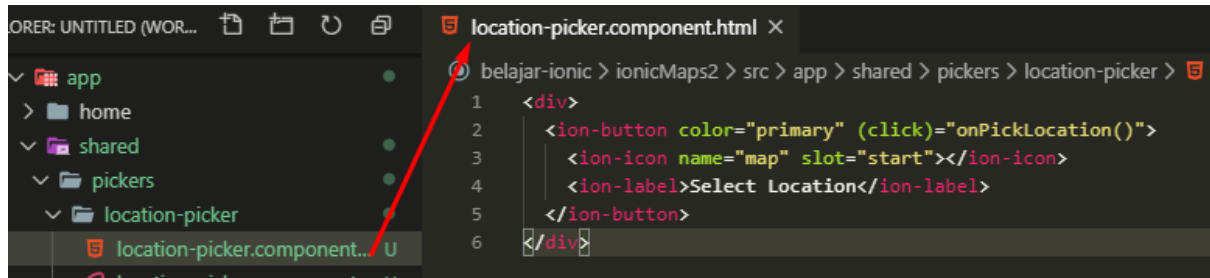


Buat project Ionic baru

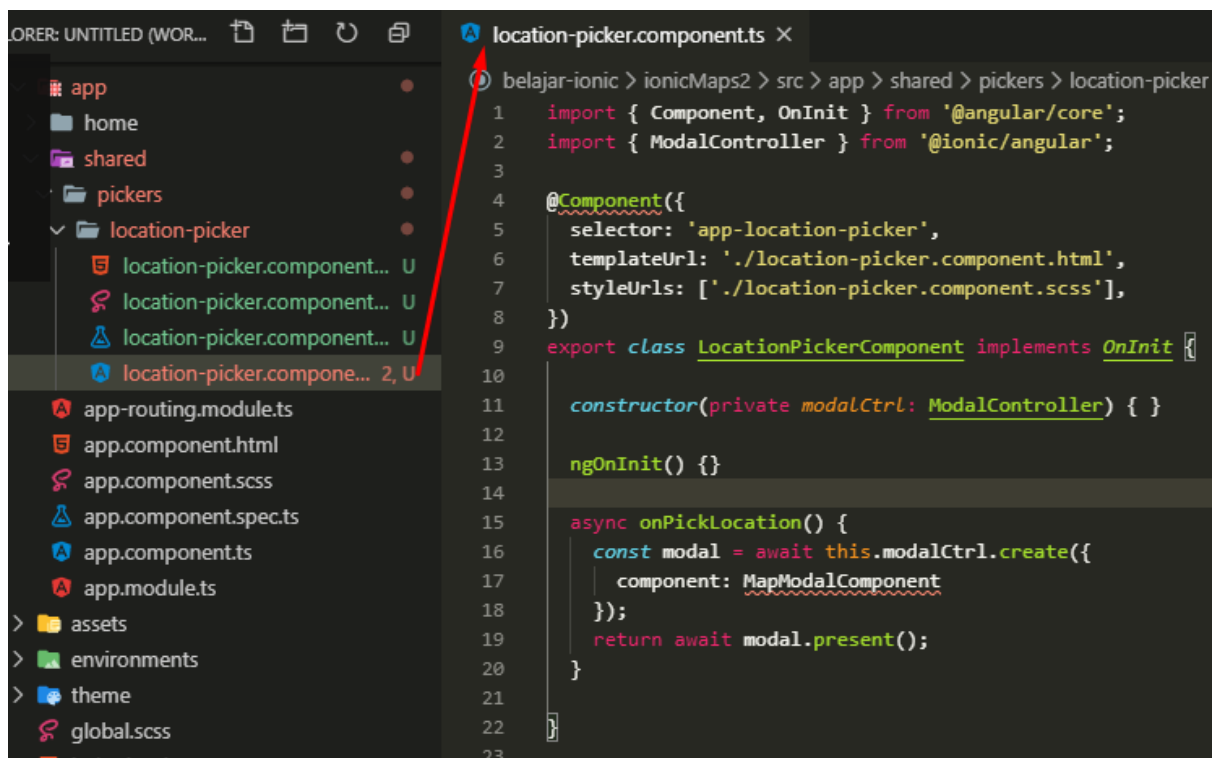
Generate component location-picker

```
D:\belajar-ionic\ionicMaps2> ionic generate component shared/pickers/location-picker
```

Tambahkan kode berikut



```
location-picker.component.html
1 <div>
2   <ion-button color="primary" (click)="onPickLocation()">
3     <ion-icon name="map" slot="start"></ion-icon>
4     <ion-label>Select Location</ion-label>
5   </ion-button>
6 </div>
```

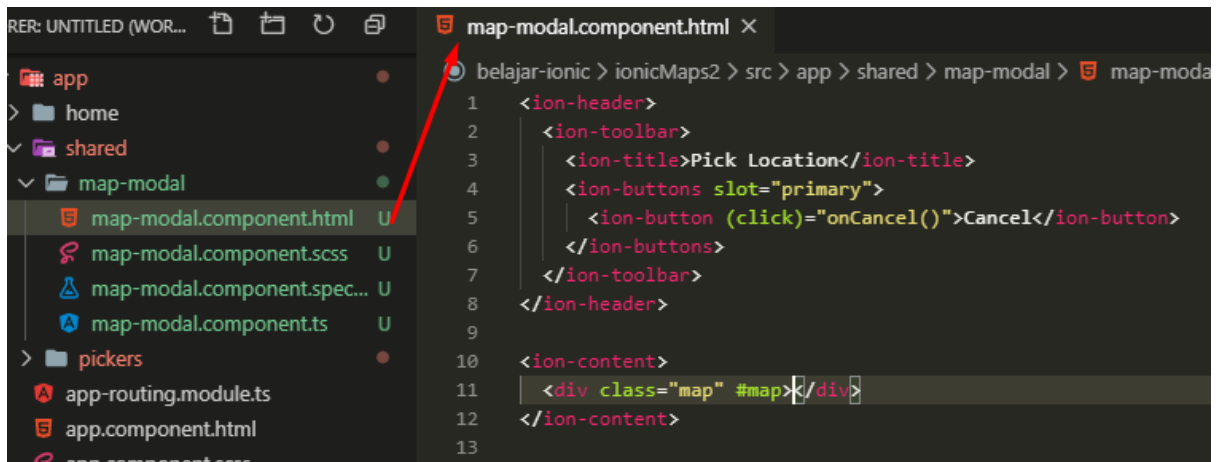


```
location-picker.component.ts
1 import { Component, OnInit } from '@angular/core';
2 import { ModalController } from '@ionic/angular';
3
4 @Component({
5   selector: 'app-location-picker',
6   templateUrl: './location-picker.component.html',
7   styleUrls: ['./location-picker.component.scss'],
8 })
9 export class LocationPickerComponent implements OnInit {
10
11   constructor(private modalCtrl: ModalController) { }
12
13   ngOnInit() {}
14
15   async onPickLocation() {
16     const modal = await this.modalCtrl.create({
17       component: MapModalComponent
18     });
19     return await modal.present();
20   }
21
22 }
```

