

WEB_ICP6

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In Class Programming:

In this ICP, we are going to

Create an application in Angular which displays nearby restaurants (Hint: Use Foursquare API)
Create an application in Angular which displays recipes (Hint: Use EDAMAM API)

Foursquare is the most reliable and unbiased location data tool for analyzing how people move about in the real world.

Developers and businesses can use Foursquare's technology, data, and other business services to create their own location-aware apps, better understand their customers, connect with target audiences, and track foot traffic and advertising success.

Edamam-api is a library that provides support for the Edamam nutritional API.

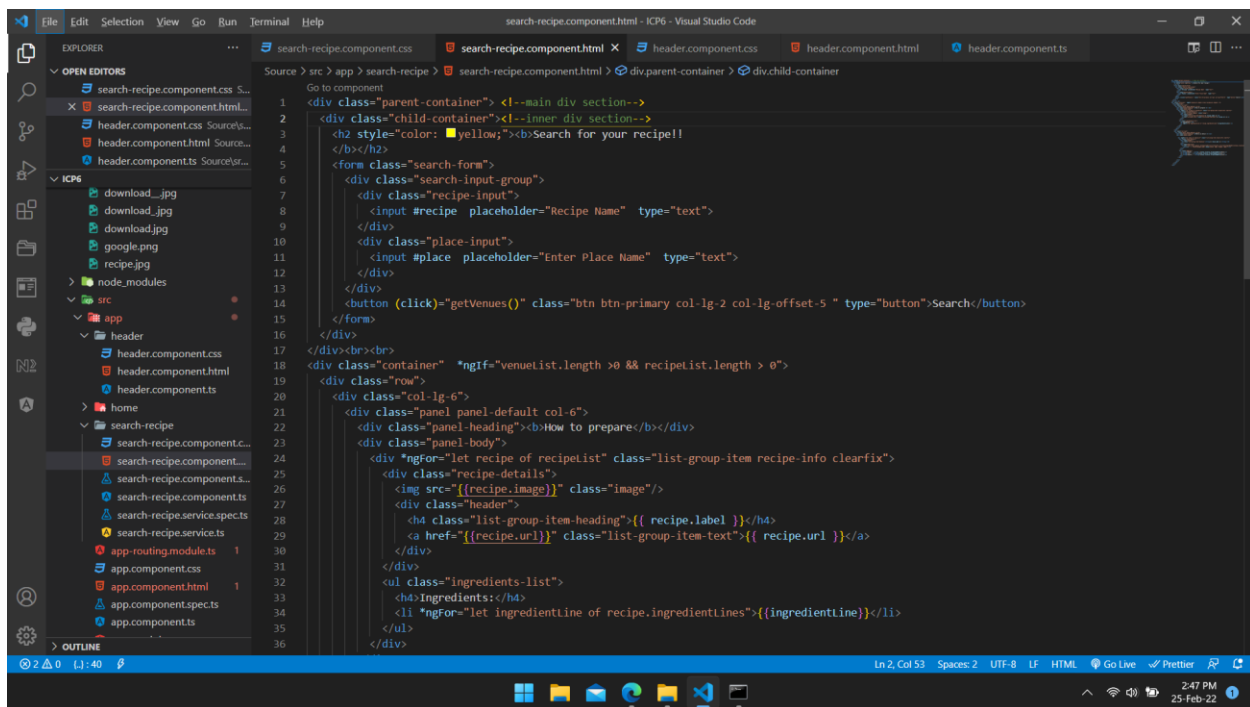
The Edamam B2B API can be accessed by submitting HTTPS queries to the following URLs. The base URL is <https://api.edamam.com>, and the entire URL is obtained by attaching the request's path to it.

Edamam servers support gzip compression for regular HTTP. Compression reduces the size of the response, allowing for faster data transport.

We also used HTML, CSS, BOOTSTRAP, and JAVASCRIPT, ANGULAR to make our webpages / website more attractive and responsive to end users.

HTML code:

