**Design of each page**

1. **Welcome page:** This is the home page for the website. This page is public page and hence can be accessed by anyone. It provides the description of the game and the rules to be followed in order to play the game.

The page will also consist of a registration and a login button for users to register/login respectively to play the game.

1. **User Dash Board:** This page is displayed to the user once the user logs in. It displays the Username, number of games played, highest score of the user in the game, highest math score and the position of the user in the overall game ranking.

This page will also consist of 5 buttons:

1. Start Regular connect four game – the user will be prompted to choose the color
2. Start math connect regular four game– the user will be prompted to choose the color
3. Practice math
4. View math/game statics
5. Log out button

In addition to this, the user dash board will also contain a navigation bar which will let the user navigate to Home | DashBoard | Statistics and a logout button. This navigation bar will be visible to all the pages except the Home page and the log out page.

1. **Regular Connect Four Game:** This page can be accessed only by the registered users. This page displays the necessary grid and the pawns required to play the game. The user will choose a particular cell and click on ‘next’ button to play the next turn. The user can terminate the game by clicking on the ‘terminate’ button which will redirect the user to the dashboard. The user can also restart the game by clicking the ‘restart’ button. This will clear the board, all the details of the present game are removed from the database and a new game is started. If the game is not over and the user clicks on either ‘terminate’ or ‘restart’ button, none of the information of that game will be stored in the database. If the user successfully completes the game, the user will be prompted with the score and win/lose status for the user and will be redirected to the dashboard.
2. **Math Connect Four Game:** This page can be accessed only by the registered users. This page is similar to Regular Connect Four Game. But before every turn, a math question will be prompted and the user cannot proceed until the question has been answered correctly. This page will have a Label which displays the question, a textbox to enter the answer and a submit button to submit the answer. Once the button is clicked, the answer will be checked for validation. If the answer is correct the user will be allowed to play the next turn. Else another math question will be prompted.
3. **Practice Math:** This page can be accessed only by the registered users. This page allows the users to practice math questions which will help them play the Math Connect Four Challenge. This page will have a Label which displays the question, a textbox to enter the answer and a ‘next’ button to submit the answer. The page will also keep track of the math score, which is initialized to zero. When a wrong answer is entered, ‘**wrong answer, please try again’** will be prompted on the screen. The user will be given a second chance to answer the question. If the answer is correct the score is incremented else the correct answer is displayed, the score is not incremented and the next question is displayed to the user.

The page will have a button to terminate math practice. When this button is clicked, the user is redirected to the dashboard.

1. **Math & Game statistics:** This page can be accessed only by the registered users. This allows the users to view all his math and game scores and his overall ranking. The tentative design of this page is as shown below:

**Math Statistics:**

|  |  |
| --- | --- |
| Date | Score |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Overall ranking: 7

**Game statistics:**

|  |  |
| --- | --- |
| Date | Score |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |

Overall ranking: 8