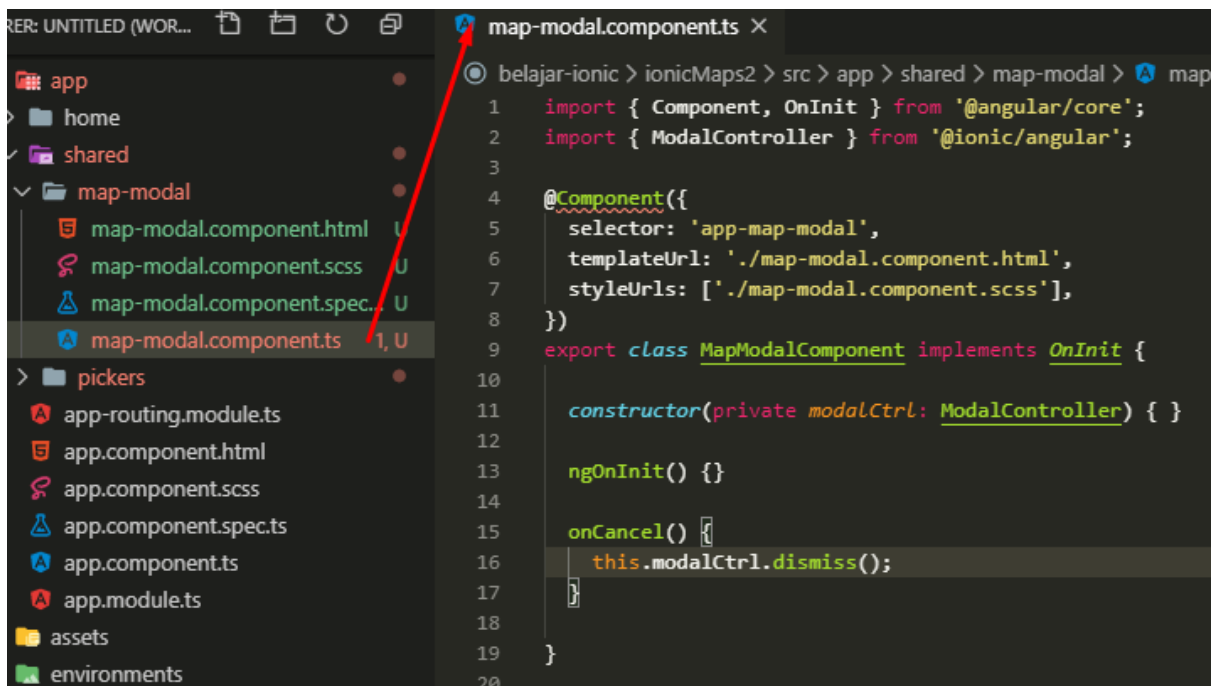
Buat component map-modal

```
D:\belajar-ionic\ionicMaps2> ionic generate component shared/map-modal
```

Tambahkan kode berikut



```
1 <ion-header>
2   <ion-toolbar>
3     <ion-title>Pick Location</ion-title>
4     <ion-buttons slot="primary">
5       <ion-button (click)="onCancel()">Cancel</ion-button>
6     </ion-buttons>
7   </ion-toolbar>
8 </ion-header>
9
10 <ion-content>
11   <div class="map" #map></div>
12 </ion-content>
13
```

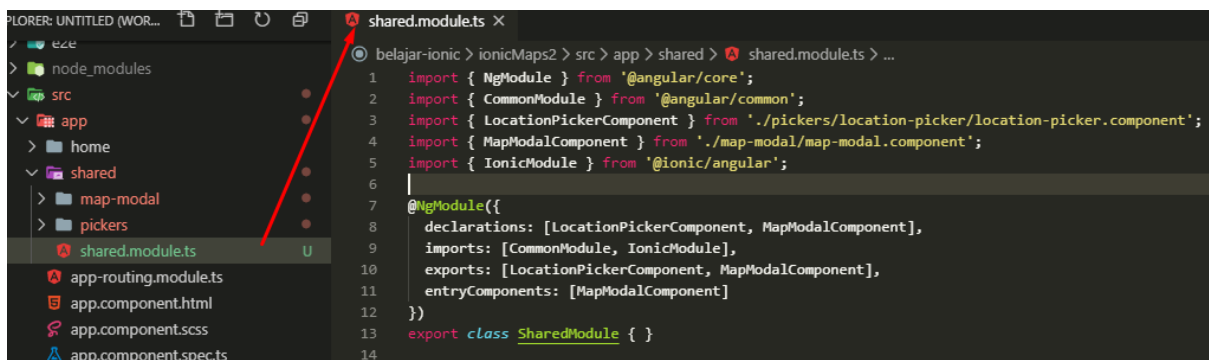


```
1 import { Component, OnInit } from '@angular/core';
2 import { ModalController } from '@ionic/angular';
3
4 @Component({
5   selector: 'app-map-modal',
6   templateUrl: './map-modal.component.html',
7   styleUrls: ['./map-modal.component.scss'],
8 })
9 export class MapModalComponent implements OnInit {
10
11   constructor(private modalCtrl: ModalController) { }
12
13   ngOnInit() {}
14
15   onCancel() {
16     this.modalCtrl.dismiss();
17   }
18
19 }
20
```