Below the snaps of our html code written,

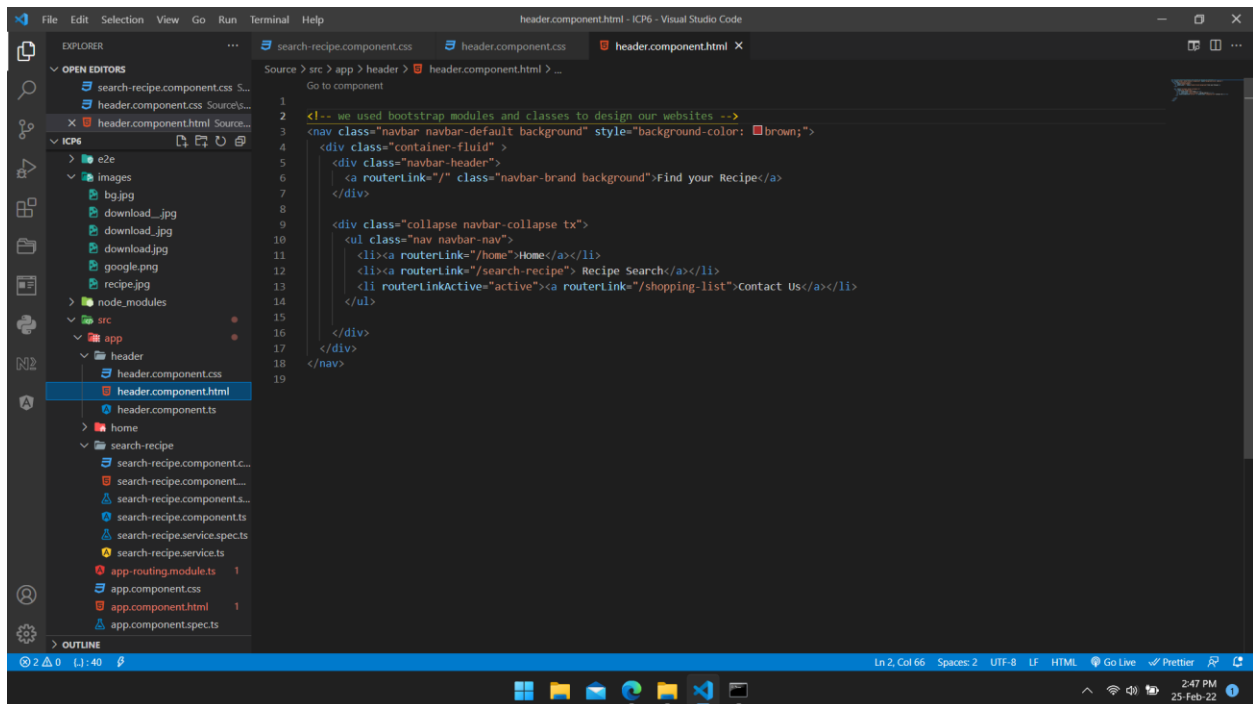


The screenshot shows a Visual Studio Code editor with the file explorer on the left and the code editor in the center. The file explorer shows a project structure with folders like 'src', 'app', 'header', and 'home'. The code editor displays the HTML code for a search recipe component. The code includes a search form with a text input and a search button, and a list of recipe items with details like image, label, and ingredients.

```
1 <div class="parent-container"> <!--main div section-->
2 <div class="child-container"><!--inner div section-->
3 <h2 style="color: yellow;"><b>Search for your recipe!!
4 </b></h2>
5 <form class="search-form">
6 <div class="search-input-group">
7 <div class="recipe-input">
8 <input #recipe placeholder="Recipe Name" type="text">
9 </div>
10 <div class="place-input">
11 <input #place placeholder="Enter Place Name" type="text">
12 </div>
13 </div>
14 <button (click)="getVenues()" class="btn btn-primary col-lg-2 col-lg-offset-5 " type="button">Search</button>
15 </form>
16 </div>
17 </div><br><br>
18 <div class="container" *ngIf="venueList.length > 0 && recipeList.length > 0">
19 <div class="row">
20 <div class="col-lg-6">
21 <div class="panel panel-default col-6">
22 <div class="panel-heading"><b>How to prepare</b></div>
23 <div class="panel-body">
24 <div *ngFor="let recipe of recipeList" class="list-group-item recipe-info clearfix">
25 <div class="recipe-details">
26 
27 <div class="header">
28 <h4 class="list-group-item-heading">{{ recipe.label }}</h4>
29 <a href="{{recipe.url}}" class="list-group-item-text">{{ recipe.url }}</a>
30 </div>
31 </div>
32 <div class="Ingredients-list">
33 <h4>Ingredients:</h4>
34 <li *ngFor="let ingredientLine of recipe.ingredientLines">{{ingredientLine}}</li>
35 </div>
36 </div>
```

