

Visual Studio Code Screenshot 1 (Top):

The screenshot shows the Visual Studio Code interface with multiple tabs open. The main editor tab is `blog.component.ts` from the `secondproject` folder. The code is a component template with various CSS styles and logic. Below the editor are several status bars showing build logs and file statistics.

```

blog.component.ts - secondproject - Visual Studio Code
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Build at: 2021-06-04T10:02:42.645Z - Hash: 83869f6a7
30f3ea5d4db - Time: 991ms
✓ Compiled successfully.
✓ Browser application bundle generation complete.

Initial Chunk Files | Names | Size
scripts.js | scripts | 12.26 kB
5 unchanged chunks
Build at: 2021-06-04T10:02:42.645Z - Hash: 83869f6a7
30f3ea5d4db - Time: 436ms
✓ Compiled successfully.
433.30 kB
Build at: 2021-06-04T10:13:16.784Z - Hash: 89d8a7e5
86740maf092 - Time: 972ms
PS D:\projects\Angular Projects\SecondProject\

12:15 PM 04-Jun-21

```

Visual Studio Code Screenshot 2 (Bottom):

This screenshot shows another instance of Visual Studio Code with a different project. The main editor tab is `script-one.js` from the `secondproject` folder. The code is a script containing logic for a timer and an express server setup. Status bars show build logs and file statistics.

```

script-one.js - secondproject - Visual Studio Code
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
Build at: 2021-06-04T10:02:42.645Z - Hash: 83869f6a7
30f3ea5d4db - Time: 991ms
✓ Compiled successfully.
✓ Browser application bundle generation complete.

Initial Chunk Files | Names | Size
scripts.js | scripts | 12.26 kB
5 unchanged chunks
Build at: 2021-06-04T10:02:42.645Z - Hash: 83869f6a7
30f3ea5d4db - Time: 436ms
✓ Compiled successfully.
433.30 kB
Build at: 2021-06-04T10:13:16.784Z - Hash: 89d8a7e5
86740maf092 - Time: 972ms
PS D:\projects\Angular Projects\SecondProject\

12:15 PM 04-Jun-21

```

contact.component.ts - secondproject - Visual Studio Code

src/app/contact/contact.component.ts

```
1 <div class="container_home" style="background: linear-gradient(to top, #fff, #000 50px);>
2   <div class="contact">
3     <h2>Contact</h2>
4     <div class="contact_div" style="margin: 20px; border: 1px solid gray; padding: 10px; font-family: Arial, Helvetica, sans-serif; font-weight: bold;">
5       <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p>
6     </div>
7   </div>
8 </div>
```

src/app/contact/contact.component.html

```
1 <div class="container_home" style="background: linear-gradient(to top, #fff, #000 50px);>
2   <div class="header_start" style="display: flex; justify-content: space-between; align-items: center; margin-bottom: 10px; position: relative; height: 50px; width: 100%;>
3     <div class="header_left" style="flex-grow: 1; position: relative; height: 100%; width: 100%;>
4       <button class="navabar-toggler position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: transparent; border: none; font-size: 2em; color: inherit; z-index: 1;>
5         &#9772;
6       <div class="navabar_toggler" style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: transparent; border: none; font-size: 2em; color: inherit; z-index: 1;>
7         &#9772;
8       </div>
9     </div>
10    <div class="header_right" style="flex-grow: 0; position: relative; height: 100%; width: 100%;>
11      <div class="header_end" style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: transparent; border: none; font-size: 2em; color: inherit; z-index: 1;>
12        &#9772;
13      </div>
14    </div>
15  </div>
16  <div class="container_fluid_start" style="margin-top: 10px; position: relative; height: 100%; width: 100%;>
17    <div class="row" style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: transparent; border: none; font-size: 2em; color: inherit; z-index: 1;>
18      <div class="col" style="position: absolute; top: 0; left: 0; width: 100%; height: 100%; background-color: transparent; border: none; font-size: 2em; color: inherit; z-index: 1;>
19        <p>Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p>
20      </div>
21    </div>
22  </div>
23 </div>
```

src/app/contact/contact.component.css

```
1 .container_home {
2   background: linear-gradient(to top, #fff, #000 50px);
3 }
4 .h2 {
5   color: #fff;
6   margin-left: 35px;
7   font-size: 2.9rem;
8 }
9 .contact {
10   margin: 0px;
11   display: flex;
12   padding-left: 120px;
13   padding-bottom: 60px;
14 }
15 .contact_div {
16   margin: 20px;
17   border: 1px solid gray;
18   padding: 10px;
19   font-family: Arial, Helvetica, sans-serif;
20   font-weight: bold;
21 }
22 
```

src/app/contact/contact.component.specs

```
1 import { ComponentFixture, TestBed } from '@angular/core/testing';
2 import { ContactComponent } from './contact.component';
3 
4 describe('ContactComponent', () => {
5   let component: ContactComponent;
6   let fixture: ComponentFixture;
7 
8   beforeEach(async () => {
9     await TestBed.configureTestingModule({
10       declarations: [ ContactComponent ]
11     })
12     .compileComponents();
13   });
14 
15   beforeEach(() => {
16     fixture = TestBed.createComponent(ContactComponent);
17     component = fixture.componentInstance;
18     fixture.detectChanges();
19   });
20 
21   it('should create', () => {
22     expect(component).toBeTruthy();
23   });
24 })
```

Build at: 2022-06-04T10:00:40Z - Hash: #3009f6d7
30f2ed40fb - Time: 901ms

✓ Compiled successfully.
Browser application bundle generation complete.

