ICP – 6 REST API in Angular

Team details:

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Github link: https://github.com/sarath98-lab/spring-2022/tree/main/Web/ICP6

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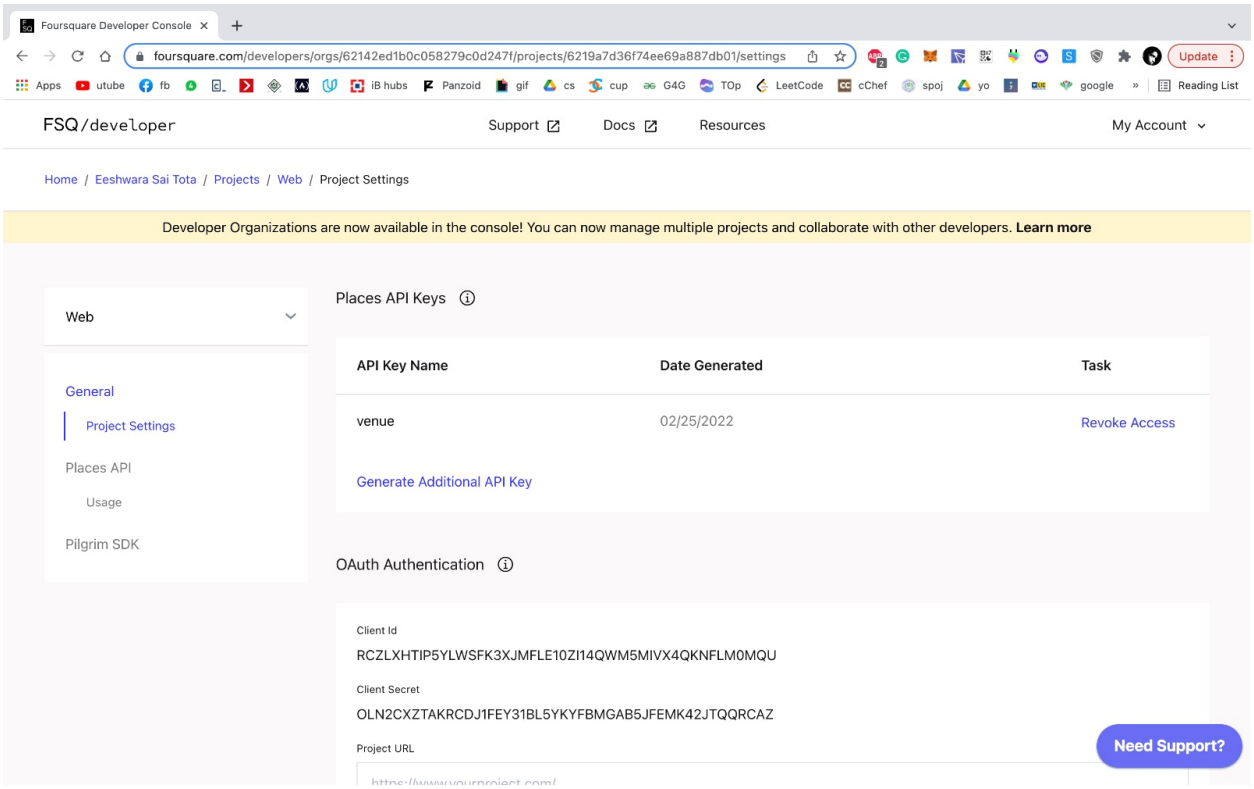
Description:

Current ICP helps in understanding REST API and make API calls using Angular framework. REST API is a web API that complies with REST architecture. In the current ICP, an interactive web application is created to display nearby restaurants and recipes using Foursquare and EDAMAM API.

Foursquare API:

In order to use foursquare API first user needs to create and account and create a project.

Client id and client secret for that specific project will be generated. In order to access v3/places/search API, an API key must be generated which is used in header while making places search call. This API returns list of nearby restaurants and their location.