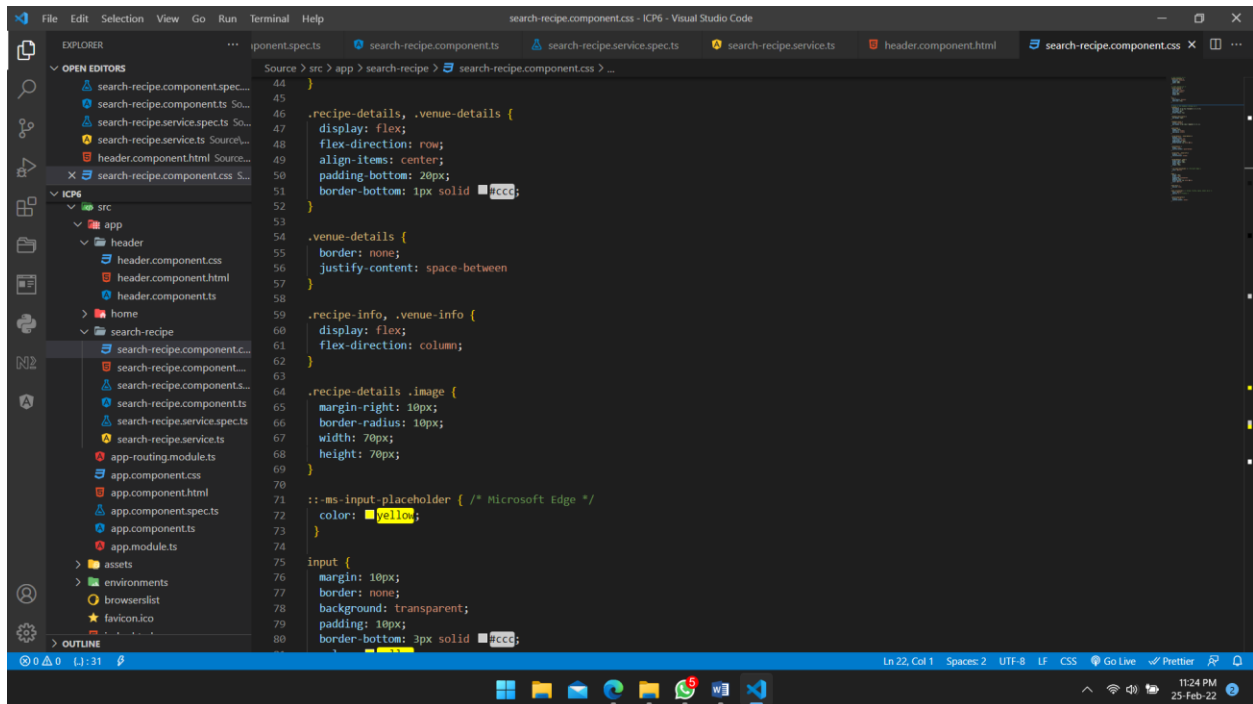
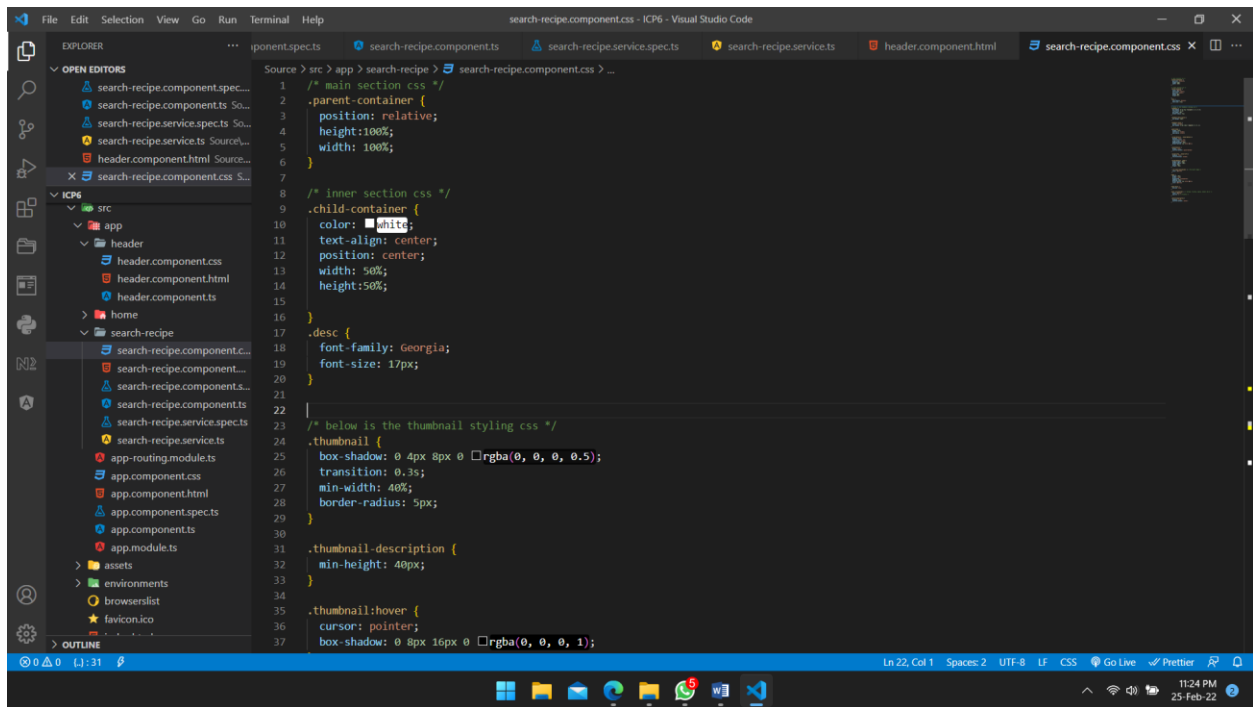
We also used bootstrap here in html code,

Bootstrap is a powerful front-end framework for building modern webpages and web applications. It's open-source and free to use, however it comes with a plethora of HTML and CSS templates for UI elements like buttons and forms. JavaScript extensions are also supported by Bootstrap.



