

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
JNANA SANGAMA, BELAGAVI-590018



A Mini Project Report (Angular JS)
On

“Facts and Quiz Platform using Angular JS”

Submitted in the partial fulfillment of the requirement for the award of

Bachelor of Engineering

in

Information Science and Engineering

Submitted By:

GOWTHAM N (1DT21IS061)
MANAVI H V (1DT21IS085)
NAGAVENI (1DT21IS095)
HRUTHWIK M (1DT21IS068)
POOJA (1DT21IS106)
PRAJWAL T P (1DT21IS113)

Under the Guidance of

Mrs. Ashwini. R

Assistant Professor, Dept. of ISE.



DEPARTMENT OF INFORMATION SCIENCE AND ENGINEERING

Accredited by NBA, New Delhi

DAYANANDA SAGAR ACADEMY OF TECHNOLOGY & MANAGEMENT

Udayapura, Kanakapura Main Road, Opp. Art of Living, Bangalore-82

2023 -2024

DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT

(Affiliated to Visvesvaraya Technological University, Belagavi & Approved by AICTE, New Delhi)

(Accredited by NBA, New Delhi)

Opp. Art of Living, Udayapura, Kanakapura Road, Bangalore- 560082

DEPARTMENT OF INFORMATION SCIENCE & ENGINEERING



Certificate

This is to certify that the Mini-Project on Angular JS entitled **“Facts and Quiz Platform ”** has been successfully carried out by **Gowtham N(1DT21IS061), Manavi H V(1DT21IS085), Nagaveni (1DT21IS095), Hruthwik M(1DT21IS068), Pooja(1DT21IS106), Prajwal T P(1DT21IS113)** bonafide students of **Dayananda Sagar Academy of Technology and Management** in partial fulfilment of the requirement of award of degree in **Information Science and Engineering** of the **Visvesvaraya Technological University, Belagavi** during the year 2023-2024. It is certified that all the corrections/ suggestions indicated for the given assessment have been incorporated in the report. This report has been approved as it satisfies the academic requirements with respect to the internship work.

Mrs. Ashwini R

Assistant Professor,
Dept. of ISE
DSATM, Bangalore.

Dr. Nandini Prasad K S

Dean-Foreign Affairs & HOD,
Dept. of ISE
DSATM, Bangalore.

ACKNOWLEDGEMENT

It gives us immense pleasure to present before you our mini - project report titled as '**Facts and Quiz Platform using Angular js**'. The joy and satisfaction that accompany the successful completion of any task would be incomplete without the mention of those who made it possible. We are glad to express our gratitude towards our prestigious Institute **DAYANANDA SAGAR ACADEMY OF TECHNOLOGY AND MANAGEMENT** for providing us with utmost knowledge, encouragement and the maximum facilities in undertaking this Mini-project.

It is also our privilege to express my gratitude and respect to all those who guided and inspired us in Successful completion of this Mini-project

We also express our deepest gratitude and special thanks to **Dr. Nandini Prasad K.S**, Professor, Dean (Foreign Affairs) and H.O.D, Department of Information Science and Engineering, DSATM for all her guidance and encouragement.

We also sincerely acknowledge the guidance and constant encouragement of our Mini-project guide, **Mrs Ashwini R, Assistant Professor**, Department of Information Science and Engineering, DSATM.

Mini-Project Associates:

GOWTHAM N (1DT21IS061)
MANAVI H V (1DT21IS085)
NAGAVENI(1DT21IS095)
HRUTWIK M (1DT21IS068)
POOJA (1DT21IS106)
PRAJWAL T P(1DT21IS113)

ABSTRACT

In this project, This project aims to develop an interactive facts and quiz platform using AngularJS to provide users with an engaging and educational experience. The platform will offer a diverse range of quizzes covering various topics such as history, science, literature, and pop culture. AngularJS will be employed for its robust framework, allowing for seamless navigation, dynamic content rendering, and real-time feedback. Users will have the flexibility to customize their quiz experience, including selecting difficulty levels and specific topics of interest. Additionally, the platform will incorporate features such as leaderboards, achievements, and social sharing capabilities to enhance user engagement and foster a sense of community. By leveraging AngularJS's capabilities, this project endeavors to create a modern and user-friendly platform for individuals to expand their knowledge through enjoyable quiz experiences.