Buat modul shared

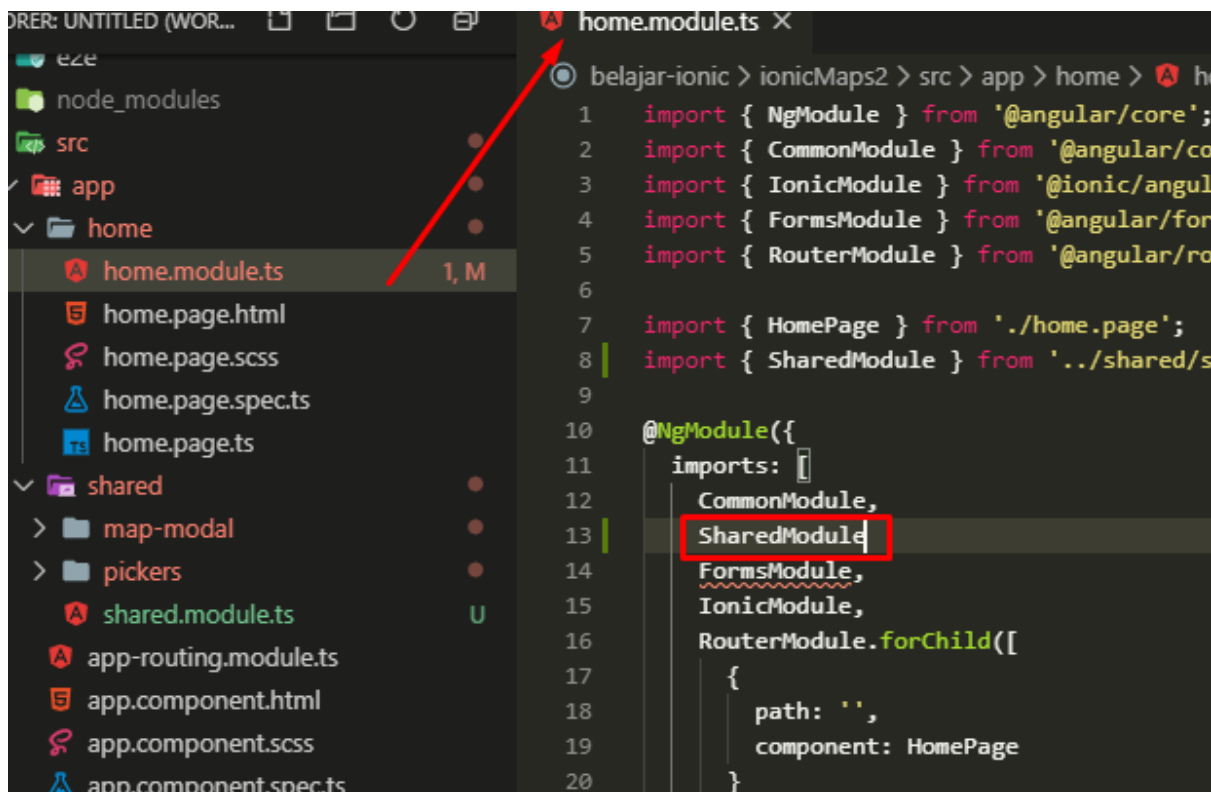
```
D:\belajar-ionic\ionicMaps2> ionic generate module shared
```

Tambahkan kode berikut



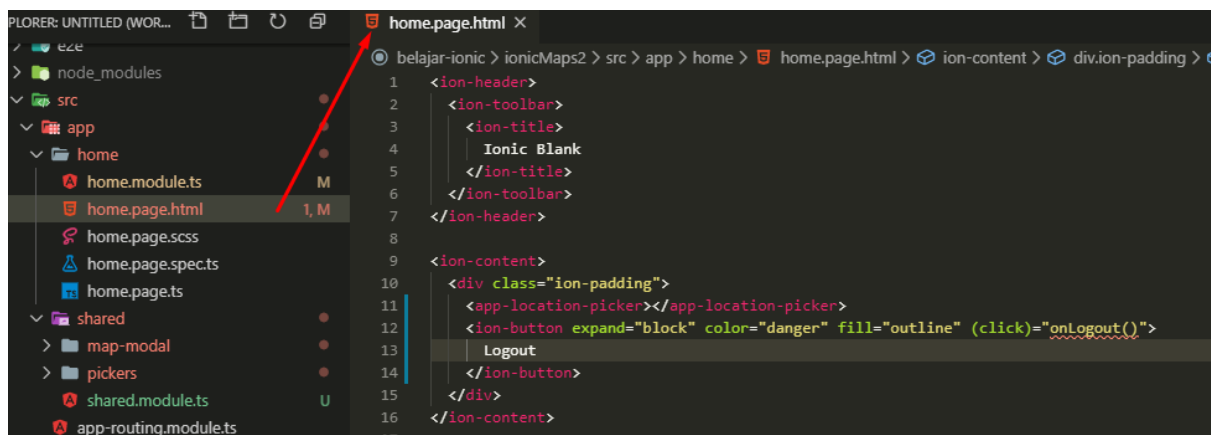
```
1 import { NgModule } from '@angular/core';
2 import { CommonModule } from '@angular/common';
3 import { LocationPickerComponent } from '../pickers/location-picker/location-picker.component';
4 import { MapModalComponent } from '../map-modal/map-modal.component';
5 import { IonicModule } from '@ionic/angular';
6
7 @NgModule({
8   declarations: [LocationPickerComponent, MapModalComponent],
9   imports: [CommonModule, IonicModule],
10   exports: [LocationPickerComponent, MapModalComponent],
11   entryComponents: [MapModalComponent]
12 })
13 export class SharedModule { }
14
```

Tambahkan kode berikut



```
1 import { NgModule } from '@angular/core';
2 import { CommonModule } from '@angular/common';
3 import { IonicModule } from '@ionic/angular';
4 import { FormsModule } from '@angular/forms';
5 import { RouterModule } from '@angular/router';
6
7 import { HomePage } from './home.page';
8 import { SharedModule } from '../shared/shared.module';
9
10 @NgModule({
11   imports: [
12     CommonModule,
13     SharedModule,
14     FormsModule,
15     IonicModule,
16     RouterModule.forChild([
17       {
18         path: '',
19         component: HomePage
20       }
21     ])
22   ]
23 })
24 export class AppModule {}
```

Tambahkan kode berikut



```
1 <ion-header>
2   <ion-toolbar>
3     <ion-title>
4       Ionic Blank
5     </ion-title>
6   </ion-toolbar>
7 </ion-header>
8
9 <ion-content>
10   <div class="ion-padding">
11     <app-location-picker></app-location-picker>
12     <ion-button expand="block" color="danger" fill="outline" (click)="onLogout()">
13       Logout
14     </ion-button>
15   </div>
16 </ion-content>
```