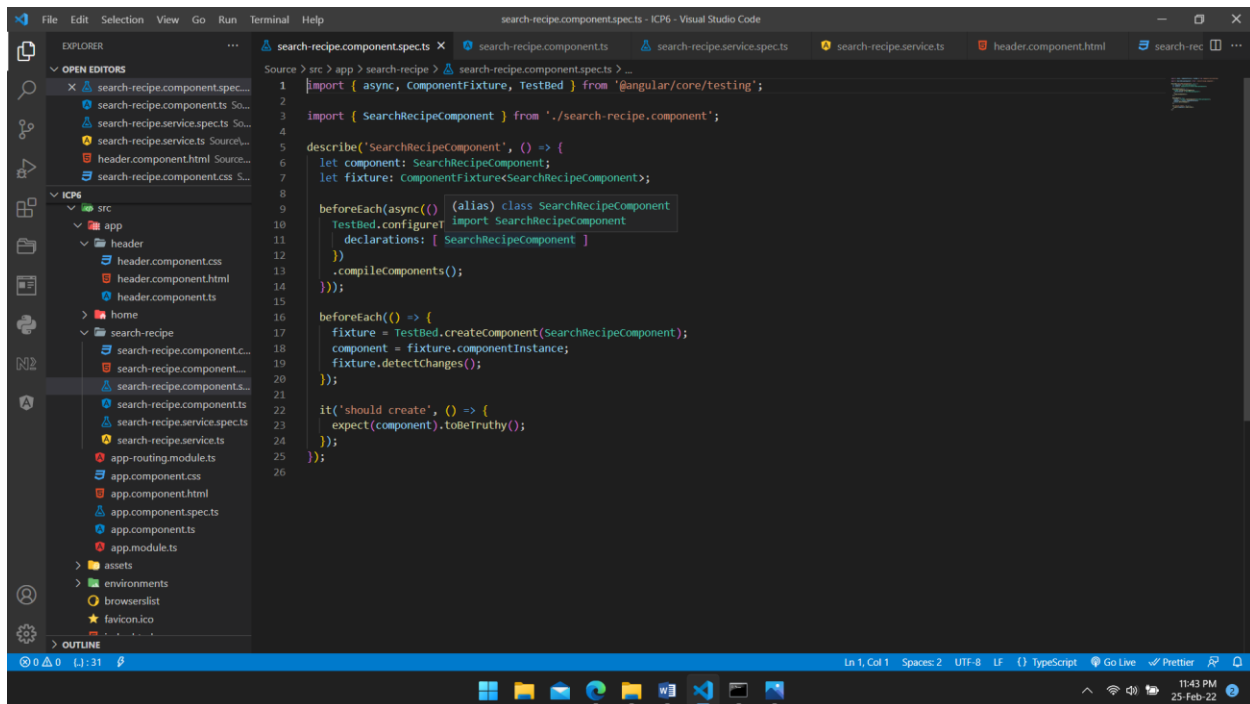
CSS code:

Below are the screenshots of css code used to design and style our website/webpages.



Search recipe code:

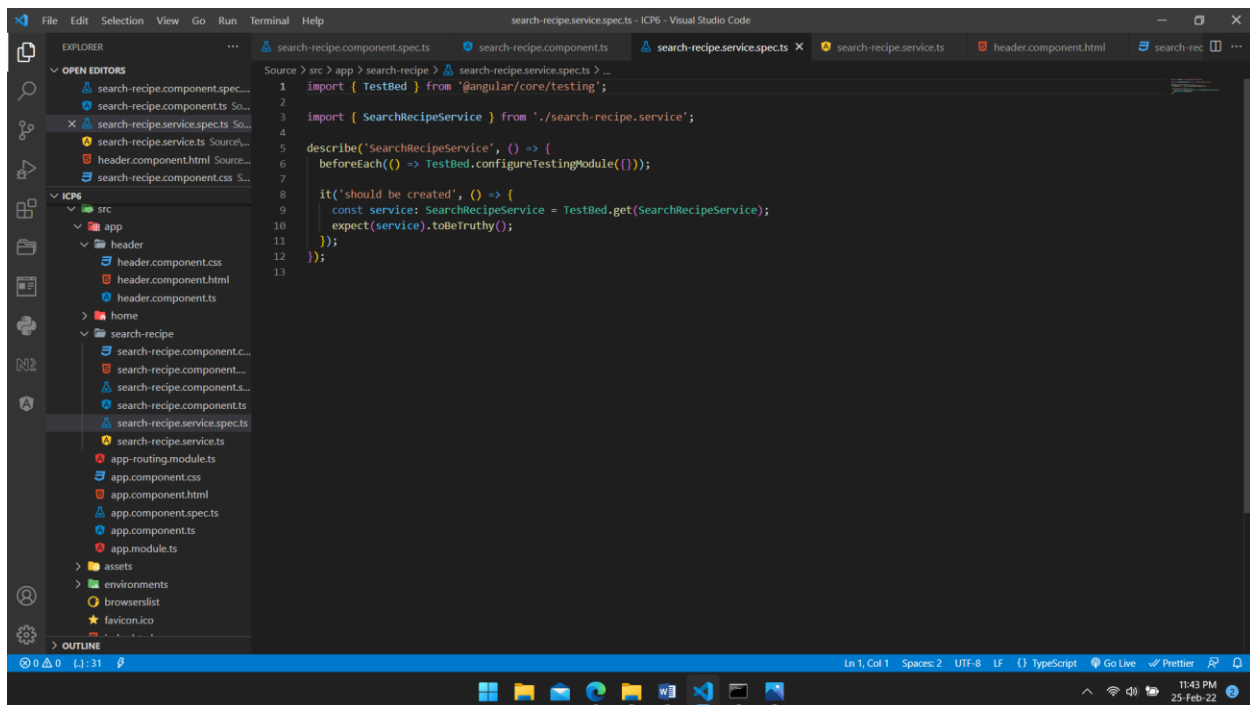
Below are the record for reference of search recipe components JavaScript code.