TABLE OF CONTENTS

Chapter	Chapter Name	Page
1	INTRODUCTION	1-5
2	REQUIREMENTS	6
3	SCRIPT AND OUTPUT	7-10
4	CONCLUSION	11
5	BIBLIOGRAPHY	12

LIST OF FIGURES

SL NO.	FIGURE NO.	FIGURE NAME	PAGE NO.
1	3.1	Main Interface	9
2	3.2	Quiz Page	9
3	3.3	Submitting the Quiz	10
4	3.4	Result Interface	10

CHAPTER 1

INTRODUCTION

1. Background

Introducing our innovative Facts and Quiz Platform, crafted with AngularJS to offer an immersive and engaging experience. Dive into a world of knowledge and excitement as you explore a multitude of fascinating facts across various categories. With AngularJS at the helm, expect seamless navigation, real-time updates, and a user-friendly interface tailored to enhance your learning journey. Whether you're a trivia enthusiast or a curious learner, our platform promises an enriching experience that will challenge, entertain, and inspire you. Get ready to embark on a thrilling adventure of discovery with our Fact Quiz Platform powered by AngularJS.

Quiz application in one form or the other is becoming a general requirement for most of the applications these days. Be it Survey, mock test, preparation, self evaluation, gathering information, actual objective test or exam. This quiz application will help you to get through your need with minimal or no modification.

Our platform is designed to inspire curiosity and encourage continuous learning. We believe that quizzes are not just about testing knowledge but also about sparking interest and encouraging exploration. By providing a user-friendly interface and a diverse range of topics, we aim to cater to learners of all ages and interests.

2 . Problem Definition

In today's digital era, educational platforms play a pivotal role in facilitating learning and knowledge retention. However, there is a distinct lack of engaging and interactive platforms specifically tailored for fact-based quizzes. To address this gap, the project aims to develop a comprehensive web-based fact quiz platform using AngularJS, providing users with an immersive learning experience.

Design and develop a web-based platform that allows users to participate in fact-based quizzes. The platform should be built using AngularJS framework to provide a dynamic and interactive user experience.

Key aspects of the problem include:

1. **Interactive Quizzes:** Engage with fascinating facts and trivia across diverse categories.
2. **User-Friendly Interface:** Navigate seamlessly through the platform with intuitive controls and smooth transitions.
3. **Instant Feedback:** Receive immediate feedback on quiz answers to enhance learning and retention.
4. **Scoring and Progress Tracking:** Track your progress and challenge yourself to improve with each quiz attempt.
5. **Community Engagement:** Share your quiz results, challenge friends, and participate in discussions to foster a sense of community.
6. **Leaderboard:** Implement a leaderboard system to showcase top scorers and encourage healthy competition among users.
7. **Admin Panel:** Create an admin panel to manage quizzes, users, and view analytics such as quiz completion rates and user engagement.
8. **Responsive Design:** Ensure the platform is responsive and works seamlessly across various devices and screen sizes.

3. Motivation

Addressing Educational Needs: In today's fast-paced world, traditional learning methods often struggle to engage modern learners. By creating a fact quiz platform, we aim to provide an alternative and interactive learning experience that caters to diverse learning styles and preferences.

Fostering Curiosity and Exploration: Fact quizzes have the unique ability to pique curiosity and encourage exploration by presenting information in a concise and engaging format. By leveraging AngularJS to build a dynamic platform, we can create an environment that motivates users to delve deeper into various topics and expand their knowledge.

Promoting Lifelong Learning: Lifelong learning is essential for personal growth and professional development. Our platform seeks to promote lifelong learning by offering users a convenient and enjoyable way to acquire new information, stay informed about current events, and broaden their intellectual horizons.

Encouraging Collaboration and Community Engagement: Learning is often a social activity, and our platform aims to foster collaboration and community engagement. By incorporating social features such as leaderboards, user profiles, and sharing options, we can create a sense of camaraderie among users, encourage knowledge sharing, and inspire healthy competition.

4 . Objective

1. **User Authentication:** Implement user authentication to allow users to sign up, log in, and manage their profiles.
2. **Quiz Creation:** Enable users to create quizzes by adding facts/questions, answer choices, and correct answers.
3. **Quiz Taking:** Develop the functionality for users to take quizzes, displaying questions one at a time and allowing them to select answers.
4. **Scoring System:** Implement a scoring system to evaluate users' performance on quizzes, providing instant feedback on correct and incorrect answers.
5. **Leaderboard:** Include a leaderboard to showcase top performers based on quiz scores, motivating users to compete and improve.
6. **Progress Tracking:** Enable users to track their progress by displaying completed quizzes, scores, and any unfinished quizzes.
7. **Categories and Tags:** Allow users to categorize quizzes by topics and add tags for easy navigation and filtering.
8. **social Sharing:** Integrate social sharing functionality to allow users to share their quiz results and achievements on social media platforms.
9. **Responsive Design:** Ensure the platform is responsive and accessible across various devices and screen sizes for a seamless user experience.
10. **Feedback Mechanism:** Implement a feedback mechanism to gather user input and improve the platform's usability and features based on user suggestions.
11. **Admin Panel:** Create an admin panel to manage users, quizzes, and reported content, ensuring the platform's integrity and quality.