Coba jalankan di browser, akan muncul seperti berikut

Ionic Blank

 SELECT LOCATION

LOGOUT

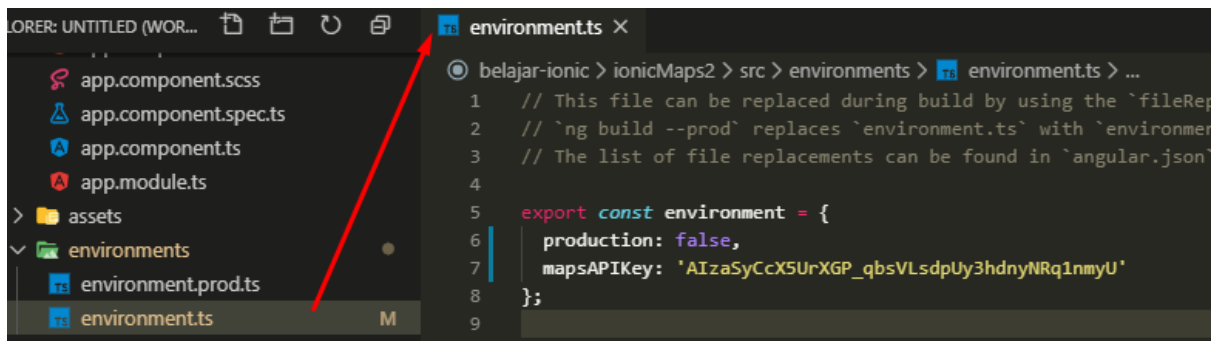
Maps Method 1

Jalankan command berikut

```
D:\belajar-ionic\ionicMaps2> npm install @agm/core
```

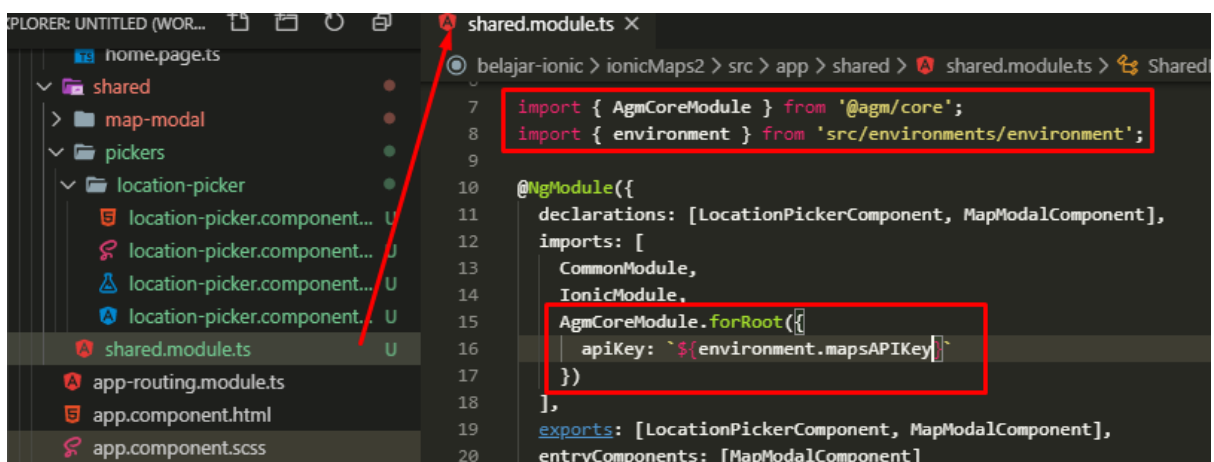
mapsAPIKey: AIzaSyCcX5UrXGP_qbsVLsdpUy3hdnyNRq1nmyU

Tambahkan maps Apikey ke environment



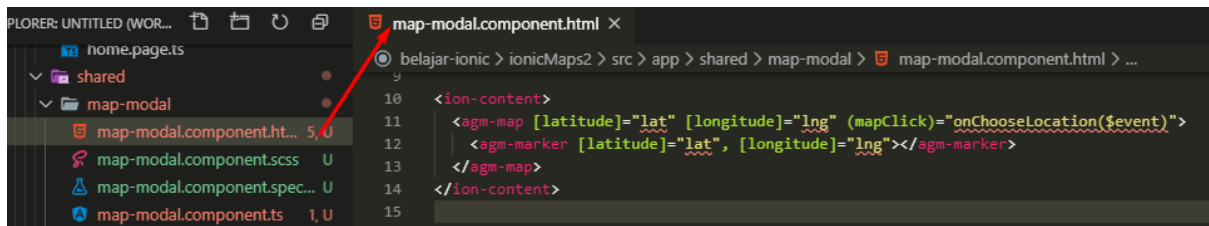
```
environment.ts
1 // This file can be replaced during build by using the `fileReplacements` property in the `angular.json` file.
2 // `ng build --prod` replaces `environment.ts` with `environment.prod.ts`.
3 // The list of file replacements can be found in `angular.json`.
4
5 export const environment = {
6   production: false,
7   mapsAPIKey: 'AIzaSyCcX5UrXGP_qbsVLsdpUy3hdnyNRq1nmyU'
8 };
9
```

Tambahkan kode berikut pada shared module

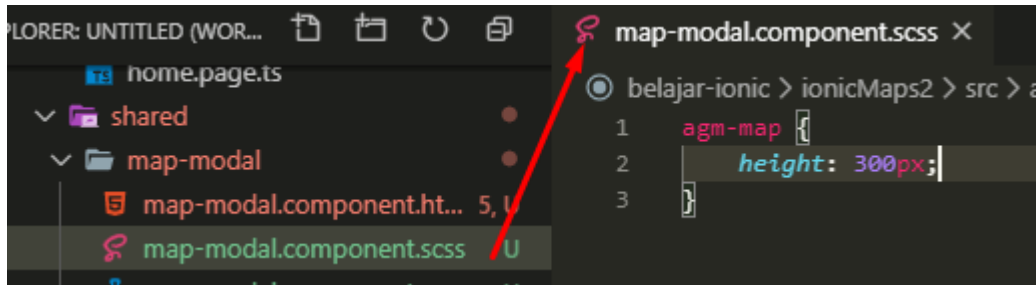


```
shared.module.ts
7 import { AgmCoreModule } from '@agm/core';
8 import { environment } from 'src/environments/environment';
9
10 @NgModule({
11   declarations: [LocationPickerComponent, MapModalComponent],
12   imports: [
13     CommonModule,
14     IonicModule,
15     AgmCoreModule.forRoot({
16       apiKey: `${environment.mapsAPIKey}`
17     })
18   ],
19   exports: [LocationPickerComponent, MapModalComponent],
20   entryComponents: [MapModalComponent]
21 })
22 export class SharedModule {}
```