The screenshot shows the Visual Studio Code editor with the file `search-recipe.component.spec.ts` open. The Explorer sidebar on the left shows the project structure with folders `src`, `app`, `header`, `home`, `search-recipe`, `assets`, `environments`, `browserslist`, and `favicon.ico`. The `search-recipe` folder is expanded, showing files like `search-recipe.component.css`, `search-recipe.component.html`, `search-recipe.component.spec.ts`, `search-recipe.component.ts`, `search-recipe.service.spec.ts`, `search-recipe.service.ts`, `app-routing.module.ts`, `app.component.css`, `app.component.html`, `app.component.spec.ts`, `app.component.ts`, and `app.module.ts`.

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

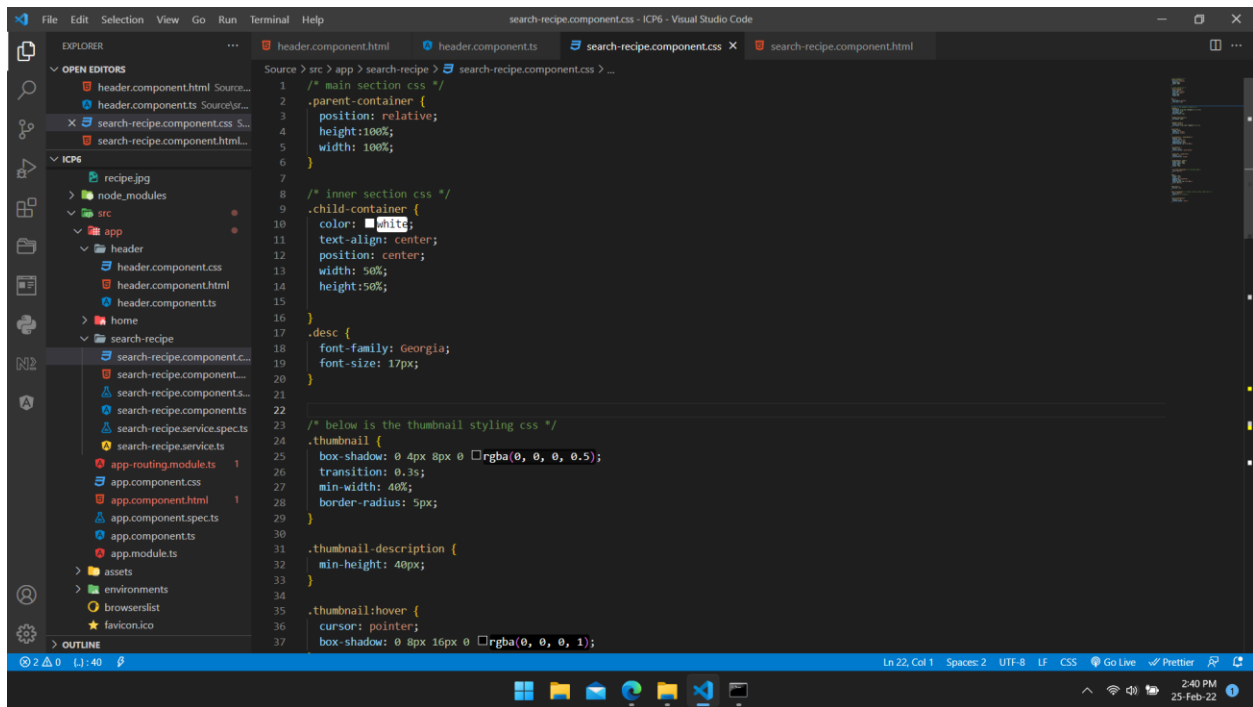
And this is for reference of search recipe specs JavaScript code.