Initial Chunks	Names	Size
scripts.js	scripts	12.26 kB

5 unchanged chunks

Build at: 2022-06-04T10:00:40Z - Hash: #3009f6d7
30f2ed40fb - Time: 400ms

✓ Compiled successfully.

433.22 kB
style: 30f2ed40fb.css@b309c73b6d63.css | styles | L [no...]
151.02 kB
polyfills: 67fffc8d1c3cd569f202.js | polyfills | L [no...]
35.96 kB
src/app/contact/contact.module.ts | scripts | L [no...]
2.10 kB
runtime: ab746c13668fb7b57021.js | runtime | L [no...]
1.01 kB

File AuditPlay Local Disk (H)
There is a problem with this drive. Scan the drive and fix it.

433.22 kB
style: 30f2ed40fb.css@b309c73b6d63.css | styles | L [no...]
151.02 kB
polyfills: 67fffc8d1c3cd569f202.js | polyfills | L [no...]
35.96 kB
src/app/contact/contact.module.ts | scripts | L [no...]
2.10 kB
runtime: ab746c13668fb7b57021.js | runtime | L [no...]
1.01 kB

File AuditPlay Local Disk (H)
There is a problem with this drive. Scan the drive and fix it.

433.22 kB
style: 30f2ed40fb.css@b309c73b6d63.css | styles | L [no...]
151.02 kB
polyfills: 67fffc8d1c3cd569f202.js | polyfills | L [no...]
35.96 kB
src/app/contact/contact.module.ts | scripts | L [no...]
2.10 kB
runtime: ab746c13668fb7b57021.js | runtime | L [no...]
1.01 kB

The screenshot shows a Visual Studio Code interface with several tabs open:

- # employees.component.css
- employees.component.html
- employees.component.spec.ts

The code editor displays the following components:

```
src > app > employees > # employees.component.css > .container_home
1 .container_home{
2   background: linear-gradient(to top, white, black 45px);
3 }
4
5   .h2{
6     color: #fff;
7     margin-left: 35px;
8     font-size: 2rem;
9   }
10
11   img{
12     width: 220px;
13     height: 120px;
14     margin-top: 10px;
15   }
16
17
18   label.validation-error {
19     color: #red;
20     margin: 5px;
21   }
22 }
```

```
src > app > employees > employees.component.html > div.container
1 <div class="container_home">
2   <!-- Header Start -->
3   <header class="navbar navbar-dark sticky-top bg-dark py-3" data-bs-target="#sidebarMenu" aria-label="Toggle navigation">
4     <button class="navbar-toggler position-relative" type="button" data-bs-toggle="collapse" data-bs-target="#sidebarMenu" aria-expanded="false" aria-label="Toggle navigation">
5       <span class="navbar-toggler-icon"></span>
6     </button>
7   </header>
8   <!-- Header End -->
9
10  <!-- Container Fluid Start -->
11  <div class="container-fluid">
12    <div class="row">
13      <nav id="sidebarMenu" class="col-3 position-sticky" style="background-color: #f2f2f2; transform: translateZ(0);>
14        <img alt="pic1" style="width: 100%; height: 100%; object-fit: cover;"/>
15        <p>Lorem ipsum, dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
16        <img alt="pic1" style="width: 100%; height: 100%; object-fit: cover;"/>
17    </nav>
18    <div class="col-9 position-sticky" style="background-color: #f2f2f2; transform: translateZ(0);>
19      <img alt="pic1" style="width: 100%; height: 100%; object-fit: cover;"/>
20      <p>Lorem ipsum, dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.</p>
21      <img alt="pic1" style="width: 100%; height: 100%; object-fit: cover;"/>
22    </div>
23  </div>
```

The terminal shows the build process and file sizes:

```
Build at: 2021-05-04T13:02:42.645Z - Hash: 898bf9e6730f2ea5d0b - Time: 981ms
✓ Compiling successfully.
✓ Browser application bundle generation complete.

Initial Check Files | Names | Size
scripts.js | scripts | 12.26 kB

5 unchanged chunks

Build at: 2021-05-04T13:02:49.794Z - Hash: 898bf9e6730f2ea5d0b - Time: 439ms
✓ Compiling successfully.

433.30 kB

Build at: 2021-05-04T13:16.796Z - Hash: 898bf9e6730f2ea5d0b - Time: 972ms
PS D:\projects\Angular\Projects\secondproject\
```

The status bar at the bottom right shows the build was successful at 16.7962.

The screenshot shows a dual-monitor setup. The left monitor displays the Angular application's codebase in Visual Studio Code, including files like dashboard.component.ts, blog.component.html, and onlinetest.component.html. The right monitor displays the build logs for these files, showing compilation details and runtime statistics. Both monitors have an HP logo at the bottom center.

Left Monitor (Angular Application Code):

- File Explorer: dashboard.component.ts, app-routing.module.ts, angular.json, contact.component.html, contact.component.ts, contact.component.specs, contact.components.ts, dashboard, dashboard.component.css, dashboard.component.html, dashboard.component.specs.
- Dashboard Component (dashboard.component.ts):

```
src > app > dashboard > dashboard.component.ts > ...  
1 import { Component, OnInit } from '@angular/core';  
2  
3 @Component({  
4 selector: 'app-dashboard',  
5 templateUrl: './dashboard.component.html'  
6 styleUrls: ['./dashboard.component.css']  
7 })  
8  
9 export class DashboardComponent implements OnInit {  
10 pic1: string = "assets/images/go_wb1_grad.jpg";  
11 pic2: string = "assets/images/download_1.jpg";  
12 pic3: string = "assets/images/download_2.jpg";  
13 pic4: string = "assets/images/download_3.jpg";  
14  
15 constructor() {}  
16  
17 ngOnInit(): void {  
18 }  
19  
20 }  
21  
22 }
```
- Output Terminal:

```
[nodemon] restarting due to changes...  
[nodemon] starting 'node server'  
app is running at port 4000...
```

