**ASP.Net Core app with TypeScript and Google Maps**

**SAMPLE 1**

<https://developers.google.com/maps/documentation/javascript/examples/map-simple>

Graphical user interface, map

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Graphical user interface, application

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1. Run Visual Studio 2022.

2. Create a new ASP.Net Core MVC project

3. With Nugget add the following library: “Microsoft.TypeScript.MSBuild (4.9.4)”

4. In the root project add a new TS Config file “tsconfig.json”.

5. In the “tsconfig.json” add the following code:

{

"compileOnSave": true,

"compilerOptions": {

"noImplicitAny": false,

"skipLibCheck": true,

"noEmitOnError": true,

"removeComments": false,

"sourceMap": true,

"typeRoots": [

"node\_modules/@types"

],

"target": "es5",

"outDir": "wwwroot/js"

},

"include": [

"scripts/\*\*/\*"

]

}

6.In the project create a new folder “scripts” and add the following new files “app.ts” and “index.ts”:

app.ts

function TSButton() {

let name: string = "Fred";

document.getElementById("ts-example").innerHTML = greeter(user);

}

class Student {

fullName: string;

constructor(public firstName: string, public middleInitial: string, public lastName: string) {

this.fullName = firstName + " " + middleInitial + " " + lastName;

}

}

interface Person {

firstName: string;

lastName: string;

}

function greeter(person: Person) {

return "Hello, " + person.firstName + " " + person.lastName;

}

let user = new Student("Luis", "M.", "Coco Enríquez");

index.ts

let map: google.maps.Map;

const center: google.maps.LatLngLiteral = { lat: 30, lng: -110 };

function initMap(): void {

map = new google.maps.Map(document.getElementById("map") as HTMLElement, {

center,

zoom: 8

});

}

7. Install the Google Maps TypeScript dependencies:

<https://developers.google.com/maps/documentation/javascript/using-typescript>

In the project open a terminal window and Run the command:

npm i -D @types/google.maps

or the command

npm install --save @types/google.maps

8. Inside the Views/Home/Index.cshtml file include the following code:

@{

ViewData["Title"] = "Home Page";

}

<div class="text-center">

<h1 class="display-4">Welcome</h1>

<p>Learn about <a href="https://docs.microsoft.com/aspnet/core">building Web apps with ASP.NET Core</a>.</p>

</div>

<div id="ts-example">

<br />

<button type="button" class="btn btn-primary btn-md" onclick="TSButton()">

Click Me

</button>

</div>

<div id="map"></div>

9. Inside the Views/Home/Shared/\_Layout.cshtml file include the following code:

…

<footer class="border-top footer text-muted">

<div class="container">

&copy; 2022 - SampleTypeScript - <**a** **asp-area**="" **asp-controller**="Home" **asp-action**="Privacy">Privacy</**a**>

</div>

</footer>

<**script** src="~/lib/jquery/dist/jquery.min.js"></**script**>

<**script** src="~/lib/bootstrap/dist/js/bootstrap.bundle.min.js"></**script**>

<**script** **src**="~/js/site.js" **asp-append-version**="true"></**script**>

<**script** src="~/js/app.js"></**script**>

<**script** src="~/js/index.js"></**script**>

<script src="https://maps.googleapis.com/maps/api/js?key=AIzaSyBaJGRMwMEnxE7hAyGILoSPWxSKhWjPs1Q&callback=initMap&v=weekly"

defer></script>

@await RenderSectionAsync("Scripts", required: false)

</body>

</html>

10. Clean and Build the solution. Then Run it.

11. Do not forget to get your Google Maps API Key in the following URL:

<https://console.cloud.google.com/apis/credentials?project=vaulted-program-328411>

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