App/Component

<nav class="navbar navbar-dark bg-primary">

    <div class="container-fluid">

        <a class="navbar-brand text-bold" href="#">

            <img src="https://img.icons8.com/color/96/000000/angularjs.png" width="50" alt="logo">

            <span class="text-uppercase">ngular Quiz</span>

        </a>

    </div>

</nav>

App.header.ts

import { ComponentFixture, TestBed } from '@angular/core/testing';

import { HeaderComponent } from './header.component';

describe('HeaderComponent', () *=>* {

*let* component: HeaderComponent;

*let* fixture: ComponentFixture<HeaderComponent>;

  beforeEach(async () *=>* {

    await TestBed.configureTestingModule({

      declarations: [ HeaderComponent ]

    })

    .compileComponents();

  });

  beforeEach(() *=>* {

    fixture = TestBed.createComponent(HeaderComponent);

    component = fixture.componentInstance;

    fixture.detectChanges();

  });

  it('should create', () *=>* {

    expect(component).toBeTruthy();

  });

});

**Question**

<div class="container mt-5">

    <div class="card">

        <div class="d-flex justify-content-between p-3">

            <div class="image">

                <img src="https://img.icons8.com/color/96/000000/angularjs.png" width="90" alt="logo">

            </div>

            <div class="quiz-header">

                <h4 style="font-family: cursive;">Angular & TypeScript Quiz!</h4>

                <span style="font-style: italic;">Welcome {{name}}</span>

            </div>

        </div>

        <ng-container \*ngIf="!isQuizCompleted">

            <div class="d-flex justify-content-around py-3">

                <div class="score">

                    <h5>{{points}} Points</h5>

                </div>

                <div class="question-remain">

                    <span style="font-style: italic;">Question {{currentQuestion+1}} of {{questionList.length}}</span>

                </div>

                <div class="timer">

                    <h5>{{counter}} sec ⏱</h5>

                </div>

            </div>

            <div class="progress mb-3">

                <div class="progress-bar progress-bar-striped bg-success" role="progressbar" [ngStyle]="{'width':progress+'%'}" aria-valuenow="25" aria-valuemin="0" aria-valuemax="100"></div>

            </div>

            <div class="question">

                <div class="card">

                    <h3>{{questionList[currentQuestion]?.questionText}}</h3>

                </div>

            </div>

            <div class="options">

                <ol \*ngFor="*let* option of questionList[currentQuestion]?.options">

                    <li (click)="answer(currentQuestion+1,option)">

                        <div appChangeBg [isCorrect]="option.correct" class="card">

                            {{option.text}}

                        </div>

                    </li>

                </ol>

            </div>

            <div class="d-flex justify-content-between">

                <button [disabled]="currentQuestion===0" class="btn" (click)="previousQuestion()"><i class="fa text-primary fa-chevron-left fa-3x" aria-hidden="true"></i></button>

                <button class="btn" (click)="resetQuiz()"><i class="fa fa-refresh text-primary fa-3x" aria-hidden="true"></i></button>

                <button class="btn" (click)="nextQuestion()"><i class="fa text-primary fa-chevron-right fa-3x" aria-hidden="true"></i></button>

            </div>

        </ng-container>

        <ng-container \*ngIf="isQuizCompleted">

            <div class="row d-flex justify-content-between">

                <img style="width: 50%;" class="img-fluid col-sm-12 mx-auto" src="https://icon-library.com/images/celebration-icon-png/celebration-icon-png-7.jpg" alt="">

                <div class="result text-center col-md-6 col-sm-12">

                    <h3>Congratulations!! <br>You have completed the quiz. <br>Below is your result:</h3>

                    <p>Total Question Attempted : {{questionList.length}} </p>

                    <p>Total Correct Answered : {{correctAnswer}} </p>

                    <p>Total Wrong Answered : {{inCorrectAnswer}} </p>

                    <p>Your Score : {{points}} Points </p>

                </div>

            </div>

        </ng-container>

    </div>

</div>

**Question.ts**

.card {

*max-width*: 800px;

*margin*: 0 auto;

*padding*: 10px;

}

li {

*list-style-type*: none;

    cursor: pointer;

*margin*: 10px 0;

}

li .card:hover {

*border*: 1px solid blue;

}

ol {

*padding*: 0;

}

**Service**

import { Injectable } from '@angular/core';

import {HttpClient} from '@angular/common/http'

@Injectable({

  providedIn: 'root'

})

export *class* QuestionService {

*constructor*(private *http* : HttpClient) { }

  getQuestionJson(){

    return this.http.get<*any*>("assets/questions.json");

  }

}

**Welcome**

<div class="container bg-light py-5">

    <h1 class="display-5 fw-bold">Welocme to Quiz App</h1>

    <p class="col-md-8 fs-4">This quiz will contains total 9 questions. Each Question holds 10 Points</p>

    <h4>Rules:</h4>

    <ol>

        <li>Correct Question gives you 10 points</li>

        <li>Incorrect question gives to -10 points</li>

        <li>You will have 60 sec to answer each question</li>

        <li>Refereshing the page will reset the Quiz</li>

    </ol>

    <h1 style="font-family: cursive;text-align:center">All the best!!</h1>

    <div class="name col-md-4 my-3">

        <label for="">Enter your name:</label>

        <input #name type="text" class="form-control">

    </div>

    <button class="btn btn-primary btn-lg" routerLink="/question" (click)="startQuiz()">Start the Quiz!!</button>

</div>

**Welcome.ts**

import { ComponentFixture, TestBed } from '@angular/core/testing';

import { WelcomeComponent } from './welcome.component';

describe('WelcomeComponent', () *=>* {

*let* component: WelcomeComponent;

*let* fixture: ComponentFixture<WelcomeComponent>;

  beforeEach(async () *=>* {

    await TestBed.configureTestingModule({

      declarations: [ WelcomeComponent ]

    })

    .compileComponents();

  });

  beforeEach(() *=>* {

    fixture = TestBed.createComponent(WelcomeComponent);

    component = fixture.componentInstance;

    fixture.detectChanges();

  });

  it('should create', () *=>* {

    expect(component).toBeTruthy();

  });

});

**Index.html**

<!doctype html>

<html lang="en">

<head>

    <meta charset="utf-8">

    <title>Online Test App</title>

    <base href="/">

    <meta name="viewport" content="width=device-width, initial-scale=1">

    <link rel="icon" type="image/x-icon" href="favicon.ico">

    <link href="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/css/bootstrap.min.css" rel="stylesheet" integrity="sha384-1BmE4kWBq78iYhFldvKuhfTAU6auU8tT94WrHftjDbrCEXSU1oBoqyl2QvZ6jIW3" crossorigin="anonymous">

    <link rel="stylesheet" href="https://cdnjs.cloudflare.com/ajax/libs/font-awesome/4.7.0/css/font-awesome.min.css">

</head>

<body>

    <script src="https://cdn.jsdelivr.net/npm/bootstrap@5.1.3/dist/js/bootstrap.bundle.min.js" integrity="sha384-ka7Sk0Gln4gmtz2MlQnikT1wXgYsOg+OMhuP+IlRH9sENBO0LRn5q+8nbTov4+1p" crossorigin="anonymous"></script>

    <app-root></app-root>

</body>

</html>