Right Monitor (Build Logs):

- Dashboard Component (dashboard.component.html):

```
src > app > dashboard > dashboard.component.html > ...  
1 <div class="container_home">  
2 <!-- Header Start -->  
3 <header class="navbar navbar-dark sticky-top bg-dark flex-md-no-wrap p-0 shadow">  
4 <button class="navbar-toggler collapsed" type="button" data-bs-toggle="collapse" data-bs-target="#sidebarMenu" aria-controls="sidebarMenu" aria-expanded="false" aria-label="Toggle navigation">  
5 <span class="navbar-toggler-icon">/</span>  
6 </button>  
7 <!-- Header End -->  
8 <!-- Container Fluid Start -->  
9 <div class="container-fluid">  
10 <div id="sidebarMenu" class="col-12 col-md-2 border-right sidebar collapse" data-bs-collapse="collapsible" data-bs-parent="#sidebarMenu">  
11 <div class="position-sticky">  
12 <img [src]="pic1">  
13 <p> Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor in reprehenderit in voluptate velit esse cillum dolore eu fugiat nulla pariatur. Excepteur sint occaecat cupidatat non proident, sunt in culpa qui officia deserunt mollit anim id est laborum.</p>  
14 <img [src]="pic2"><br/>
```
- Build Log:

```
Build at: 2021-06-04T10:00:42.645Z - Hash: 83009f6a73bf1e54d7b - Time: 993ms  
✓ Compiled successfully.  
✓ Browser application bundle generation complete.
```
- Initial Check Files | Names | Size:

```
scripts.js | scripts | 12.26 kB
```
- 5 unchanged chunks
- Build Log:

```
Build at: 2021-06-04T10:00:48.704Z - Hash: 83009f6a73bf1e54d7b - Time: 436ms  
✓ Compiled successfully.
```
- Build Log:

```
Build at: 2021-06-04T10:13:16.786Z - Hash: 88db7e758676ea0f932 - Time: 9725ms  
scripts.cs70bb05a8e7ff4d8053d.js | scripts | 2.10 kB  
runtime.ab7405136b0f7b1f92b.js | runtime | 1.81 kB
```

The screenshot shows a dual-monitor setup with two instances of Visual Studio Code running side-by-side.

Left Monitor (news-letter Project):

- File Explorer:** Shows files for the 'news-letter' project, including 'news-letter.component.html', 'news-letter.component.ts', 'news-letter.component.spec.ts', 'app-routing.module.ts', 'home.component.html', 'contact.component.html', 'dashboard.component.html', 'online-test.component.html', and 'employees.component.html'.
- Code Editors:** Two editors are open:
 - news-letter.component.html:** Contains template code for a news letter component.
 - news-letter.component.spec.ts:** Contains test cases for the news letter component.
- Terminal:** Shows build logs and application startup messages.

Right Monitor (home Project):

- File Explorer:** Shows files for the 'home' project, including 'home.component.html', 'home.component.ts', 'home.component.spec.ts', 'posts.js', 'about.component.css', and 'dashboard.component.css'.
- Code Editors:** Two editors are open:
 - home.component.html:** Contains template code for a home component.
 - home.component.ts:** Contains component logic.
- Terminal:** Shows build logs and application startup messages.

Common View:

- Status Bar:** Shows the current file path, commit hash, and other system information.
- Bottom Bar:** Includes tabs for 'File', 'Edit', 'Search', 'Run', 'Terminal', and 'Help'.

Screenshot of Visual Studio Code showing multiple tabs open across two windows:

- Top Window:**
 - Left sidebar: Project structure for "secondproject" showing files like angular.json, app-routing.module.ts, app.component.css, etc.
 - Editors: Several code files are open, including app-routing.module.ts, script-one.js, and app-http.service.ts.
 - Bottom status bar: Build output showing successful compilation and file sizes.
- Bottom Window:**
 - Left sidebar: Project structure for "secondproject" showing files like server.js, tsconfig.json, etc.
 - Editors: One code file, server.js, is open.
 - Bottom status bar: Build output showing successful compilation and file sizes.

Screenshot of Visual Studio Code showing the "server.js" editor:

```

server.js - secondproject - Visual Studio Code

const express = require('express');
const path = require('path');
const app = express();

const posts = require('./server/routes/posts');

app.use(express.static(path.join(__dirname, 'dist/secondproject')));

app.use('/posts', posts)

// catch all other routes request and return to the index
app.get('*', (req, res)=>{
  |   res.sendFile(path.join(__dirname, 'dist/secondproject/index.html'))
});

const port = process.env.PORT || 4040;

app.listen(4040, (req,res)=>{

  console.log("app is running at port 4040...");
})
    
```

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** On the left, it shows the project structure under "OPEN EDITORS". The file "angular.json" is currently selected.
- Code Editor:** The main area displays the content of the "angular.json" file for the "secondproject". The file defines an architect configuration with a test builder, karma options, assets, styles, and scripts. It also specifies a default project as "secondproject".
- Bottom Status Bar:** Shows the path "D:\projects\Angular Projects\secondproject", the terminal tab is active, and the status "Ln 106, Col 25".

