**Online Test Application**

**Writeup**

DESCRIPTION

The Online Test Application system creates an application that enables users to provide online tests, review them, and display the results.

**Requirements:**

* Visual Code as an IDE to develop the whole project.
* Angular client installed in the machine.
* The Structure of the code is written in HTML5.
* The designing part of the HTML handled by Bootstrap5.
* The button and forms functionalities are handled by TypeScript.
* The other functionalities and project structures are handles by the angular.

**Features:**

* The app contains the Header and Footer part for each and every sections.
* The app has a name of Angular Quiz App, which have two pages. The first page is a welcome page where the Gestures and Rules have written, also the name can be taken as input from the user.
* After clicking the Start Quiz button, they will redirect the user to the questions page, where an Angular and Typescript questions will be there.
* Also, the app contains previous button, next button and a refresh button. Previous button and next button will change the questions whereas, the refresh button will restart the quiz again from starting.
* The app also contains, progress bar and timer. The progress bar will increase as per the questions and timer will start every time from 60 sec for each question. The app contains total 9 questions.
* There is 10 points for each and every correct answer and also, -10 negative points for each and every incorrect answer.
* After completion the quiz, a congratulation message with a image will display along with result of the quiz for user. And a button at bottom is there to display the correct answers.

**Working Procedure:**

* Creating an angular app with a name.
* Generate the components for header, welcome, questions and footer.
* Adding the CSS style and JS bungle of Bootstrap5 in the index.html.
* Adding the necessary structure in the component.html of welcome and questions page from the Bootstrap5.
* Adding the routing modules for welcome page and questions component.
* Taking the name as an input from the user and store it by using localStorage.setItem.
* For the timer part, rxjs library from the angular have been used.
* For progress part, progress bar section has been used from the Bootstrap5 and value will change as per the questions by calculating the current question / total question.
* Json of questions have been created of 9 questions and stored in the assets folder of the angular project.
* Created a questions service and getting the questions,json from the assets folder.
* For the timer, next button, previous button, and refresh buttons, the logics have been written in component.ts file of the questions. And, also values are added by using interpolations in the html part of the questions.
* For the colour changing logic in the options for correct and incorrect options, directives have been used.
* And for the last answer list part, Modal have been used from the Bootsratp5.