Project Proposal:

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Our project will be an online jeopardy game. In the game, users can pick a question category and a corresponding point value, and by answering the questions, users can accumulate their points. Our game allows multiple users to play simultaneously while not affecting each other's gameplay. This project will at least include three required functionalities, and it will include logic that will execute both front-end in the web browser and back-end in the web server. The project will also have database so that users can access the data, and the data will be updated accordingly. We will also implement and incorporate AJax to our project.

To play the game, each user will be prompted to register for an account (or login if already have an account), so in the backend a database will store all the user's information. The database will also store the questions. Whenever a user choose a question category and a point value(front-end), a corresponding question would be picked from the database(back-end) and presented to the user at the front-end. Whenever the users answer correctly, their score will be updated at back-end accordingly.

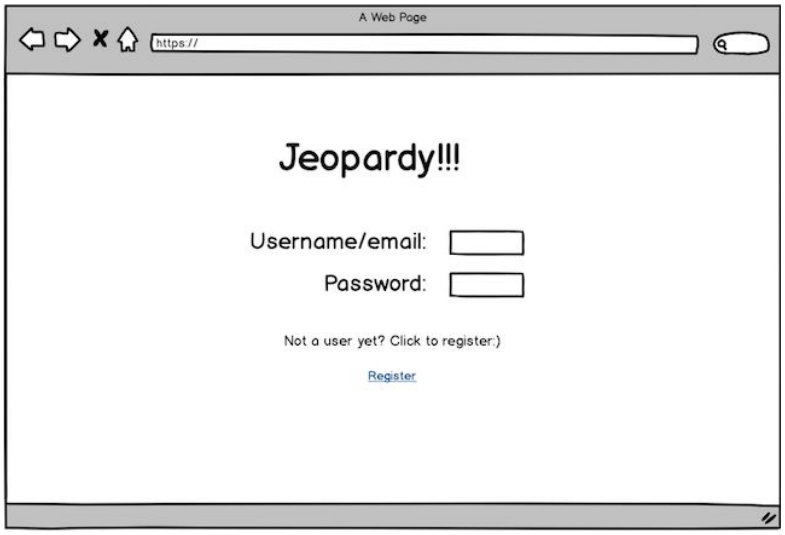
The current framework of our jeopardy game will look like this: Initially, users will be provided with a screen full of various question categories (e.g. Sports, History, Games, Politics...) and users will be prompted to select one of them. This will be our first functionality/scenario. After choosing the question category, users will then see the "question grid". Within each block, there will be a question of the chosen category and of some certain value (e.g. 20, 50, 100 pts). All questions of the same value will be classified under the same column. Upon shown this screen, users will then be able to choose their desired question, which leads them to our second functionality/scenario -- answering the question. Now, the game will provide a pop-up window displaying the question, in the form of multiple choice. Users will be prompted to select one answer they think that is correct. If users make the correct guess, points will be added to users' total score accordingly; if not, the game will end and users will go to a 'You Lose' page and their final score will be displayed on the screen. Our third functionality is that user can check their score histories by clicking on their profile. The scores will be listed from the highest to the lowest. Other functionalities/scenario will also be added based on needs.

We will also implement and incorporate AJax to our project to handle multiple users accessing our game at the same time, so that one person's activity would not affect the other.

For example, while one person may be checking their score history, the other person is playing the game.

User Interface Design:

1) The Login Page:



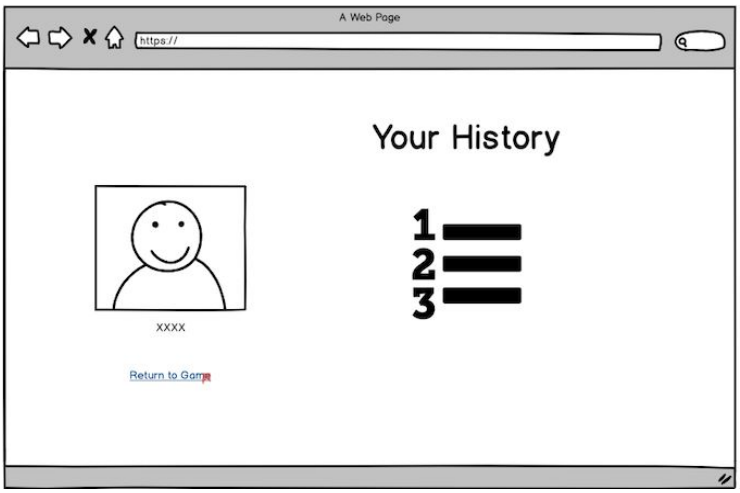
In the Login page, the users are prompted to login using username or email. If they are not registered users yet, they can click on the ‘register’ button to register.