The screenshot shows the Visual Studio Code editor with the file `search-recipe.service.spec.ts` open. The Explorer sidebar on the left shows the project structure, with the `search-recipe` folder expanded. The `search-recipe.service.spec.ts` file is selected in the Explorer.

```
1 import { TestBed } from '@angular/core/testing';
2
3 import { SearchRecipeService } from './search-recipe.service';
4
5 describe('SearchRecipeService', () => {
6   beforeEach(() => TestBed.configureTestingModule({}));
7
8   it('should be created', () => {
9     const service: SearchRecipeService = TestBed.get(SearchRecipeService);
10     expect(service).toBeTruthy();
11   });
12 });
```

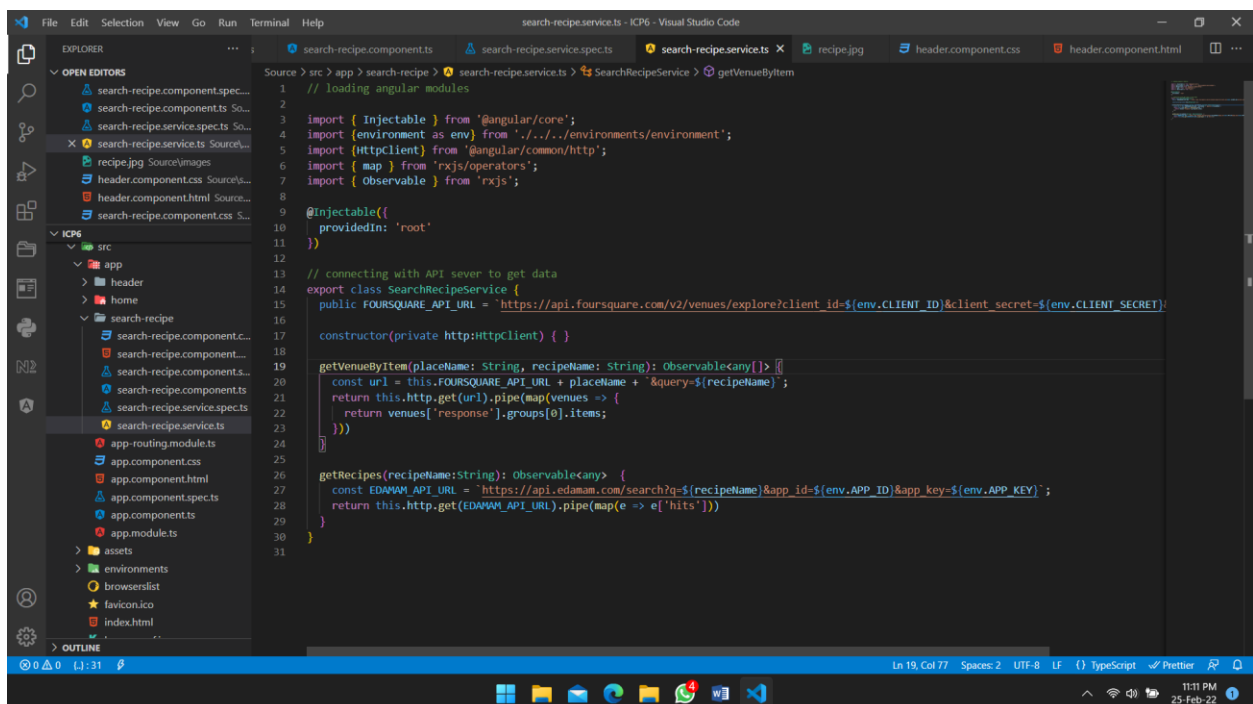
Next, this is for the reference of search recipe components css code.



```
Source > src > app > search-recipe > search-recipe.component.css > ...
1 /* main section css */
2 .parent-container {
3   position: relative;
4   height: 100%;
5   width: 100%;
6 }
7
8 /* inner section css */
9 .child-container {
10  color: white;
11  text-align: center;
12  position: center;
13  width: 50%;
14  height: 50%;
15 }
16
17 .desc {
18  font-family: Georgia;
19  font-size: 17px;
20 }
21
22 /* below is the thumbnail styling css */
23 .thumbnail {
24  box-shadow: 0 4px 8px 0 rgba(0, 0, 0, 0.5);
25  transition: 0.3s;
26  min-width: 40%;
27  border-radius: 5px;
28 }
29
30 .thumbnail-description {
31  min-height: 40px;
32 }
33
34 .thumbnail:hover {
35  cursor: pointer;
36  box-shadow: 0 8px 16px 0 rgba(0, 0, 0, 1);
37 }
```