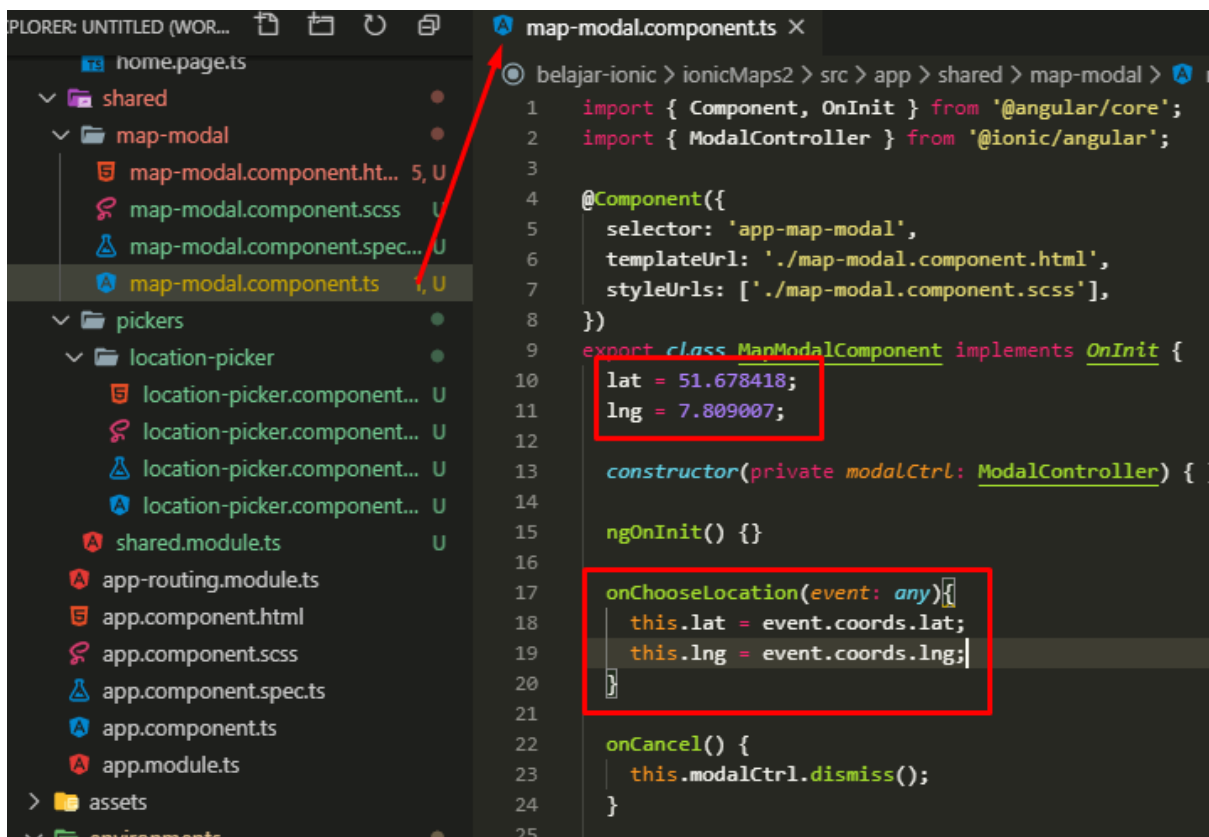
Tambahkan kode berikut



```
10 <ion-content>
11 <agm-map [latitude]="lat" [longitude]="lng" (mapClick)="onChooseLocation($event)">
12 <agm-marker [latitude]="lat", [longitude]="lng"></agm-marker>
13 </agm-map>
14 </ion-content>
15
```



```
1 agm-map {
2   height: 300px;
3 }
```



```
1 import { Component, OnInit } from '@angular/core';
2 import { ModalController } from '@ionic/angular';
3
4 @Component({
5   selector: 'app-map-modal',
6   templateUrl: './map-modal.component.html',
7   styleUrls: ['./map-modal.component.scss'],
8 })
9 export class MapModalComponent implements OnInit {
10   lat = 51.678418;
11   lng = 7.809007;
12
13   constructor(private modalCtrl: ModalController) {}
14
15   ngOnInit() {}
16
17   onChooseLocation(event: any) {
18     this.lat = event.coords.lat;
19     this.lng = event.coords.lng;
20   }
21
22   onCancel() {
23     this.modalCtrl.dismiss();
24   }
25 }
```