2) The Main Page (for category selection):

After users logged in, they then enter the main page, which allows them to choose which category of questions do they want to play. By clicking on the category, they can then enter to that specific page to play the jeopardy game. We want to make each selection an oval-shaped button. It increases the usability by letting users know where to click on (avoid user errors) and

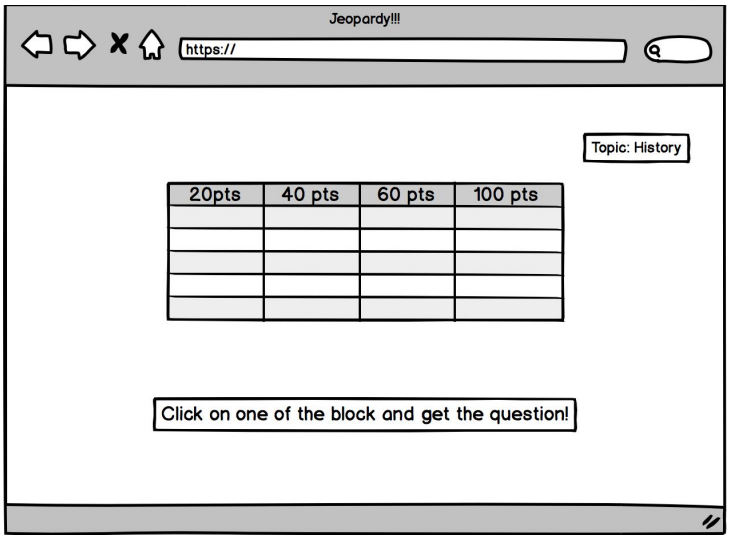
improving users' subject satisfaction. After users clicking on the category selection button, they will then enter the game page. Users can also see their profile picture appear on the upper right corner. By clicking on the picture, they can enter the user's score history page to view their score histories.

3) User's Score History:



In the user's score history page, the user can see their profile picture appear on the left-hand side. On the right-hand side, they can see their score histories for playing the jeopardy game, ranking from the highest score to the lowest. There's also a link down below the profile picture. By clicking on that link, users can return back to the main page to keep playing the game. This increases the usability by letting users know how to return to the main page (avoid user errors).

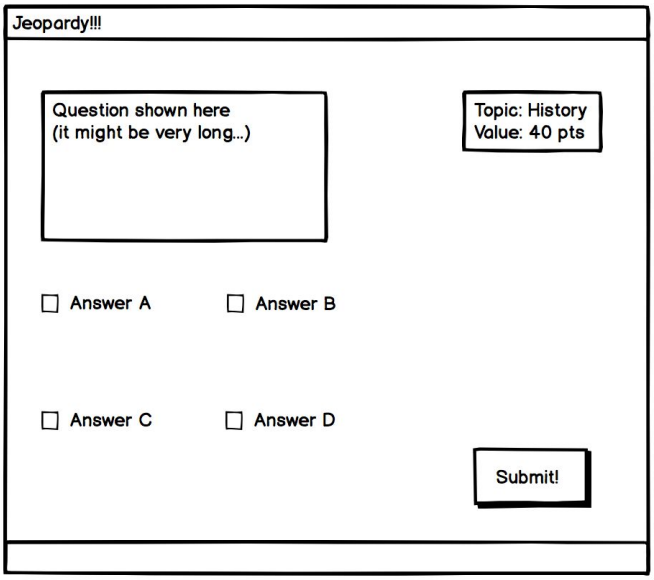
4) Game page:



In the game page, there is a table with grids. Each column represents questions with a specific amount of points that users can earn. There is a notice below the table stating 'Click on one of the block and get the question!', so that users know what to do with the game, which increases

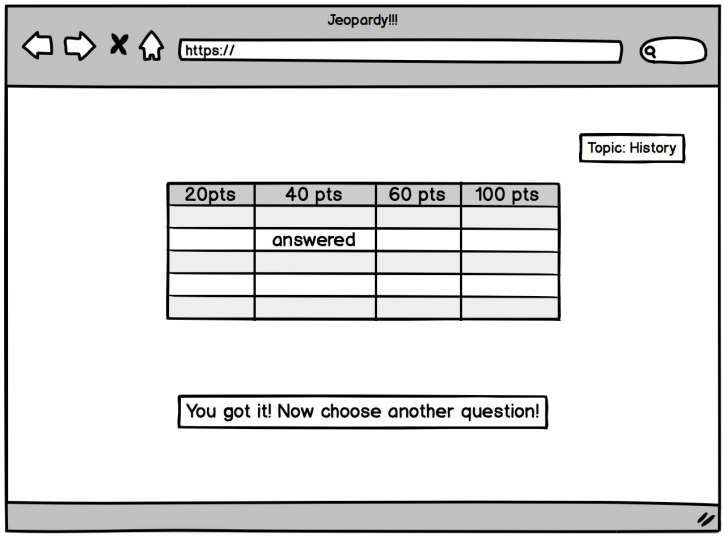
the usability by avoiding user errors. After user clicking on one of the block, a question window will pop up. On the top right-hand side, users can see the category of questions that they are playing for this round.

5) The Question Window:



After choosing the question(block), user will be provided with a pop-up window which contains the selected question. Text describing the question and 4 possible answers will be displayed, while the topic related to and value of this question is shown on top-right corner. The “submit!” button will be available after user selects the answer. This design is fast to learn and help to avoid user errors.

6) The Game Page (After Answering a Question):



After submitted the answer, user will be led to 2 possible pages. If the answer was correct, user will go back to the previous game page, with the already answered questions being covered

with text “answered” and unable to be answered again. This improve the usability by avoiding user errors (selecting the question that has already been answered).

7) The ‘You Lose’ Page:

If answer is incorrect, user will be led to the “You Lose” Page. This page will show “You Lose :(” and the user’s total score for this round of game. Below texts there is also a link “go back to the game”. If clicked, the link will lead user back to the main page.