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer (Left):** Shows the project structure with files like `angular.json`, `app.component.ts`, `background.directive.ts`, etc.
- Code Editor (Center):** Displays the `angular.json` file content. The file defines a production build target and a development build target, both using the "secondproject:build" configuration. It also includes sections for extracting i18n, testing with Karma, and running scripts.
- Bottom Status Bar:** Shows the path `D:\projects\Angular Projects\secondproject` and the status "In 106, Col 25".

The screenshot shows the Visual Studio Code interface with the angular.json file open in the editor. The code defines a project named 'secondproject' with various configurations for assets, styles, scripts, budgets, file replacements, and output hashing.

```
{
  "projects": {
    "secondproject": {
      "architect": {
        "test": {
          "options": {
            "scripts": [
              "src/assets"
            ],
            "styles": [
              "src/styles.css",
              "node_modules/bootstrap/dist/css/bootstrap.min.css"
            ],
            "scripts": [
              "D:/projects/Angular Projects/secondproject/src/assets/Script/script.js"
            ]
          }
        },
        "options": {
          "production": {
            "budgets": [
              {
                "type": "initial",
                "maximumWarning": "500kb",
                "maximumError": "1mb"
              },
              {
                "type": "anyComponentStyle",
                "maximumWarning": "2kb",
                "maximumError": "4kb"
              }
            ],
            "fileReplacements": [
              {
                "replace": "src/environments/environment.ts",
                "with": "src/environments/environment.prod.ts"
              }
            ],
            "outputHashing": "all"
          },
          "development": {
            "buildOptimizer": false,
            "optimization": false
          }
        }
      }
    }
  }
}
```

The screenshot shows the Visual Studio Code interface with the angular.json file open in the editor. The code defines a project named 'secondproject' with various configurations for assets, styles, scripts, budgets, file replacements, and output hashing.

```
{
  "$schema": "./node_modules/@angular/cli/lib/config/schema.json",
  "cli": {
    "analytics": "d5bdfcb1-85d0-426c-87c2-74f6be969be9"
  },
  "version": 1,
  "newProjectRoot": "projects",
  "projects": {
    "secondproject": {
      "projectType": "application",
      "schematics": {
        "@schematics/angular:application": {
          "strict": true
        }
      },
      "root": "",
      "sourceRoot": "src",
      "prefix": "app",
      "architect": {
        "build": {
          "builder": "@angular-devkit/build-angular:browser",
          "options": {
            "outputPath": "dist/secondproject",
            "index": "src/index.html",
            "main": "src/main.ts",
            "polyfills": "src/polyfills.ts",
            "tsconfig": "tsconfig.app.json",
            "assets": [
              "src/favicon.ico",
              "src/assets"
            ],
            "styles": [
              "src/styles.css",
              "node_modules/bootstrap/dist/css/bootstrap.min.css"
            ]
          }
        }
      }
    }
  }
}
```

Screenshot of Visual Studio Code showing the file `onlinetest.component.html`. The code is an Angular component template.

```
onlinetest.component.html
src > app > onlinetest > onlinetest.component.html > div.container_home > div.container-fluid > div.row
  57   </ul>
  58   </div>
  59   <div *ngIf="currentQuiz > 9">
  60     <button class="btn btn-success btn-block" (click)="showResults()">Show Results</button>
  61     <div *ngIf="results">
  62       <p>Correct Answer: {{ correctAnswer }} | Incorrect Answer: {{ incorrectAnswer }}<br />
  63       <!-- <a routerLink="/second-question"><button>Next</button></a> -->
  64     </div>
  65   </div>
  66   </div>
  67   </div>
  68 </div>
  69   <!-- Dashboard Content End -->
  70
  71 </main>
  72 </div>
  73 </div>
  74 <!-- Container Fluid End -->
  75 </div>
```

The code includes logic for displaying results after the last quiz (index 9), showing a success button, and navigating to the next question. It also contains a comment for the final container fluid.

Screenshot of Visual Studio Code showing the file `onlinetest.component.html`. The code is an Angular component template.

```
onlinetest.component.html
src > app > onlinetest > onlinetest.component.html > div.container_home
  41   <!-- Dashboard Content Begin -->
  42   <div class="container p-5">
  43     <div class="row">
  44       <div class="col-sm-8 offset-2">
  45         <div *ngIf="currentQuiz < 10">
  46           <p class="text-center">{{ currentQuiz + 1 }} of {{ quizzes.length }}</p>
  47           <h1>{{ quizzes[currentQuiz].question }}</h1>
  48
  49           <ul class="list-group" *ngFor="let quiz of quizzes[currentQuiz].answers">
  50             <label>
  51               <li class="list-group-item" appBackground [correctAnswer]="quiz.correct">
  52                 <input type="radio" name="options" (change)="onAnswer(quiz.correct)" [disabled]="answerSelected">
  53                 {{ quiz.option }}
  54               </li>
  55             </label>
  56           </ul>
  57
  58         </div>
  59         <div *ngIf="currentQuiz > 9">
  60           <button class="btn btn-success btn-block" (click)="showResults()">Show Results</button>
  61           <div *ngIf="results">
  62             <p>Correct Answer: {{ correctAnswer }} | Incorrect Answer: {{ incorrectAnswer }}<br />
  63             <!-- <a routerLink="/second-question"><button>Next</button></a> -->
  64           </div>
  65         </div>
  66       </div>
  67     </div>
  68   </div>
  69   <!-- Dashboard Content End -->
  70
  71 </main>
  72 </div>
  73 </div>
  74 <!-- Container Fluid End -->
  75 </div>
```

This version of the code is identical to the one above but includes a detailed list group for each quiz answer, allowing users to select options. It also includes a success button and results display for the final quiz.