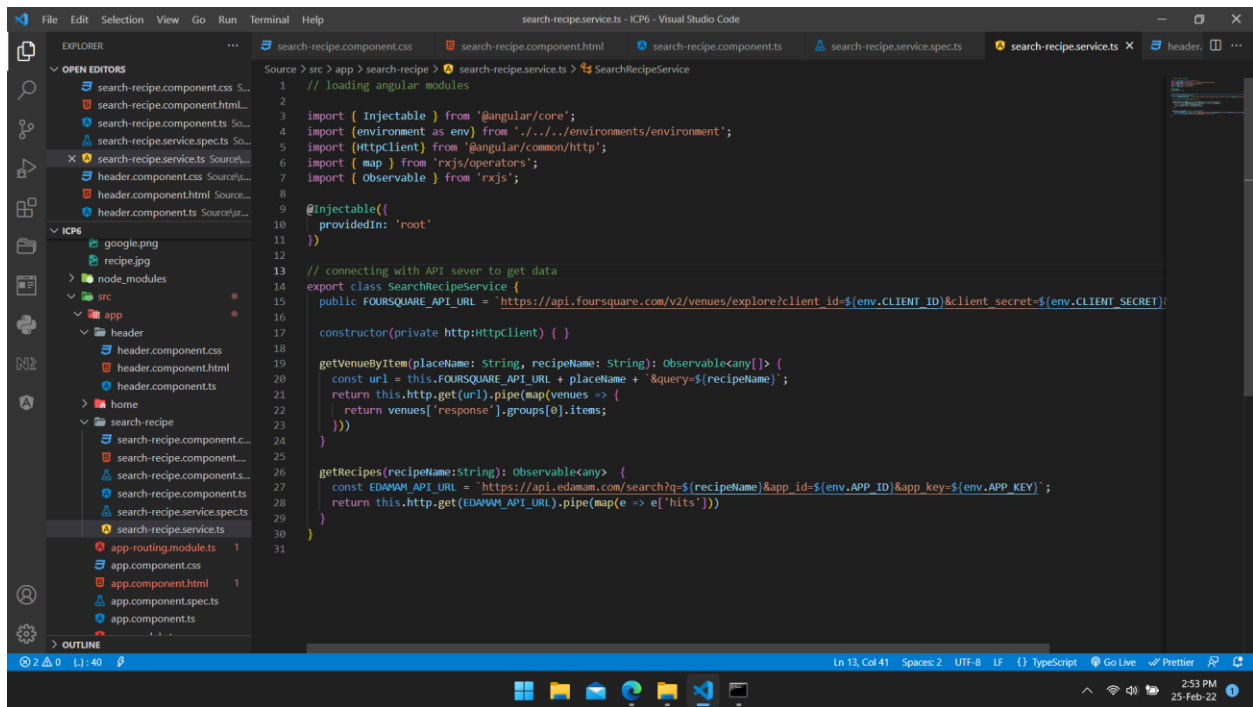
Using API's:

You can use our Recipe Search API to search through millions of web recipes and integrate the results into your mobile or web applications.



```
Source > src > app > search-recipe > search-recipe.service.ts > SearchRecipeService > getVenueByItem
1 // loading angular modules
2
3 import { Injectable } from '@angular/core';
4 import { Environment as env } from '../environments/environment';
5 import { HttpClient } from '@angular/common/http';
6 import { map } from 'rxjs/operators';
7 import { Observable } from 'rxjs';
8
9 @Injectable({
10   providedIn: 'root'
11 })
12
13 // connecting with API sever to get data
14 export class SearchRecipeService {
15   public FOURSQUARE_API_URL = 'https://api.foursquare.com/v2/venues/explore?client_id=${env.CLIENT_ID}&client_secret=${env.CLIENT_SECRET}';
16
17   constructor(private http: HttpClient) { }
18
19   getVenueByItem(placeName: String, recipeName: String): Observable<any> {
20     const url = this.FOURSQUARE_API_URL + placeName + '&query=${recipeName}';
21     return this.http.get(url).pipe(map(venues => {
22       return venues['response'].groups[0].items;
23     })))
24
25   getRecipes(recipeName: String): Observable<any> {
26     const EDAMAM_API_URL = 'https://api.edamam.com/search?q=${recipeName}&app_id=${env.APP_ID}&app_key=${env.APP_KEY}';
27     return this.http.get(EDAMAM_API_URL).pipe(map(e => e['hits']))
28   }
29 }
30
31
```