Coba di browser

Pick Location

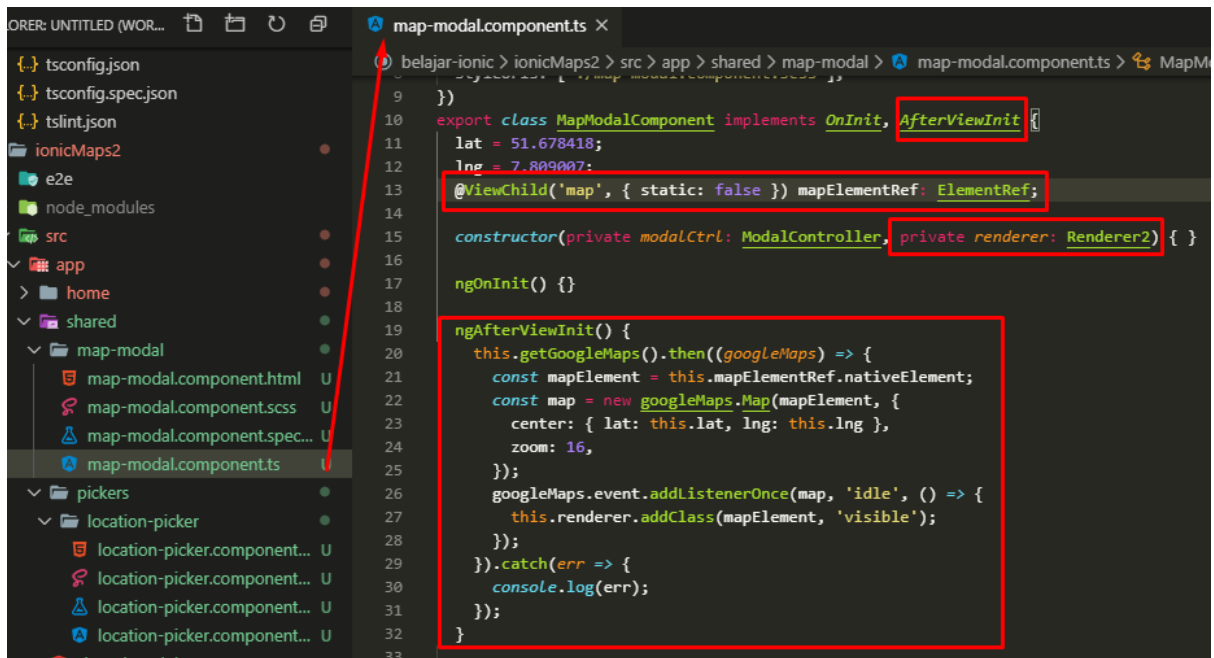
CANCEL



Metode 2

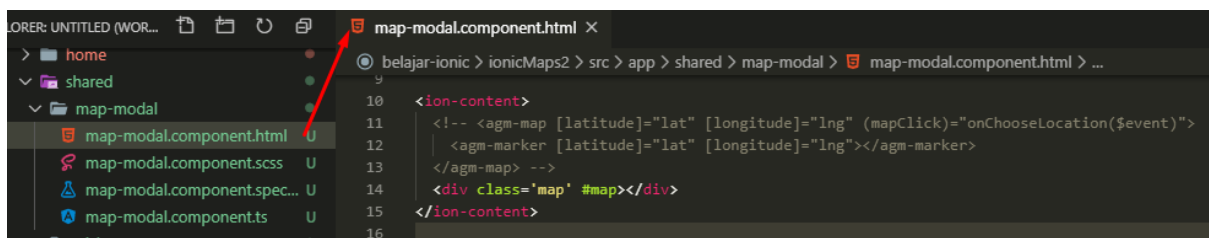
Tambahkan kode berikut

```
map-modal.component.ts
24 private getGoogleMaps(): Promise<any> {
25   const win = window as any;
26   const googleModule = win.google;
27   if (googleModule && googleModule.maps) {
28     return Promise.resolve(googleModule.maps);
29   }
30   return new Promise((resolve, reject) => {
31     const script = document.createElement('script');
32     script.src = 'https://maps.googleapis.com/maps/api/js?key=${environment.mapsApiKey}&callback=initMap';
33     script.async = true;
34     script.defer = true;
35     document.body.appendChild(script);
36     script.onload = () => {
37       const loadedGoogleModule = win.google;
38       if (loadedGoogleModule && loadedGoogleModule.maps) {
39         resolve(loadedGoogleModule.maps);
40       } else {
41         reject('Google maps SDK is not available');
42       }
43     };
44   });
45 }
```



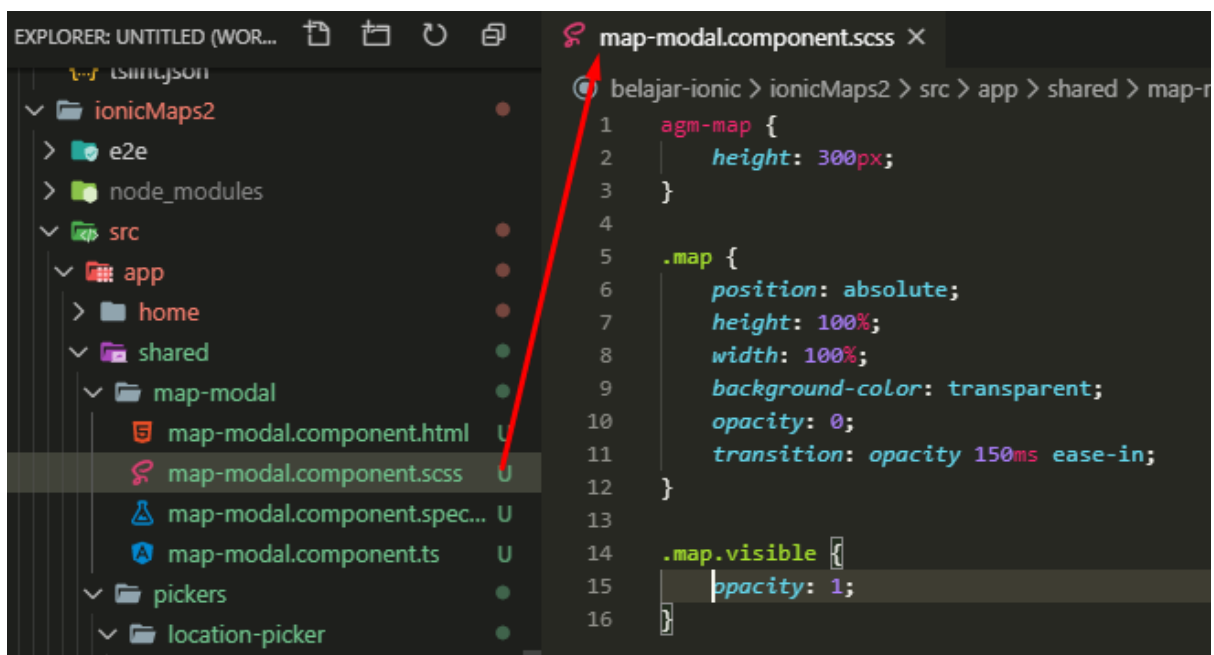
```
9  })
10 export class MapModalComponent implements OnInit, AfterViewInit {
11   lat = 51.678418;
12   lng = 7.809007;
13   @ViewChild('map', { static: false }) mapElementRef: ElementRef;
14
15   constructor(private modalCtrl: ModalController, private renderer: Renderer2) { }
16
17   ngOnInit() {}
18
19   ngAfterViewInit() {
20     this.getGoogleMaps().then((googleMaps) => {
21       const mapElement = this.mapElementRef.nativeElement;
22       const map = new googleMaps.Map(mapElement, {
23         center: { lat: this.lat, lng: this.lng },
24         zoom: 16,
25       });
26       googleMaps.event.addListenerOnce(map, 'idle', () => {
27         this.renderer.addClass(mapElement, 'visible');
28       });
29     }).catch(err => {
30       console.log(err);
31     });
32   }
33 }
```