Selection View Go Run Terminal Help

dist > secondproject > assets > Script > JS script.js > ...

```
script.js - secondproject - Visual Studio Code
```

function readFormData() {
 var formData = {};
 formData["fullName"] = document.getElementById('fullName').value;
 formData["email"] = document.getElementById('email').value;
 formData["salary"] = document.getElementById('salary').value;
 formData["city"] = document.getElementById('city').value;
 return formData;
}

function validate() {
 isValid = true;
 if (document.getElementById('fullName').value == "") {
 isValid = false;
 document.getElementById('fullNameValidationWarning').classList.remove('hide');
 } else {
 if (!document.getElementById('fullNameValidationWarning').classList.contains('hide')) {
 document.getElementById('fullNameValidationWarning').classList.add('hide');
 }
 }
 return isValid;
}

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

D:\projects\Angular-Projects\secondproject>

OPEN EDITORS

dist > secondproject > assets > Script > JS script.js > ...

```
script.js - secondproject - Visual Studio Code
```

function onEdit(row) {
 selectedRow = row.parentElement.parentElement;
 document.getElementById('fullName').value = selectedRow.cells[0].innerHTML;
 document.getElementById('email').value = selectedRow.cells[1].innerHTML;
 document.getElementById('salary').value = selectedRow.cells[2].innerHTML;
 document.getElementById('city').value = selectedRow.cells[3].innerHTML;
}

function updateRecord(formData) {
 selectedRow.cells[0].innerHTML = formData.fullName;
 selectedRow.cells[1].innerHTML = formData.email;
 selectedRow.cells[2].innerHTML = formData.salary;
 selectedRow.cells[3].innerHTML = formData.city;
}

function onDelete(row) {
 if (confirm('Are you sure to delete this record? ')) {
 var currentRow = row.parentElement.parentElement;
 document.getElementById('employeeList').deleteRow(currentRow.rowIndex);
 resetForm();
 }
}

function resetForm() {
 document.getElementById('fullName').value = "";
 document.getElementById('email').value = "";
 document.getElementById('salary').value = "";
 document.getElementById('city').value = "";
 selectedRow = null;
}

function readFormData() {
 var formData = {};

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

D:\projects\Angular-Projects\secondproject>

action View Go Run Terminal Help

script.js - secondproject - Visual Studio Code

```

dist > secondproject > assets > Script > script.js ...

```

```

1  var selectedRow = null;
2
3  function onFormSubmit() {
4      if (validate()) {
5          var formData = readFormData();
6          if (selectedRow == null) {
7              insertNewRecord(formData);
8          } else {
9              updateRecord(formData);
10         }
11         resetForm();
12     }
13
14 }
15
16 function insertNewRecord(data) {
17     var table = document.getElementById('employeeList').getElementsByTagName('tbody')[0];
18     var newRow = table.insertRow(table.length);
19     newRow.insertCell(0);
20     cell1.innerHTML = data.firstName;
21     cell1 = newRow.insertCell(1);
22     cell2.innerHTML = data.email;
23     cell2 = newRow.insertCell(2);
24     cell3.innerHTML = data.salary;
25     cell3 = newRow.insertCell(3);
26     cell4.innerHTML = data.city;
27     cell4 = newRow.insertCell(4);
28     cells.innerHTML = '<a class="btn btn-sm btn-secondary" onClick="onDelete(this)">Delete</a>';
29     cells.innerHTML = '<a class="btn btn-sm btn-secondary" onClick="onEdit(this)">Edit</a>';
30     resetForm();
31 }
32
33 function onEdit(row) {
34     selectedRow = row.parentElement.parentElement;
35     document.getElementById('fullName').value = selectedRow.cells[0].innerHTML;
36 }
37
38 
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS D:\projects\Angular Projects\secondproject>

View Go Run Terminal Help

onlinetest.service.ts - secondproject - Visual Studio Code

```

service... onlinetest.service.ts ...

```

```

{
    question: 'What is the main primary role of the full stack web developer?',
    answer: [
        {option: 'To organize data in the background.', correct: false},
        {option: 'To design user interaction on websites, developing servers and database for websites functionality and', correct: false},
        {option: 'To code, test and analyse all the applications including mobile, desktop and web applications.', correct: true},
        {option: 'To manage all the applications on the net/site.', correct: false}
    ],
    question: 'Which of the following is not part of quality of a full stack developer?',
    answer: [
        {option: 'Is aware of latest trends and development', correct: false},
        {option: 'Understand only stacks, none of different technology', correct: true},
        {option: 'Can point you to the right direction even if they cannot solve it', correct: false},
        {option: 'Is passionate and interested about learning new things', correct: false}
    ],
    question: 'A full stack developer is also known as an amalgamation of languages?',
    answer: [
        {option: 'True', correct: true},
        {option: 'False', correct: false}
    ],
    question: 'The main difference between a web developer and a full stack is the languages they use, a full stack dev',
    answer: [
        {option: 'True', correct: false},
        {option: 'False', correct: true}
    ]
}

```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS D:\projects\Angular Projects\secondproject> node server
app is running at port 4040...

The screenshot displays two tabs of code in a Visual Studio Code editor. Both tabs are for files named `onlinetest.service.ts`.

Top Tab Content:

