lot different when the students login to their accounts.

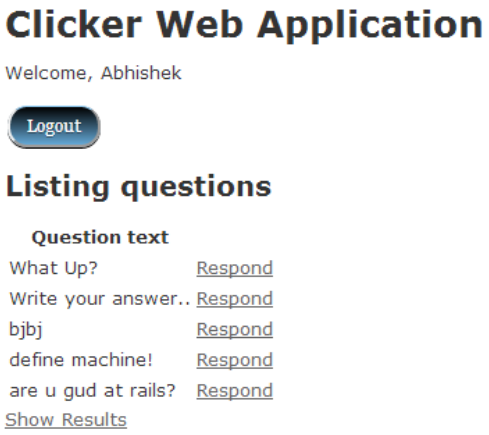


When the professor clicks on the New Question button, the display screen appears as follows:



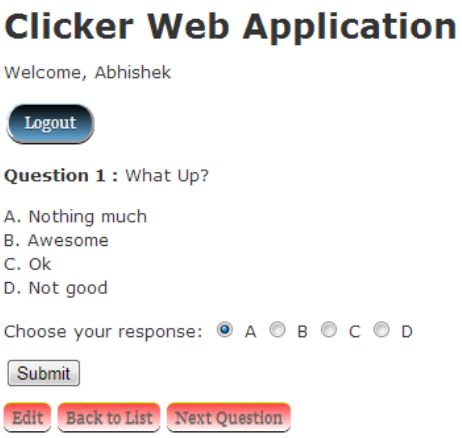
To begin the process of creating the questions, the professor has the option to select between 2 types of questions: multiple choice and Short answer. When the professor selects the multiple choice option, the professor gets the form shown in the picture above. He can select the correct answer from the list of options to display a bar graph that compares the responses of the students with the correct answer. However, the professor does not have this ability if the short answer option is selected.

When a student logs in, the list of questions created by the instructor are displayed to him/her as follows:

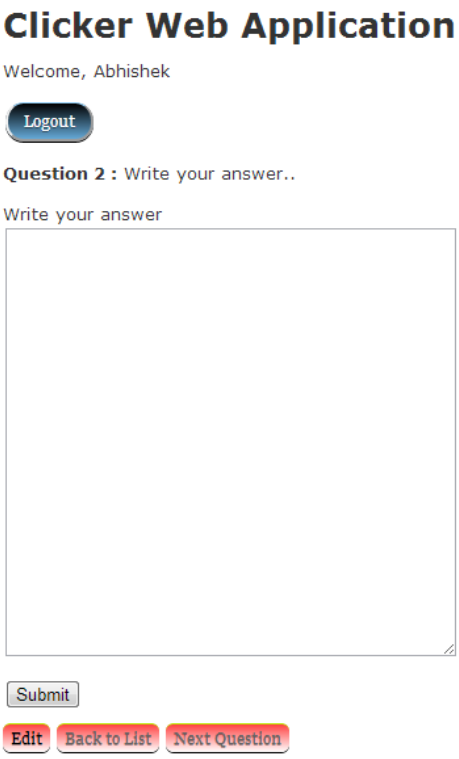


The students only get to respond to the questions and view the status graphs. S/he will not be able to modify any questions in the data. The following page appears when student clicks on the

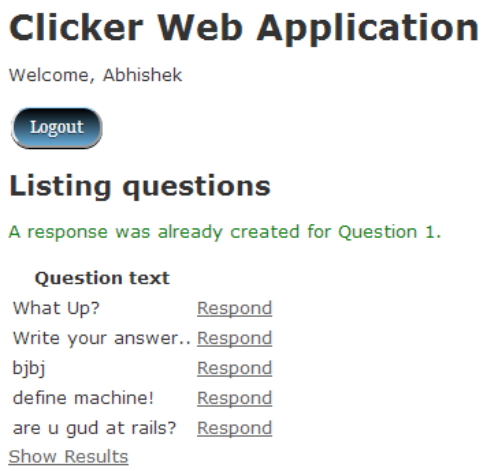
respond button for a question. If the question is a multiple choice, the page looks like the following:



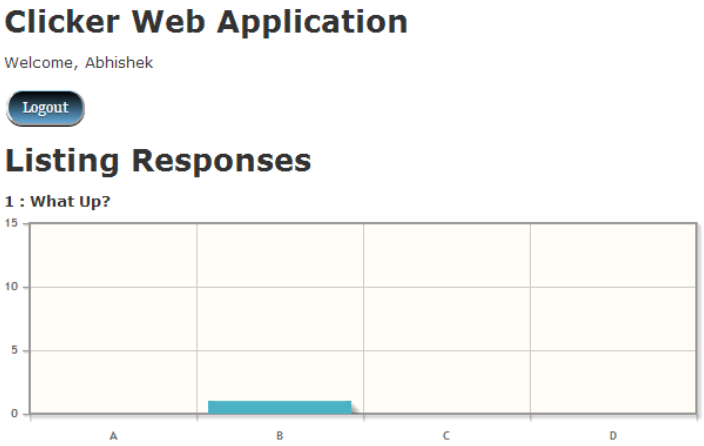
If the question is a short answer type, then the page appears as follows:



The students cannot change their response once they clicked the submit button. Thus if any student tries to modify his answer, then a page will be displayed with a note, as follows:



Next, when the students click on the show results option, a page with the graphs of the responses of all the students will be displayed as follows:



The graphs will be listed in order according to the question number and thus the project is pretty much complete.

Contributions:

Andrew Delgado — Access Restrictions

Matthew Fernandez — Result graphs, amazon cloud url

Andrew Gamulja — Database, Login, questions scaffold

Munand Kotha — Testing

Vincent Pasquale — Layouts

Arun Vangapelli — Original skeleton

Abhishek Yeruva — Cascade style sheets, original skeleton, database, answers scaffold

Resources:

- D. Bruff. Teaching with Classroom Response Systems: Creating Active Learning Environments, Jossey-Bass, San Francisco, CA, 2009.
- Teaching with Clickers. UNM OSET Office, oset.unm.edu/teachingwithclickers.html.
- Top Hat Monocle Classroom Response System. www.tophatmonocle.com.

Links:

https://github.com/abhishekreddy1206/clickerproject.git -commits

https://github.com/clickerguys/clickerprojectfinal.git -final product

https://github.com/munand/clickerproject.git -test cases (rspec, unit and cucumber)