Modifikasi menjadi seperti berikut



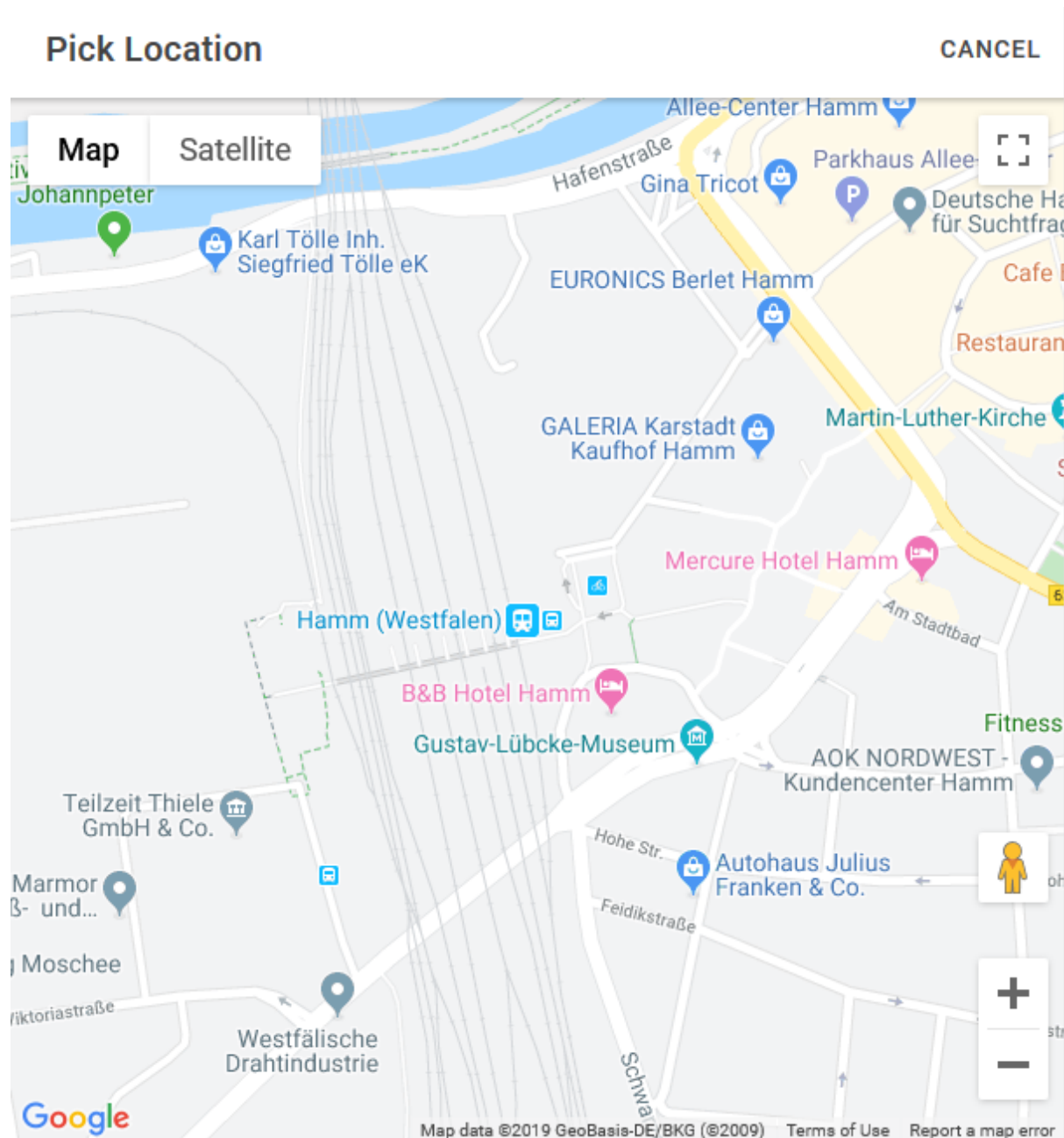
```
10 <ion-content>
11 <!-- <agm-map [latitude]="lat" [longitude]="lng" (mapClick)="onChooseLocation($event)" -->
12 <agm-marker [latitude]="lat" [longitude]="lng"></agm-marker>
13 </agm-map -->
14 <div class='map' #map></div>
15 </ion-content>
16
```

Tambahkan style



```
1 agm-map {
2   height: 300px;
3 }
4
5 .map {
6   position: absolute;
7   height: 100%;
8   width: 100%;
9   background-color: transparent;
10  opacity: 0;
11  transition: opacity 150ms ease-in;
12 }
13
14 .map.visible {
15   opacity: 1;
16 }
```


Lihat hasilnya di browser



Tambahkan marker


```
EXPLORER: UNTITLED (WOR...  
  {} tsconfig.json  
  {} tsconfig.spec.json  
  {} tslint.json  
  ionicMaps2  
    > e2e  
    > node_modules  
    > src  
      > app  
        > home  
        > shared  
          > map-modal  
            map-modal.component.html  
            map-modal.component.scss  
            map-modal.component.spec...  
            map-modal.component.ts  
          > pickers  
            > location-picker  
              location-picker.component...  
              location-picker.component...  
              location-picker.component...  
              location-picker.component...  
            shared.module.ts  
  map-modal.component.ts  
    17 ngOnInit() {}  
    18  
    19 ngAfterViewInit() {  
    20     this.getGoogleMaps().then((googleMaps) => {  
    21       const mapElement = this.mapElementRef.nativeElement;  
    22       const map = new googleMaps.Map(mapElement, {  
    23         center: { lat: this.lat, lng: this.lng },  
    24         zoom: 16,  
    25       });  
    26       googleMaps.event.addListenerOnce(map, 'idle', () => {  
    27         this.renderer.addClass(mapElement, 'visible');  
    28       });  
    29       const marker = new googleMaps.Marker({ position: { lat: this.lat, lng: this.lng }, map });  
    30       console.log(marker);  
    31       map.addListener('click', event => {  
    32         const selectedCoords = {  
    33           lat: event.latLng.lat(),  
    34           lng: event.latLng.lng(),  
    35         };  
    36         this.modalCtrl.dismiss(selectedCoords);  
    37       });  
    38     }).catch(err => {  
    39       console.log(err);  
    40     });  
    41   }  
  }
```

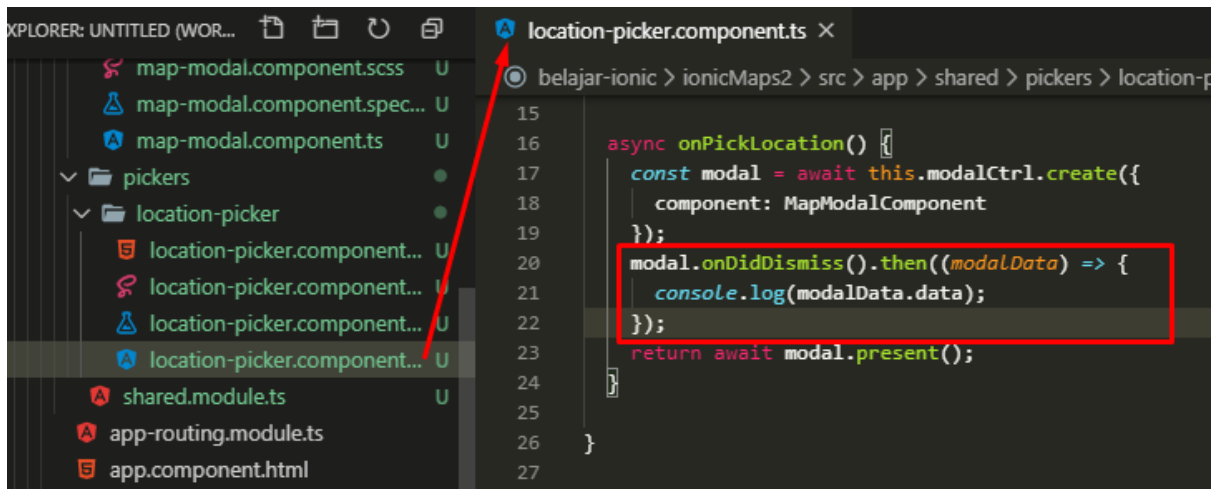
Lihat hasilnya di browser

Pick Location

CANCEL



Tambahkan kode berikut



Coba di browser

```
Object { lat: 51.68014766342161, lng: 7.806035112411564 }
```