```
    {
        question: 'What Does PHP stand for?',
        answer: [
            {option: 'HyperText Preprocessor', correct: true},
            {option: 'HyperText Programming', correct: false},
            {option: 'HyperText Programming', correct: false},
            {option: 'HyperText Processor', correct: false}
        ]
    },
    {
        question: 'What Does SQL stand for?',
        answer: [
            {option: 'Stylish Questions Langauge', correct: false},
            {option: 'Stylesheet Query Language', correct: false},
            {option: 'Statement Query Langauge', correct: false},
            {option: 'Structured Query Language', correct: true}
        ]
    },
    {
        question: 'What does XML stand for?',
        answer: [
            {option: 'extensible Multiple Langauge', correct: false},
            {option: 'extensible Markup langauge', correct: true},
            {option: 'extra Multiple Langauge', correct: false},
            {option: 'extra Multi-program Language', correct: false}
        ]
    },
    {
        question: 'Which of the following is not part of the back-end languages?',
        answer: [
            {option: 'Ruby', correct: false},
            {option: 'Java', correct: false},
            {option: 'Python', correct: true}
        ]
    }
```

Bottom Tab Content:

```
1  import { Injectable } from '@angular/core';
   import { Quiz } from './quiz.model';

2  @Injectable({
3      providedIn: 'root'
4  })
5  export class OnlinetestService {
6
7      quizzes: Quiz[] = [
8          {
9              question: 'What does HTML stand for?',
10             answer: [
11                 {option: 'HyperText Multiple Langauge', correct: false},
12                 {option: 'HyperText Markup Langauge', correct: true},
13                 {option: 'HyperText Makeup Langauge', correct: false},
14                 {option: 'HyperText Multi Langauge', correct: false}
15             ]
16         },
17         {
18             question: 'What does CSS stand for?',
19             answer: [
20                 {option: 'Common Style Sheet', correct: false},
21                 {option: 'Colorful Style Sheet', correct: false},
22                 {option: 'Computer Style Sheet', correct: false},
23                 {option: 'Cascading Style Sheet', correct: true}
24             ]
25         },
26         {
27             question: 'What Does PHP stand for?',
28             answer: [
29                 {option: 'HyperText Preprocessor', correct: true},
30                 {option: 'HyperText Programming', correct: false},
31                 {option: 'HyperText Preprogramming', correct: false}
32             ]
33         }
34     ]
35 }
```

Both tabs show the same code structure, with slight variations in the options for the last question.

Selection View Go Run Terminal Help

quiz.model.ts - secondproject - Visual Studio Code

```
... TS quiz.model.ts ×
EDITORS      src > app > TS quiz.model.ts > Quiz
TS quiz.model.ts src... 1 export class Quiz {
ND... 2   question!: String;
... 3   answer!: { option: string; correct: boolean; }[];
# service.compone... 4 }
# service.compone... 5
# service.compone...
# service.compone...
# service.compone...
# services
# app-http.service...
# app-http.service.ts
# app-routing.modul...
# app.component.css
# app.component.html
# app.componentsp...
# app.components...
# app.module.ts
# background.directi...
# background.directi...
# onlinetest.service.s...
# onlinetest.service.ts
# quiz.model.specs
# quiz.models
# services.service.spe...
```

File Edit Selection View Go Run Terminal Help

app-http.service.specs.ts - secondproject - Visual Studio Code

```
EXPLORER      ... TS app-http.service.specs ×
OPEN EDITORS      src > app > services > TS app-http.service.specs.ts > ...
# app-httpservice... 1 import { TestBed } from '@angular/core/testing';
SECOND... 2
# home.component... 3 import { AppHttpService } from './app-http.service';
# home.component... 4
# news-letter 5 describe('AppHttpService', () => {
# news-letter.comp... 6   let service: AppHttpService;
# news-letter.comp... 7
# news-letter.comp... 8   beforeEach(() => {
# news-letter.comp... 9     TestBed.configureTestingModule({}); 
# news-letter.comp... 10    service = TestBed.inject(AppHttpService);
# news-letter.comp... 11  });
# onlinetest 12  it('should be created', () => {
# onlinetest.compo... 13    expect(service).toBeTruthy();
# onlinetest.compo... 14  });
# onlinetest.compo... 15 });
# onlinetest.compo... 16 });
# onlinetest.compo... 17
# services
# service.compone...
# service.compone...
# service.compone...
# service.compone...
# services
# app-httpservice...
# app-routing.modul...
# app.component.css
# app.component.html
# app.componentsp...
# app.components...
# app.module.ts
# background.directi...
```

PROBLEMS OUTPUT DESIGN CONSOLE TERMINAL

The screenshot shows two tabs open in Visual Studio Code:

app-http.service.ts - secondproject - Visual Studio Code

```
src > app > services > TS app-http.service.ts > AppHttpService
  @Injectable({
    providedIn: 'root'
  })
  export class AppHttpService {
    constructor() { }
    // getHeaders(){
    //   const headers = new Headers();
    //   headers.append('Content-Type', 'application/json');
    //   return headers;
    // }
    // getUrl(url){
    //   return this.http.get(url);
    // }
  }

```

app-routing.module.ts - secondproject - Visual Studio Code

```
src > app > TS app-routing.module.ts ...
  import { NgModule } from '@angular/core';
  import { RouterModule, Routes } from '@angular/router';
  import { HomeComponent } from './home/home.component';
  import { AboutComponent } from './about/about.component';
  import { BlogComponent } from './blog/blog.component';
  import { ContactComponent } from './contact/contact.component';
  import { HeaderComponent } from './header/header.component';
  import { ServiceComponent } from './service/service.component';
  import { OnlinetestComponent } from './onlinetest/onlinetest.component';
  import { EmployeesComponent } from './employees/employees.component';
  import { DashboardComponent } from './dashboard/dashboard.component';
  import { CandidateFormComponent } from './candidate-form/candidate-form.component';
  import { NewsletterComponent } from './news-letter/news-letter.component';

  const routes: Routes = [
    {path: '', component: HomeComponent},
    {path: 'about', component: AboutComponent},
    {path: 'blog', component: BlogComponent},
    {path: 'contact', component: ContactComponent},
    {path: 'header', component: HeaderComponent},
    {path: 'service', component: ServiceComponent},
    {path: 'onlinetest', component: OnlinetestComponent},
    {path: 'employees', component: EmployeesComponent},
    {path: 'dashboard', component: DashboardComponent},
    {path: 'candidate-form', component: CandidateFormComponent},
    {path: 'news-letter', component: NewsletterComponent},
  ];

