**Code:**

**<!doctype html>**

**<html lang="en">**

**<head>**

**<title>Title</title>**

**<!-- Required meta tags -->**

**<meta charset="utf-8">**

**<meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no">**

**<!-- Bootstrap CSS -->**

**<link rel="stylesheet" href="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css" integrity="sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T" crossorigin="anonymous">**

**</head>**

**<body>**

**<!-- Optional JavaScript -->**

**<!-- jQuery first, then Popper.js, then Bootstrap JS -->**

**<script src="https://code.jquery.com/jquery-3.3.1.slim.min.js" integrity="sha384-q8i/X+965DzO0rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo" crossorigin="anonymous"></script>**

**<script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js" integrity="sha384-UO2eT0CpHqdSJQ6hJty5KVphtPhzWj9WO1clHTMGa3JDZwrnQq4sF86dIHNDz0W1" crossorigin="anonymous"></script>**

**<script src="https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js" integrity="sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy6OrQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM" crossorigin="anonymous"></script>**

**<div class="row">**

**<div class="col-12" style="background-color:Tomato; color:white;">**

**<h3 style="text-align: center;" >Online Test Application (PHASE 4)</h3><span><h1 style="font-size: 15px; text-align: right;"> Creator ~Mohammed Mueen</h1>**

**</span>**

**</div>**

**<br>**

**<div class="col-4 text-lg-left">**

**<br>Select Quiz:**

**<select [(ngModel)]="quizName" (change)="loadQuiz(quizName)">**

**<option \*ngFor="let quiz of quizes" [value]="quiz.id">{{quiz.name}}</option>**

**</select>**

**</div>**

**</div>**

**<div id="quiz">**

**<h2 class="text-center font-weight-normal " style=" border:2px solid Tomato; color:#125C13">{{quiz.name}}</h2>**

**<hr />**

**<div style="background-color:#F4E185;">**

**<div \*ngIf="mode=='quiz' && quiz">**

**<div \*ngFor="let question of filteredQuestions;">**

**<br><div class="badge badge-pill badge-dark">Question {{pager.index + 1}} of {{pager.count}}</div>**

**<div \*ngIf="config.duration" class="badge badge-info float-right">Time: {{ellapsedTime}} / {{duration}}</div>**

**<br>**

**<h3 class="font-weight-normal">{{pager.index + 1}}.**

**<span [innerHTML]="question.name"></span>**

**</h3> <br>**

**<div class="row text-left options">**

**<div class="col-6" \*ngFor="let option of question.options">**

**<div class="option">**

**<label class="font-weight-normal" [attr.for]="option.id">**

**<input id="{{option.id}}" type="checkbox" [(ngModel)]="option.selected" (change)="onSelect(question, option);" /> {{option.name}}**

**</label>**

**</div>**

**</div>**

**</div>**

**</div>**

**</div>**

**</div>**

**<hr />**

**<div class="text-center">**

**<button type="button" class="btn btn-link" \*ngIf="config.allowBack" (click)="goTo(0);">First</button>**

**<button class="btn btn-danger" \*ngIf="config.allowBack" (click)="goTo(pager.index - 1);">Prev</button>**

**<button class="btn btn-primary" (click)="goTo(pager.index + 1);">Next</button>**

**<button type="button" class="btn btn-link" \*ngIf="config.allowBack" (click)="goTo(pager.count - 1);">Last</button>**

**<!--<pagination \*ngIf="config.showPager" direction-links="false" total-items="totalItems" items-per-page="itemsPerPage" ng-model="currentPage" ng-change="pageChanged()"></pagination>-->**

**</div>**

**<div class="row text-center" \*ngIf="mode=='review'">**

**<div class="col-4 cursor-pointer" \*ngFor="let question of quiz.questions; let index = index;">**

**<div (click)="goTo(index)" class="p-3 mb-2 {{ isAnswered(question) == 'Answered'? 'bg-info': 'bg-warning' }}">{{index + 1}}. {{ isAnswered(question) }}</div>**