+++++

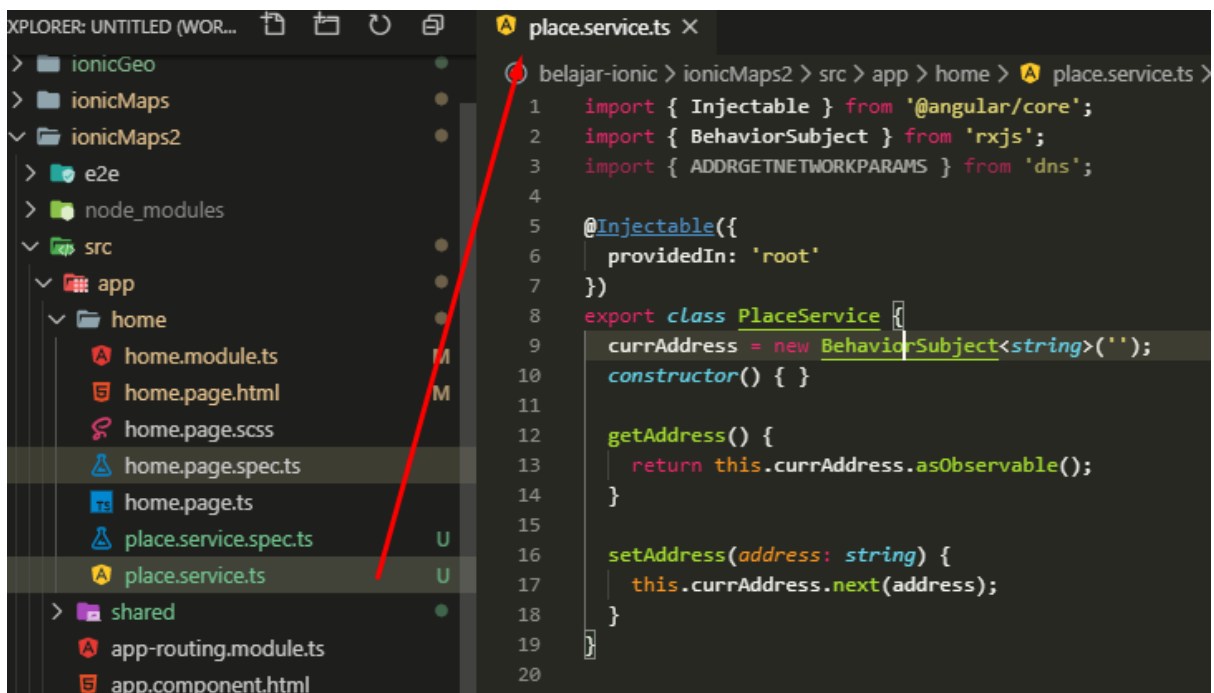
TAMBAHAN

Menampilkan alamat

Buat place service

```
D:\belajar-ionic\ionicMaps2> ionic generate service home/place
```

Tambahkan kode berikut



EXPLORER: UNTITLE...

home.page.html X

belajar-ionic > ionicMaps2 > src > app > home > home.page.html > ion-content > div.ion-padding

```
1 <ion-header>
2   <ion-toolbar>
3     <ion-title>
4       Ionic Blank
5     </ion-title>
6   </ion-toolbar>
7 </ion-header>
8
9 <ion-content>
10  <div class="ion-padding">
11    <app-location-picker></app-location-picker>
12    <ion-button expand="block" color="danger" fill="outline" (click)="onLogout()">
13      Logout
14    </ion-button>
15    <ion-label *ngIf="address">Address: {{ address }}</ion-label>
16  </div>
17 </ion-content>
18
```

EXPLORER: UNTITLE...

home.page.ts X

belajar-ionic > ionicMaps2 > src > app > home > home.page.ts

```
1 import { Component, OnInit } from '@angular/core';
2 import { PlaceService } from '../place.service';
3
4 @Component({
5   selector: 'app-home',
6   templateUrl: 'home.page.html',
7   styleUrls: ['home.page.scss'],
8 })
9 export class HomePage implements OnInit {
10   address = '';
11
12   constructor(private placeSvc: PlaceService) {}
13
14   ngOnInit() {
15     this.placeSvc.getAddress().subscribe(
16       currAddress => {
17         this.address = currAddress;
18       }
19     );
20   }
21 }
22
```

location-picker.component.ts

```
9
10 @Component({
11   selector: 'app-location-picker',
12   templateUrl: './location-picker.component.html',
13   styleUrls: ['./location-picker.component.scss'],
14 })
15 export class LocationPickerComponent implements OnInit {
16
17   constructor(private modalCtrl: ModalController, private http: HttpClient, private placeSvc: PlaceService) {}
18
19   ngOnInit() {}
20
21   async onPickLocation() {
22     const modal = await this.modalCtrl.create({
23       component: MapModalComponent
24     });
25     modal.onDidDismiss().then((modalData) => {
26       console.log(modalData.data);
27       this.getAddress(modalData.data.lat, modalData.data.lng).subscribe(
28         (address) => {
29           this.placeSvc.setAddress(address);
30           console.log(address);
31         }
32       );
33     });
34     return await modal.present();
35   }
36 }
```

location-picker.component.ts

```
34   return await modal.present();
35 }
36
37 private getAddress(lat: number, lng: number) {
38   return this.http.get<any>(`https://maps.googleapis.com/maps/api/geocode/json?latlng=${lat},${lng}&key=${
39     environment.mapsAPIKey
40   }`)
41     .pipe(
42       map(geoData => {
43         if (!geoData || !geoData.results || !geoData.results.length) {
44           return null;
45         }
46         return geoData.results[0].formatted_address;
47       })
48     );
49 }
```