Using the above generated information, recipe name and place the API returns restaurant locations. As show below

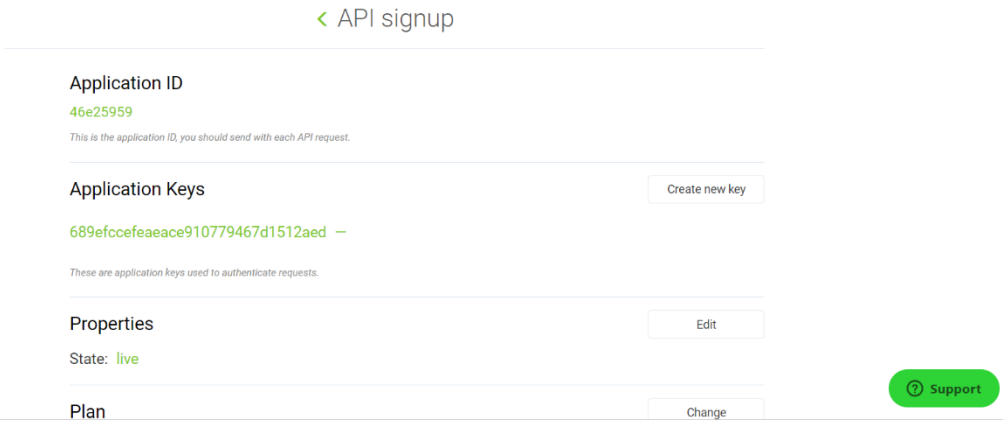
RESPONSE

200 Try It


```
{
  "results": [
    {
      "fsq_id": "4b019e70f964a520ff4322e3",
      "categories": [
        {
          "id": 13064,
          "name": "Pizzeria",
          "icon": {
            "prefix": "https://ss3.4sqi.net/img/categ
            "suffix": ".png"
          }
        },
        {
          "id": 13236,
          "name": "Italian Restaurant",
          "icon": {
            "prefix": "https://ss3.4sqi.net/img/categ
            "suffix": ".png"
          }
        }
      ],
      "chains": [],
      "distance": 1040,
      "geocodes": {
        "main": {
          "latitude": 39.108536040464436,
          "longitude": -94.58266156479525
        }
      },
      "location": {
        "address": "427 Main St",
        "country": "US",
        "cross_street": "at E 5th St",
        "dma": "Kansas City",
        "formatted_address": "427 Main St (at E 5th S
        "locality": "Kansas City",
        "neighborhood": [
          "Downtown"
        ],
```