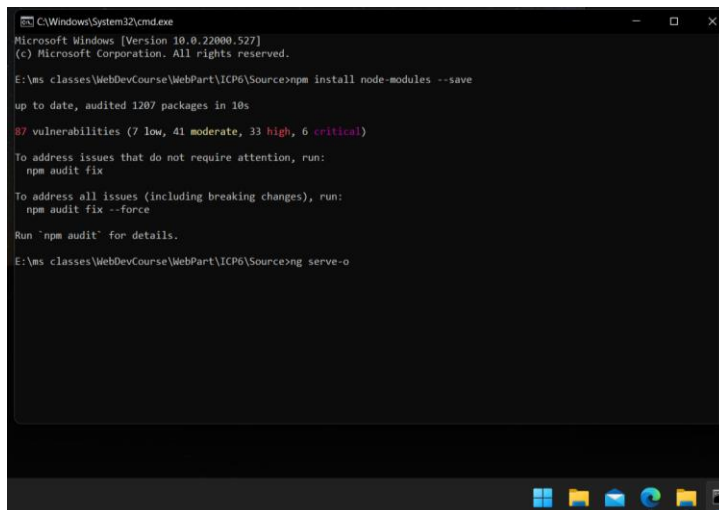
js code:



```
1 // loading angular modules
2
3 import { Injectable } from '@angular/core';
4 import { environment as env } from '../environments/environment';
5 import { HttpClient } from '@angular/common/http';
6 import { map } from 'rxjs/operators';
7 import { Observable } from 'rxjs';
8
9 @Injectable({
10   providedIn: 'root'
11 })
12
13 // connecting with API sever to get data
14 export class SearchRecipeService {
15   public FOURSQUARE_API_URL = 'https://api.foursquare.com/v2/venues/explore?client_id=${env.CLIENT_ID}&client_secret=${env.CLIENT_SECRET}';
16
17   constructor(private http: HttpClient) { }
18
19   getVenueByItem(placeName: String, recipeName: String): Observable<any[]> {
20     const url = this.FOURSQUARE_API_URL + placeName + '&query=${recipeName}';
21     return this.http.get(url).pipe(map(venues => {
22       return venues['response'].groups[0].items;
23     }));
24   }
25
26   getRecipes(recipeName: String): Observable<any> {
27     const EDAMAM_API_URL = 'https://api.edamam.com/search?q=${recipeName}&app_id=${env.APP_ID}&app_key=${env.APP_KEY}';
28     return this.http.get(EDAMAM_API_URL).pipe(map(e => e['hits']));
29   }
30 }
31
```

Run the App:

Use the following commands to install the node modules for the application and then run the app for the output.



```
C:\Windows\System32\cmd.exe
Microsoft Windows [Version 10.0.22000.527]
(c) Microsoft Corporation. All rights reserved.

E:\ms classes\WebDevCourse\WebPart\ICP6\Source>npm install node-modules --save

up to date, audited 1207 packages in 10s

87 vulnerabilities (7 low, 41 moderate, 33 high, 6 critical)

To address issues that do not require attention, run:
  npm audit fix

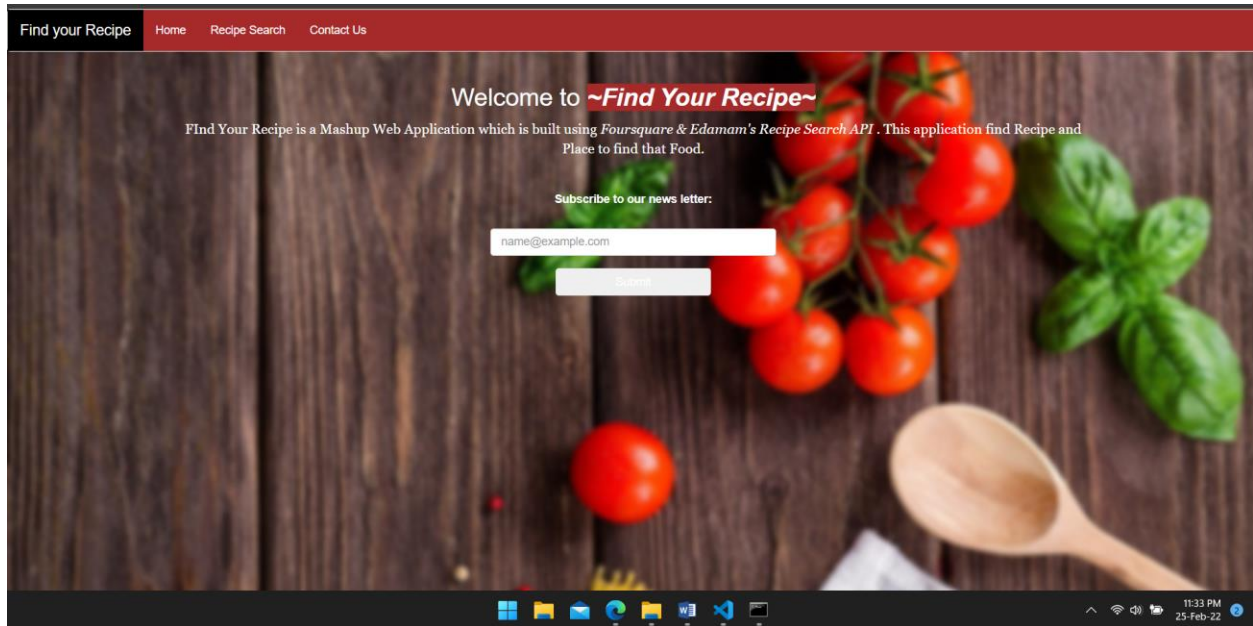
To address all issues (including breaking changes), run:
  npm audit fix --force

Run 'npm audit' for details.

E:\ms classes\WebDevCourse\WebPart\ICP6\Source>ng serve-o
```


Output:

Below are of outputs of our designed / created webpages/ website.



We get the data/ details of the recipes and based on the location given, from the servers using API's mentioned above in the ICP report.

