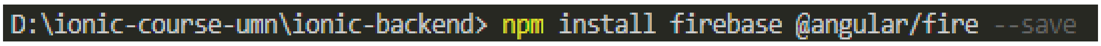
Start new blank Ionic Project

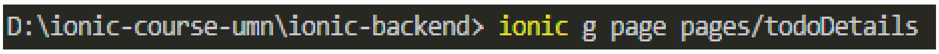
Install firebase angularFire

https://github.com/angular/angularfire



```
D:\ionic-course-umn\ionic-backend> npm install firebase @angular/fire --save
```

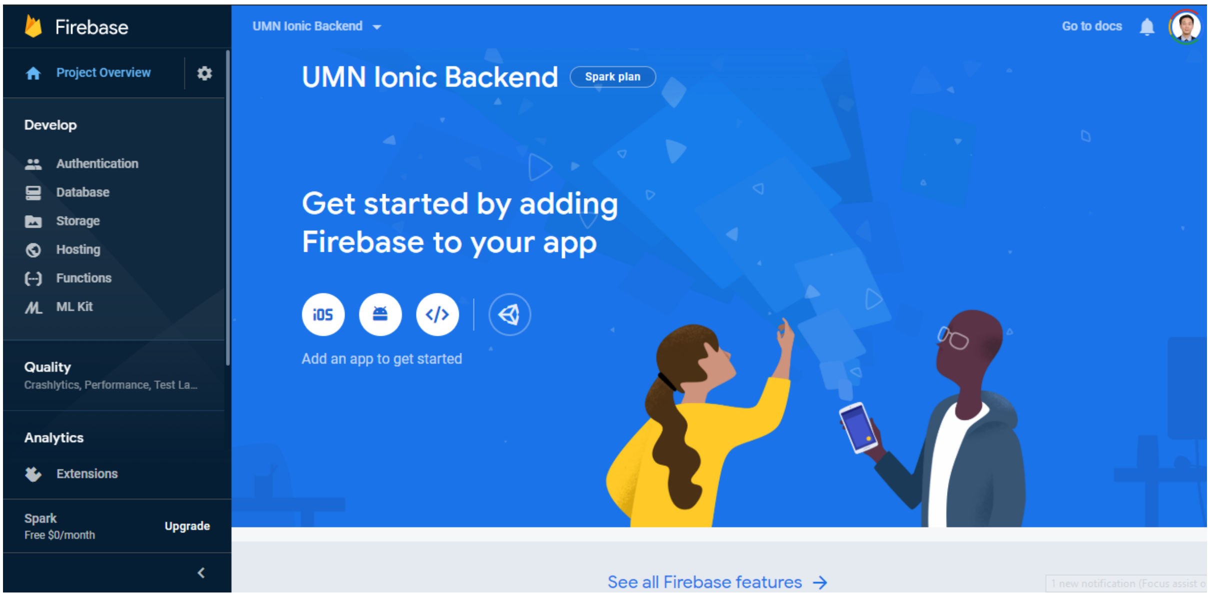
Buat page



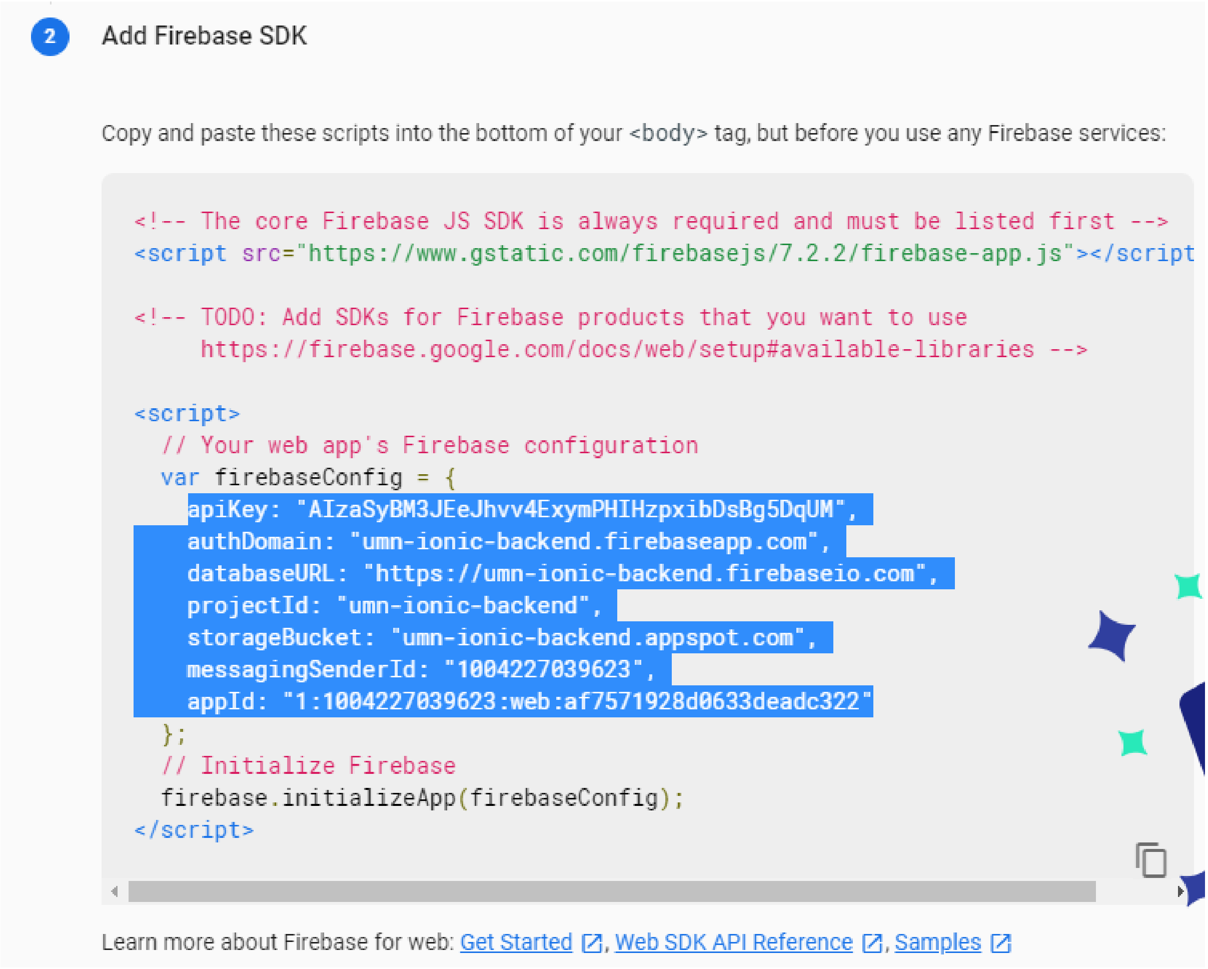
```
D:\ionic-course-umn\ionic-backend> ionic g page pages/todoDetails
```