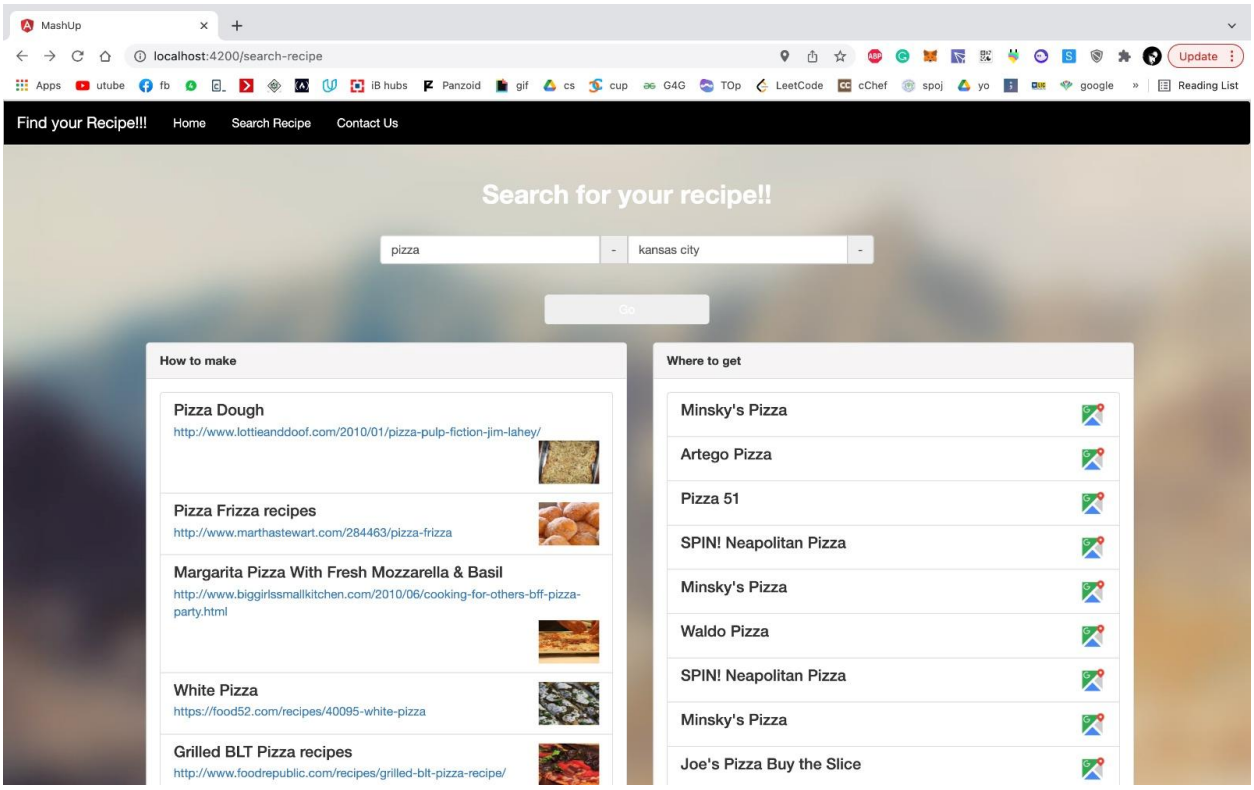

Edamam API:

The Edamam API displays the list of recipes. Similar to the foursquare, we generated credentials in the Edamam API also.

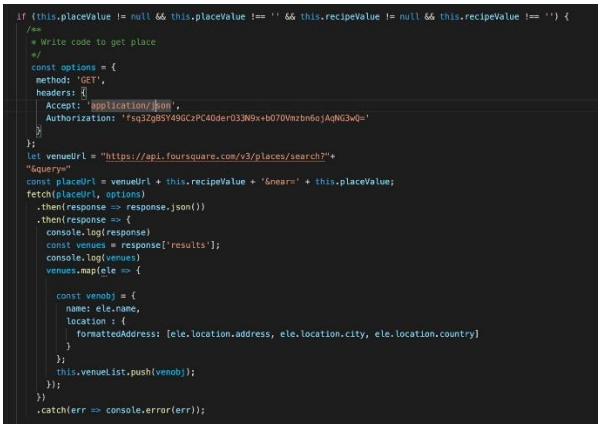


Using Application ID, keys and recipe name we get list of venues through Edamam API.

Using the above two APIs we built have built the website.



Type script file to fetch places and recipes



```
if (this.placeValue != null && this.placeValue !== '' && this.recipeValue != null && this.recipeValue !== '') {
  /**
   * Write code to get place
   */
  const options = {
    method: 'GET',
    headers: {
      Accept: 'application/json',
      Authorization: 'fsq3ZgBSY49GCzPC4OderO33N9x+bO7OVmzbn6ojAqNG3wQ='
    }
  };
  let venueUrl = "https://api.foursquare.com/v3/places/search?"+
  "&query="
  const placeUrl = venueUrl + this.recipeValue + '&near=' + this.placeValue;
  fetch(placeUrl, options)
    .then(response => response.json())
    .then(response => {
      console.log(response)
      const venues = response['results'];
      console.log(venues)
      venues.map(ele => {

        const venobj = {
          name: ele.name,
          location : {
            formattedAddress: [ele.location.address, ele.location.city, ele.location.country]
          }
        };
        this.venueList.push(venobj);
      });
    })
    .catch(err => console.error(err));
```

From the response received from the API we only use required information which involves:

Recipe’s label, URL and Image

```
if (this.recipeValue !== null) {
  /**
   * Write code to get recipe
   */
   let recipeUrl = "https://api.edamam.com/search?"+
   "app_id="+
   "46e25959"+
   "&app_key="+
   "689efccefeaeace910779467d1512aed"+
   "&q="
   const foodUrl = recipeUrl + this.recipeValue;
   this._http.get(foodUrl).subscribe(data => {
     const recipes = data['hits'];
     recipes.map(ele => {
       let recipe = ele['recipe'];
       const recobj = {
         name : ele .recipe.label,
         url: ele.recipe.url,
         icon: ele.recipe.image
       };
       this.recipeList.push(recobj);

     });
   });
}
```

From the response received from Foursquare API we use venue name, address city and country.

Learnings from the lesson:

- HTTPS and REST API in Angular.

Issue with the lesson:

Constructors, ngInIt etc features in Angular must have been discussed.

Discussed v2 version of venue API has issues. This is solved using places API which is not discussed.

Contribution:

Equal contribution