5. Scope of the project

- **User Interface (UI):** Designing an intuitive and attractive UI for the quiz platform Implementing responsive design to ensure compatibility across devices.
- **Authentication and User Management:** Integration of authentication mechanisms like email/password, social login, or OAuth. Managing user profiles, including profile pictures, usernames, etc.
- **Quiz Creation and Management:** Building a system for creating quizzes with various types of questions (multiple choice, true/false, etc.). Implementing features like timers, scoring, and difficulty levels for quizzes. Admin panel for managing quizzes, including editing, deleting, or scheduling them.
- **Quiz Taking Experience:** Developing the quiz interface where users can attempt quizzes. Providing feedback on answers (correct/incorrect) in real-time. Handling navigation between questions and submitting answers.
- **Scoring and Leaderboard:** Calculating scores based on correct answers and time taken. Implementing a leaderboard to showcase top performers.
- **Analytics and Reporting:** Tracking user activity, such as quiz attempts, scores, and completion rates.
Generating reports for administrators to analyze quiz performance and user engagement

CHAPTER 2

REQUIREMENTS

The requirements can be broken down into 2 major categories namely hardware and software requirements. The former specifies the minimal hardware facilities expected in a system in which the project has to be run. The latter specifies the essential software needed to build and run the project.

1. Software Requirements

- Technology Implemented : Node.js and Express.js
- Language Used : Javascript , HTML,CSS
- User Interface Design : HTML, CSS, AngularJS
- Web Browser : Google Chrome, IE8 and all above
- Software : HTTP Server

CHAPTER 3

SCRIPT AND OUTPUT

Code:

```
<> index.html > ...
1  <!DOCTYPE html>
2  <html lang="en" ng-app="turtleFacts">
3  <head>
4      <meta charset="UTF-8">
5      <meta name="viewport" content="width=device-width, initial-scale=1">
6      <title>Turtle Facts</title>
7      <!-- Bootstrap css and my own css -->
8      <link rel="stylesheet"
9          href="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/css/bootstrap.min.css"
10         integrity="sha384-1q8mTJOASx8j1Au+a5WDVnPi2lkFfwwEAa8hDDdjZlpLegxhjVME1fgjWPGmkzs7"
11         crossorigin="anonymous">
12      <link rel="stylesheet" href="css/style.css">
13  </head>
14  <body>
15
16      <div class="container">
17          <div class="row">
18              <div class="col-md-12">
19                  <h1>Facts Quiz</h1>
20                  <h3>
21                      Learn about all the turtles below before you decide to take on the
22                      <strong>TURTLE QUIZ</strong>
23                  </h3>
24              </div>
25              <!-- Hook on the controller for this view and specify when to show it using ng-hide -->
26              <div ng-controller="listCtrl as list" ng-hide="list.quizMetrics.quizActive || list.quizMetrics.resultsActive">
27                  <!-- top search bar with start quiz button using bootstrap -->
28                  <form class="form">
29                      <span class="input-group-addon"></span>
30                      <input
31                          type="text"
32                          placeholder="Search..."
33                      >
34                  </form>
35
36                  <script src="https://ajax.googleapis.com/ajax/libs/angularjs/1.5.0-rc.2/angular.min.js"></script>
37                  <script src="https://code.jquery.com/jquery-2.2.0.min.js"></script>
38                  <script src="https://maxcdn.bootstrapcdn.com/bootstrap/3.3.6/js/bootstrap.min.js" integrity="sha384-0mSbJDEHialfmuBBQP6"
39                      ></script>
40
41                  <!-- Our application scripts -->
42                  <script src="js/app.js"></script>
43                  <script src="js/controllers/list.js"></script>
44                  <script src="js/controllers/quiz.js"></script>
45                  <script src="js/controllers/results.js"></script>
46                  <script src="js/factories/quizMetrics.js"></script>
47                  <script src="js/factories/dataservice.js"></script>
48              </div>
49          </div>
50      </div>
51  </body>
52 </html>
```

```
(function(){
  angular
    .module("turtleFacts")
    .factory("quizMetrics", QuizMetrics);
  QuizMetrics.$inject = ['DataService'];
  function QuizMetrics(DataService){
    var quizObj = {
      quizActive: false,
      resultsActive: false,
      correctAnswers: [],
      markQuiz: markQuiz, // markQuiz is a named function below
      numCorrect: 0
    };
    return quizObj;


    function changeState(metric, state){
      if(metric === "quiz"){
        quizObj.quizActive = state;
      }else if(metric === "results"){
        quizObj.resultsActive = state;
      }else{
        return false;
      }
    }
    function markQuiz(){
      quizObj.correctAnswers = DataService.correctAnswers;
      for(var i = 0; i < DataService.quizQuestions.length; i++){
        if(DataService.quizQuestions[i].selected === DataService.correctAnswers[i]){
          DataService.quizQuestions[i].correct = true;
          quizObj.numCorrect++;
        }else{
          DataService.quizQuestions[i].correct = false;
        }
      }
    }
  }
})();
```