Buat service todo

Buat Project Baru di Firebase



Copas bagian ini



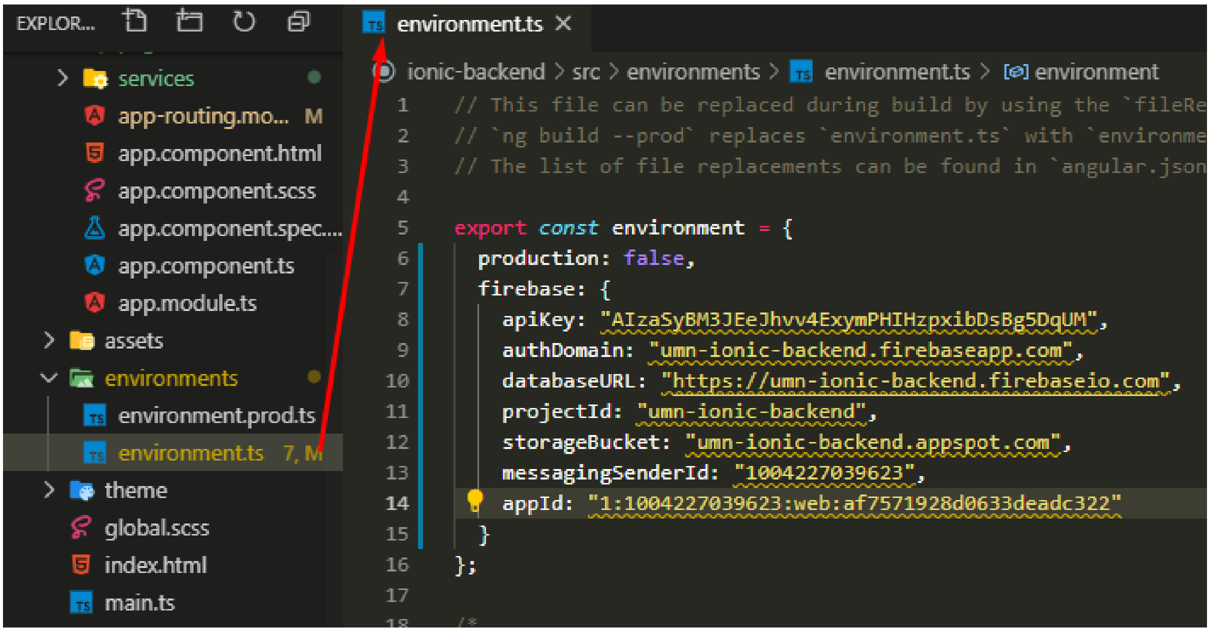
2 Add Firebase SDK

Copy and paste these scripts into the bottom of your <body> tag, but before you use any Firebase services:

```
<!-- The core Firebase JS SDK is always required and must be listed first -->
<script src="https://www.gstatic.com/firebasejs/7.2.2/firebase-app.js"></script

<!-- TODO: Add SDKs for Firebase products that you want to use
     https://firebase.google.com/docs/web/setup#available-libraries -->

<script>
  // Your web app's Firebase configuration
  var firebaseConfig = {
    apiKey: "AIzaSyBM3JEeJhvv4ExymPHIHzpxibDsBg5DqUM",
    authDomain: "umn-ionic-backend.firebaseapp.com",
    databaseURL: "https://umn-ionic-backend.firebaseio.com",
    projectId: "umn-ionic-backend",
    storageBucket: "umn-ionic-backend.appspot.com",
    messagingSenderId: "1004227039623",
    appId: "1:1004227039623:web:af7571928d0633deadc322"
  };
  // Initialize Firebase
  firebase.initializeApp(firebaseConfig);
</script>
```