  @NgModule({
    imports: [RouterModule.forRoot(routes)],
    exports: [RouterModule]
  })
  export class AppRoutingModule { }
```

File Edit Selection View Go Run Terminal Help

app.component.ts - secondproject - Visual Studio Code

EXPLORER

OPEN EDITORS

- app.component.ts
- SECOND...
- home.component...
- home.component...
- home.component...
- news-letter...
- news-letter.comp...
- news-letter.comp...
- news-letter.comp...
- news-letter.comp...
- news-letter.comp...
- onlinetest...
- onlinetest.compo...
- onlinetest.compo...
- onlinetest.compo...
- onlinetest.compo...
- onlinetest.compo...
- service...
- service.compone...
- service.compone...
- services...
- app-http.service.s...
- app-http.service.t...
- app-routing.modul...
- app-component.css
- app.component.html
- app.component.sp...
- app.component.ts

app.module.ts - secondproject - Visual Studio Code

selection View Go Run Terminal Help

... app.module.ts x

src > app > app.module.ts > ...

```
21  AppComponent,
22  OnlinetestComponent,
23  BackgroundDirective,
24  HeaderComponent,
25  ServiceComponent,
26  AboutComponent,
27  ContactComponent,
28  BlogComponent,
29  HomeComponent,
30  EmployeesComponent,
31  DashboardComponent,
32  CandidateFormComponent,
33  NewsLetterComponent,
```

34],
35 imports: [
36 BrowserModule,
37 AppRoutingModule
38],
39 providers: [],
40 bootstrap: [AppComponent]
41 }
42 export class AppModule {}
43 }
44
45

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS D:\projects\Angular Projects\secondproject> node server
app is running at port 4040...

FILE

SCRIPTS

File View Go Run Terminal Help

app.module.ts - secondproject - Visual Studio Code

```

src > app > app.module.ts ...
1 import { NgModule } from '@angular/core';
2 import { BrowserModule } from '@angular/platform-browser';
3
4 import { AppRoutingModule } from './app-routing.module';
5 import { AppComponent } from './app.component';
6 import { OnlinetestComponent } from './onlinetest/onlinetest.component';
7 import { BackgroundDirective } from './background.directive';
8 import { HeaderComponent } from './header/header.component';
9 import { ServiceComponent } from './service/service.component';
10 import { AboutComponent } from './about/about.component';
11 import { ContactComponent } from './contact/contact.component';
12 import { BlogComponent } from './blog/blog.component';
13 import { HomeComponent } from './home/home.component';
14 import { EmployeesComponent } from './employees/employees.component';
15 import { DashboardComponent } from './dashboard/dashboard.component';
16 import { CandidateFormComponent } from './candidate-form/candidate-form.component';
17 import { NewsLetterComponent } from './news-letter/news-letter.component';

18 @NgModule({
19   declarations: [
20     AppComponent,
21     OnlinetestComponent,
22     BackgroundDirective,
23     HeaderComponent,
24     ServiceComponent,
25     AboutComponent,
26     ContactComponent,
27     BlogComponent,
28     HomeComponent,
29     EmployeesComponent,
30     DashboardComponent,
31     CandidateFormComponent,
32     NewsLetterComponent,
33   ],
34 })
35 
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS D:\projects\Angular Projects\secondproject> node server

outline timeline npm scripts cs-script - active

File View Go Run Terminal Help

onlinetest.component.html - secondproject - Visual Studio Code

```

src > app > onlinetest > onlinetest.component.html > div.container_home
42 <!-- Dashboard Content Begin -->
43 <div class="container p-5">
44   <div class="row">
45     <div class="col-sm-8 offset-2">
46       <div *ngIf="currentQuiz < 10">
47         <p class="text-center">{{ currentQuiz + 1 }} of {{ quizzes.length }}</p>
48         <h1>{{ quizzes[currentQuiz].question }}</h1>
49
50         <ul class="list-group" *ngFor="let quiz of quizzes[currentQuiz].answers">
51           <label>
52             <li class="list-group-item" appBackground [correctAnswer]="quiz.correct">
53               {{ quiz.option }}
54             </li>
55           </label>
56         </ul>
57       </div>
58       <div *ngIf="currentQuiz > 9">
59         <button class="btn btn-success btn-block" (click)="showResults()">Show Results</button>
60         <div *ngIf="results">
61           <div>
62             <div>
63               <div>
64                 <div>
65                   <div>
66                     <div>
67                     <div>
68                     </div>
69                   </div>
70                 </div>
71               </div>
72             </div>
73           </div>
74         </div>
75       </div>
76     </div>
77   </div>
78 <!-- Dashboard Content End -->
79 </main>
80 </div>
81 
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

PS D:\projects\Angular Projects\secondproject> node server

outline timeline npm scripts cs-script - active

SRC View GO RUN Terminal Help

onlinetest.component.html - secondproject - Visual Studio Code