Output:

Facts Quiz


Learn about all the turtles below before you decide to take on the **TURTLE QUIZ**

[Start Quiz](#)




Leatherback Turtle
Locations: All tropical and subtropical oceans
Size: Up to 2m, up to 900kg
Average Lifespan: 45 years
Diet: Carnivore

[Learn More](#)




Hawksbill Sea Turtle
Locations: Tropical Coastal areas around the world
Size: Over 1m, 45-68kg
Average Lifespan: 30-50 Years
Diet: Carnivore

[Learn More](#)



Alligator Snapping Turtle
Locations: Along the Atlantic Coast of USA
Size: around 60cm, up to 100kg
Average Lifespan: 20-70 years
Diet: Carnivore

[Learn More](#)



Kemp's Ridley Sea Turtle
Locations: Coastal areas of the North Atlantic
Size: 65cm, up to 45kg
Average Lifespan: Around 50 years
Diet: Omnivore

[Learn More](#)

Fig. 3.1 Main interface

Description: The Main interface consists of Facts and Start quiz

Facts Quiz

Learn about all the turtles below before you decide to take on the **TURTLE QUIZ**

Progress:

?

?

?

?

?

?

?


?

?

?

Legend:

 Answered

 Unanswered

Question:

1. How much can a loggerhead weigh?

Up to 20kg

Up to 115kg

Up to 220kg

Up to 500kg

[Continue](#)

Fig. 3.2 Quiz Page

Description: When the User starts the quiz

Facts Quiz

Learn about all the turtles below before you decide to take on the **TURTLE QUIZ**

Progress:



Legend:



Answered



Unanswered

Question:

Are you sure you want to submit your answers?

Yes

No

Fig. 3.3 Submitting the Quiz

Description: When the user all the answers and Submit the Quiz

Facts Quiz

Learn about all the turtles below before you decide to take on the **TURTLE QUIZ**

Results:



Legend:



Correct



Incorrect

You Scored 2 / 10

20.00%

Questions:

1. How much can a loggerhead weigh?

Up to 20kg

Your Answer

Up to 115kg

Correct Answer

Up to 220kg

Up to 500kg

[Go Back To Facts](#)

Fig. 3.4 Result Interface

Description: Result Interface after Submitting the Quiz

CONCLUSION

In conclusion, developing a fact quiz platform using AngularJS offers a dynamic and responsive user experience, leveraging the framework's robust features for creating interactive web applications. With AngularJS, developers can efficiently handle data binding, routing, and modular development, streamlining the process of designing and deploying a fact-based quiz platform. The platform can provide engaging quizzes, allowing users to test their knowledge across various topics while enjoying a seamless and intuitive interface. Additionally, AngularJS facilitates easy integration with external APIs for sourcing questions and enriching the quiz content. Overall, leveraging AngularJS for a fact quiz platform ensures scalability, performance, and a rich user experience, making it a compelling choice for both developers and users alike.

In summary, building a fact quiz platform using AngularJS offers a blend of flexibility, interactivity, and efficiency. The framework's robust architecture enables developers to create engaging quizzes with ease, while its modular approach simplifies maintenance and scalability. AngularJS's data-binding capabilities ensure seamless updates and real-time interactions, enhancing the overall user experience. Furthermore, its compatibility with external APIs enables the integration of diverse content sources, enriching the quiz offerings. With AngularJS, developers can craft a feature-rich fact quiz platform that captivates users with its dynamic interface and diverse content, making learning and testing knowledge an enjoyable experience.

BIBLIOGRAPHY

WEB REFERENCES:

<https://www.codeproject.com/Articles/860024/Quiz-Application-in-AngularJs>

<https://www.udemy.com/course/creating-a-quiz-with-angularjs/>

<https://vitalflux.com/angularjs-quizapp-framework-github/>