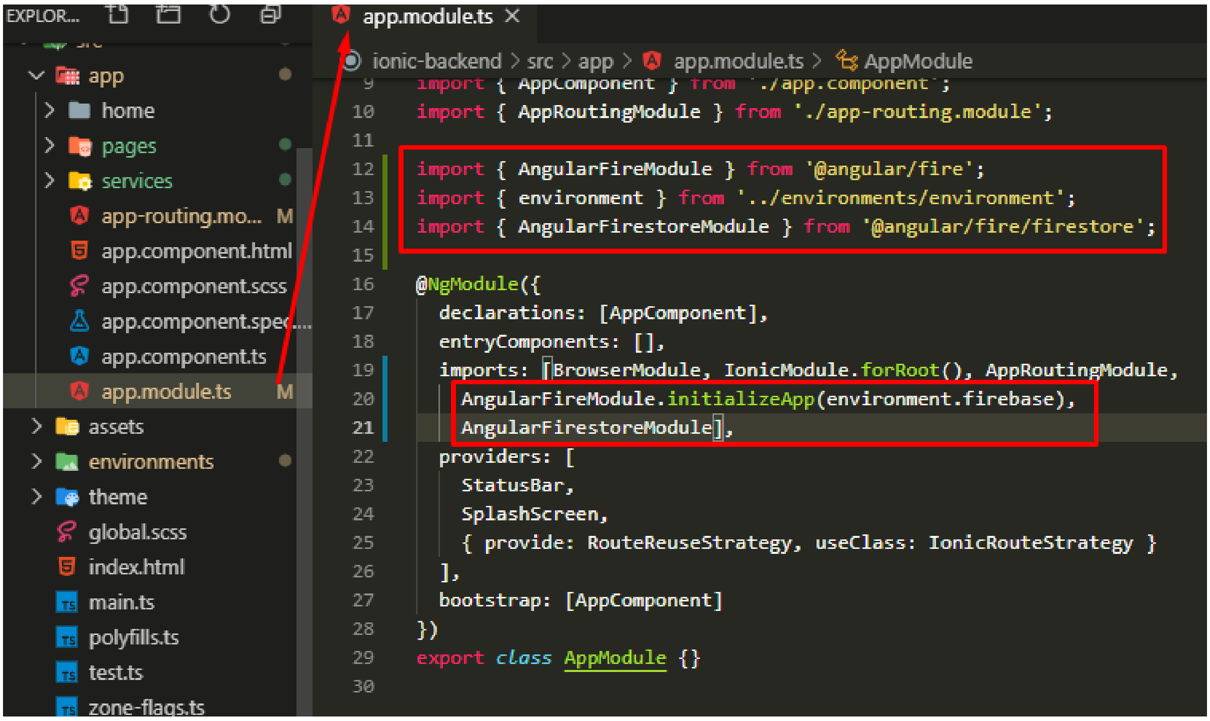
Learn more about Firebase for web: Get Started, Web SDK API Reference, Samples

Set environment



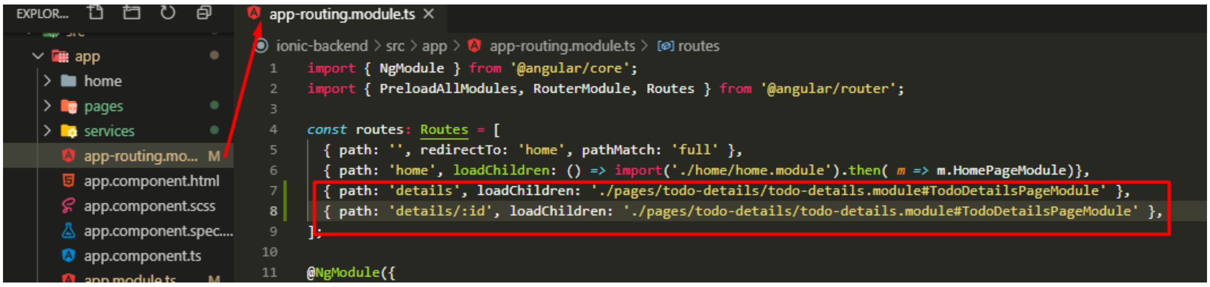
```
// This file can be replaced during build by using the `fileRe
// `ng build --prod` replaces `environment.ts` with `environme
// The list of file replacements can be found in `angular.json

export const environment = {
  production: false,
  firebase: {
    apiKey: "AIzaSyBM3JEeJhvv4ExymPHIHzpxibDsBg5DqUM",
    authDomain: "umn-ionic-backend.firebaseapp.com",
    databaseURL: "https://umn-ionic-backend.firebaseio.com",
    projectId: "umn-ionic-backend",
    storageBucket: "umn-ionic-backend.appspot.com",
    messagingSenderId: "1004227039623",
    appId: "1:1004227039623:web:af7571928d0633deadc322"
  }
};

/*
```