**</div>**

**</div>**

**<div class="result" \*ngIf="mode=='result'">**

**<h2>Quiz Result</h2>**

**<div \*ngFor="let question of quiz.questions; let index = index">**

**<div class="result-question">**

**<h5>{{index + 1}}. {{question.name}}</h5>**

**<div class="row">**

**<div class="col-6" \*ngFor="let Option of question.options">**

**<input id="{{Option.id}}" type="checkbox" disabled="disabled" [(ngModel)]="Option.selected" /> {{Option.name}}**

**</div>**

**</div>**

**<div class="p-1 m-2 alert {{ isCorrect(question) == 'correct'? 'alert-success': 'alert-danger'}}">Your answer is {{isCorrect(question)}}.</div>**

**</div>**

**</div>**

**<h4 class="alert alert-info text-center">You may close this window now.</h4>**

**</div>**

**<hr />**

**<div class="container">**

**<div \*ngIf="mode!='result'">**

**<button type="button" style="border-radius: 8px; "class=" col-4 btn btn-danger"(click)="mode = 'quiz'">Quiz</button>**

**<button type="button" style="border-radius: 8px;"class="col-4 btn btn-success" (click)="mode = 'review'">Review</button>**

**<button class=" col-4 btn btn-info" style="border-radius: 8px;" (click)="onSubmit();">Submit Quiz</button>**

**</div>**

**</div>**

**</div>**

**</body>**

**</html>**

**JSON**

**{**

**"id": 1,**

**"name": "JavaScript Quiz",**

**"description": "JavaScript Quiz (Basic Multiple Choice Questions for JavaScript Developers)",**

**"questions": [**

**{**

**"id": 1010,**

**"name": "Which HTML tag do we use to put the JavaScript?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "<javascript>",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "<script>",**

**"isAnswer": true**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "<js>",**

**"isAnswer": false**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "None of the above",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1011,**

**"name": "Which built-in method calls a function for each element in the array?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "while()",**

**"isAnswer": false**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "loop",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "forEach",**

**"isAnswer": true**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "takeUntil",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1012,**

**"name": "What is the difference between let and var?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "let has local scope",**

**"isAnswer": true**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "Both are same",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "var is new data type",**

**"isAnswer": false**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "let consumes more cpu and ram",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1013,**

**"name": "What is TypeScript?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "A Language based on Javascript",**

**"isAnswer": true**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "script that runs on browser",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "A DataType Collection of Javascript",**

**"isAnswer": false**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "None of the above",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1014,**

**"name": "Which of the following is right syntex for arrow function?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "a -> { return b; }",**

**"isAnswer": false**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "x <= x + y;",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "x <- x + 5;",**

**"isAnswer": false**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "x => x + 5;",**

**"isAnswer": true**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1015,**

**"name": "Which new ES6 syntax helps with formatting output text - mixing variables with string literals, for example.",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "Generator Functions",**

**"isAnswer": false**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "Arrow Functions",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "Template Strings",**

**"isAnswer": true**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "Set Data Structure",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1016,**

**"name": "Which ES6 feature helps in merging of a number of changed properties into an existing object?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "Class syntex",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "Object.assign()",**

**"isAnswer": true**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "map data structure",**

**"isAnswer": false**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "Array.includes(obj);",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1017,**

**"name": "What is the difference between == and === ?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "=== throws syntex error",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "== checks values only, === checks types as well",**

**"isAnswer": true**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "=== is reference type check only",**

**"isAnswer": false**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "Both are same",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1018,**

**"name": "Which of the following is NOT the method of an Array?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": ".map()",**

**"isAnswer": false**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": ".includes()",**

**"isAnswer": false**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": ".subscribe()",**

**"isAnswer": true**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": ".flatMap()",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**},**

**{**

**"id": 1019,**

**"name": "What will be the output of the following code: ['a', 'b', 'c'].fill(7, 1, 2);?",**

**"questionTypeId": 1,**

**"options": [**

**{**

**"id": 1055,**

**"questionId": 1010,**

**"name": "['a', 7, 'c']",**

**"isAnswer": true**

**},**

**{**

**"id": 1056,**

**"questionId": 1010,**

**"name": "['a', 7, 7, 'b', 'c']",**

**"isAnswer": false**

**},**

**{**

**"id": 1057,**

**"questionId": 1010,**

**"name": "['a', 'b', 'c']",**

**"isAnswer": false**

**},**

**{**

**"id": 1058,**

**"questionId": 1010,**

**"name": "['7', 7, 'c']",**

**"isAnswer": false**

**}**

**],**

**"questionType": {**

**"id": 1,**

**"name": "Multiple Choice",**

**"isActive": true**

**}**

**}**

**]**

**}**