```
... onlinetest.component.html ...
src app > onlinetest > onlinetest.component.html > div.container_home
onetest.compo...
1 <div class="container_home">
2   <!-- Header Start -->
3   <header class="navbar navbar-dark sticky-top bg-dark flex-md-noWrap p-0 shadow">
4     <button class="navbar-toggler position-absolute d-md-none collapsed" type="button" data-bs-toggle="collapse"
5       data-bs-target="#sidebarMenu" aria-controls="sidebarMenu" aria-expanded="false"
6       aria-label="Toggle navigation">
7       <span class="navbar-toggler-icon"></span>
8     </button>
9     <!-- -->
10    </header>
11   <!-- Header End -->
12
13   <!-- Container Fluid Start -->
14   <div class="container-fluid">
15     <div class="row">
16       <nav id="sidebarMenu" class="col-md-3 col-lg-2 d-md-block bg-light sidebar collapse">
17         <div class="position-sticky pt-3">
18           <!-- <img [src]=""><br /><br />
19           <p>
20             Lorem ipsum dolor, sit amet consectetur adipisicing elit. Deleniti eligendi fugit ut, dolores sed dolor sunt inventore velit! Vel
21             quidem esse error culpa? Illum, non magnam? Eveniet deleniti ex provident! <br />
22             <img [src]=""><br /><br />
23             <!-- <marquee behavior="left" direction="left"> <small><strong> ads by mcDuck High</strong></small></marquee>
24           </p>
25           </div>
26         </div>
27         <br />
28         <img [src]=""><br /><br />
29         <p>
30           Lorem ipsum dolor sit amet consectetur adipisicing elit. Velit, quo. Quidem ipsam facilis numquam fugit dignissimos cumque atque eligendi
            concomit? <br />
        </p>
      </nav>
    </div>
  </div>
</div>
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
PS D:\projects\Angular Projects\secondproject> node server
app is running at port 4040...
```

onlinetest.components -

src app > onlinetest > onlinetest.component.ts > OnlinetestComponent

```
... onlinetest.component.ts ...
component...
constructor( private quizService: OnlinetestService) { }

ngOnInit(): void {
  this.quizzes = this.quizService.getQuizzes();

  // this.randomize = Math.floor(Math.random() * this.quizzes.length)
}

onAnswer(option: boolean){
  this.answerSelected = true;
  setTimeout(() => {
    this.currentQuiz++;
    // this.randomize = Math.floor(Math.random() * this.quizzes.length)
    this.answerSelected = false;
  }, 1000);

  if(option){
    this.correctAnswer++;
  }
  else{
    this.incorrectAnswer++;
  }
}

showResults(){
  this.results = true;
}

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
```

onlinetest.components.ts - secondproject - Visual Studio Code

```
onlinetest.components x
src > app > onlinetest > onlinetest.component.ts > OnlinetestComponent
  @Component({
    selector: 'app-onlinetest',
    templateUrl: './onlinetest.component.html',
    styleUrls: ['./onlinetest.component.css']
  })
  export class OnlinetestComponent implements OnInit {
    pic: string = "assets/images/gadgets.png";
    pic1: string = "assets/images/download (7).jpg";
    quizzes: Quiz[] = [];
    currentQuiz = 0;
    answerSelected = false;
    correctAnswer = 0;
    incorrectAnswer = 0;
    randomize: number;
    results = false;
  }
  constructor( private quizService: OnlinetestService) { }

  throw err;
}

Error: Cannot find module 'D:\projects\Angular Projects\secondproject\server'
  at Function.Module._resolveFilename (internal/modules/cjs/loader.js:885:15)
  at Function.Module._load (internal/modules/cjs/loader.js:730:27)
  at Function.executeUserEntryPoint [as runMain] (internal/modules/run_main.js:72:12)
  at internal/main/run_main_module.js:17:47
  code: 'MODULE_NOT_FOUND',
  requireStack: []

PS D:\projects\Angular Projects\secondproject> ^
PS D:\projects\Angular Projects\secondproject> node server
app is running at port 4040...
```

posts.js - secondproject - Visual Studio Code

```
posts.js x
Server > routes > posts.js > ...
  1 const express = require('express');
  2 const router = express.Router();
  3
  4 router.get('/', (req, res)=>{
  5   res.send('POST WORKS');
  6 }
  7
  8 module.exports = router;

throw err;
}

Error: Cannot find module 'D:\projects\Angular Projects\secondproject\server'
  at Function.Module._resolveFilename (internal/modules/cjs/loader.js:885:15)
  at Function.Module._load (internal/modules/cjs/loader.js:730:27)
  at Function.executeUserEntryPoint [as runMain] (internal/modules/run_main.js:72:12)
  at internal/main/run_main_module.js:17:47
  code: 'MODULE_NOT_FOUND',
  requireStack: []

PS D:\projects\Angular Projects\secondproject> ^
PS D:\projects\Angular Projects\secondproject> node server
app is running at port 4040...
```

The screenshot shows the Visual Studio Code interface with the following details:

- File Explorer:** Shows the project structure under "OPEN EDITORS".
- Header Component:** The active file is `header.component.ts`. It imports `Component` and `OnInit` from Angular. The component has a selector `'app-header'`, a template URL `'./header.component.html'`, and style URLs `['./header.component.css']`. It contains a constructor and an `ngOnInit` method.
- Header Component HTML:** The file `header.component.html` defines a navigation bar with a brand logo, a toggle button, and a dropdown menu with multiple items.
- Header Component CSS:** The file `header.component.css` applies styles to the navigation bar, including colors for the active item and the dropdown menu.
- Terminal:** Shows the output of the build process and the start of the application server.