Tambahkan kode berikut



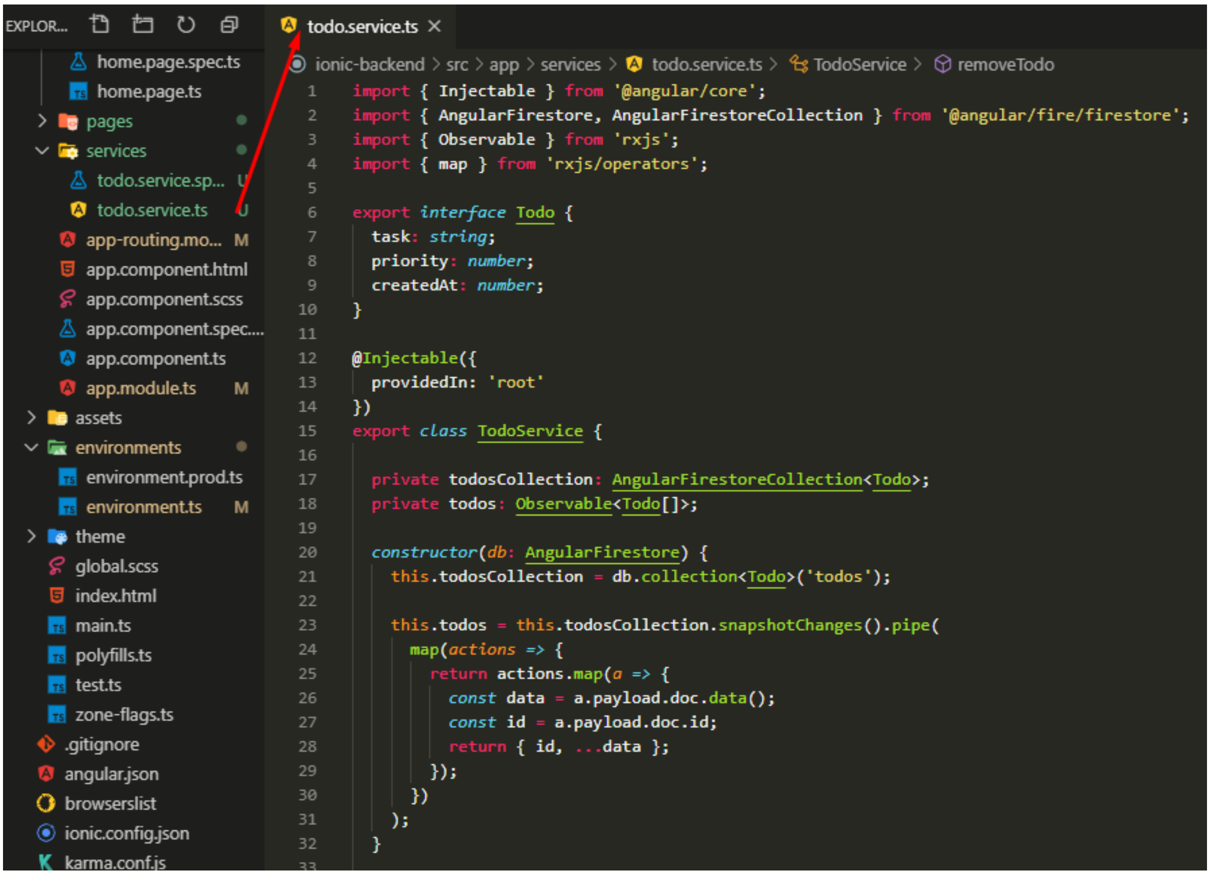
```
import { AppComponent } from './app.component';
import { AppRoutingModule } from './app-routing.module';

import { AngularFireModule } from '@angular/fire';
import { environment } from '../environments/environment';
import { AngularFirestoreModule } from '@angular/fire/firestore';

@NgModule({
  declarations: [AppComponent],
  entryComponents: [],
  imports: [BrowserModule, IonicModule.forRoot(), AppRoutingModule,
    AngularFireModule.initializeApp(environment.firebase),
    AngularFirestoreModule],
  providers: [
    StatusBar,
    SplashScreen,
    { provide: RouteReuseStrategy, useClass: IonicRouteStrategy }
  ],
  bootstrap: [AppComponent]
})
export class AppModule {}
```

Ubah routing menjadi

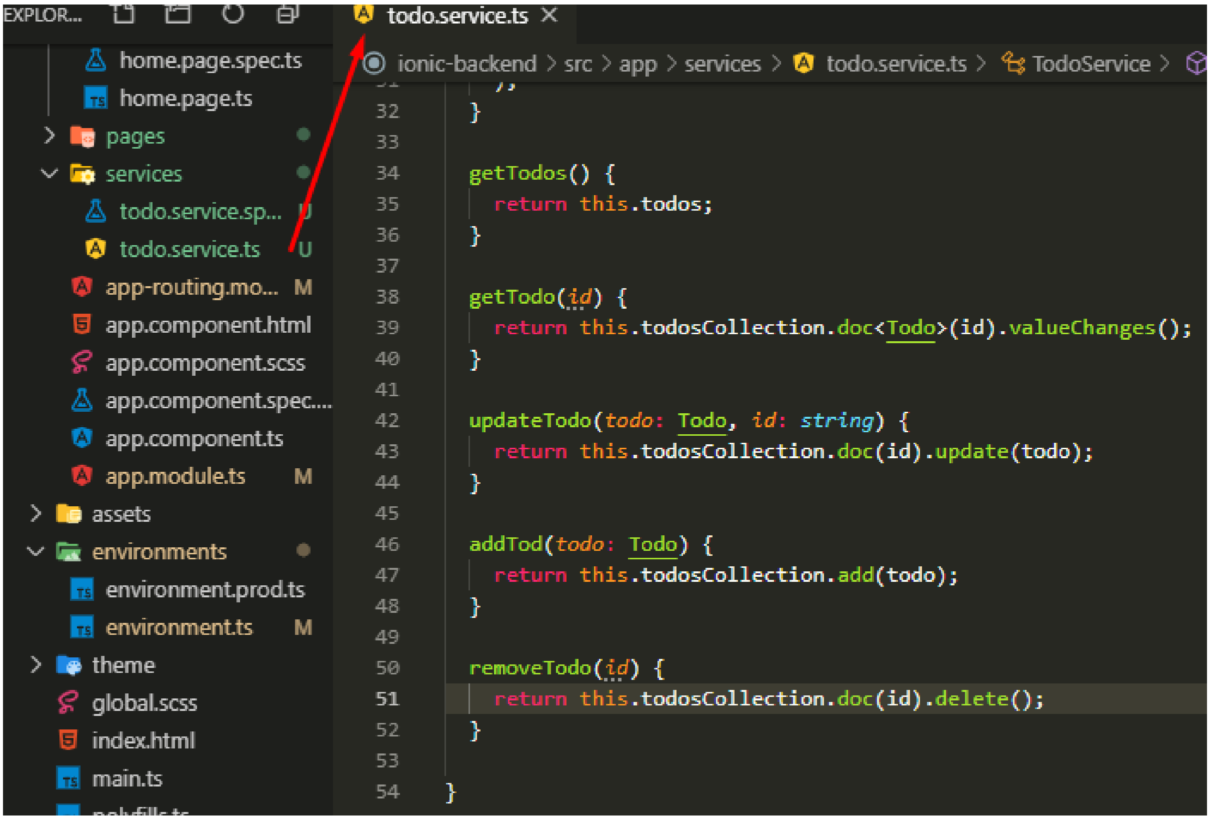


```
import { NgModule } from '@angular/core';
import { PreloadAllModules, RouterModule, Routes } from '@angular/router';

const routes: Routes = [
  { path: '', redirectTo: 'home', pathMatch: 'full' },
  { path: 'home', loadChildren: () => import('./home/home.module').then( m => m.HomePageModule)},
  { path: 'details', loadChildren: './pages/todo-details/todo-details.module#TodoDetailsPageModule' },
  { path: 'details/:id', loadChildren: './pages/todo-details/todo-details.module#TodoDetailsPageModule' },
];

@NgModule({
```

Todo service

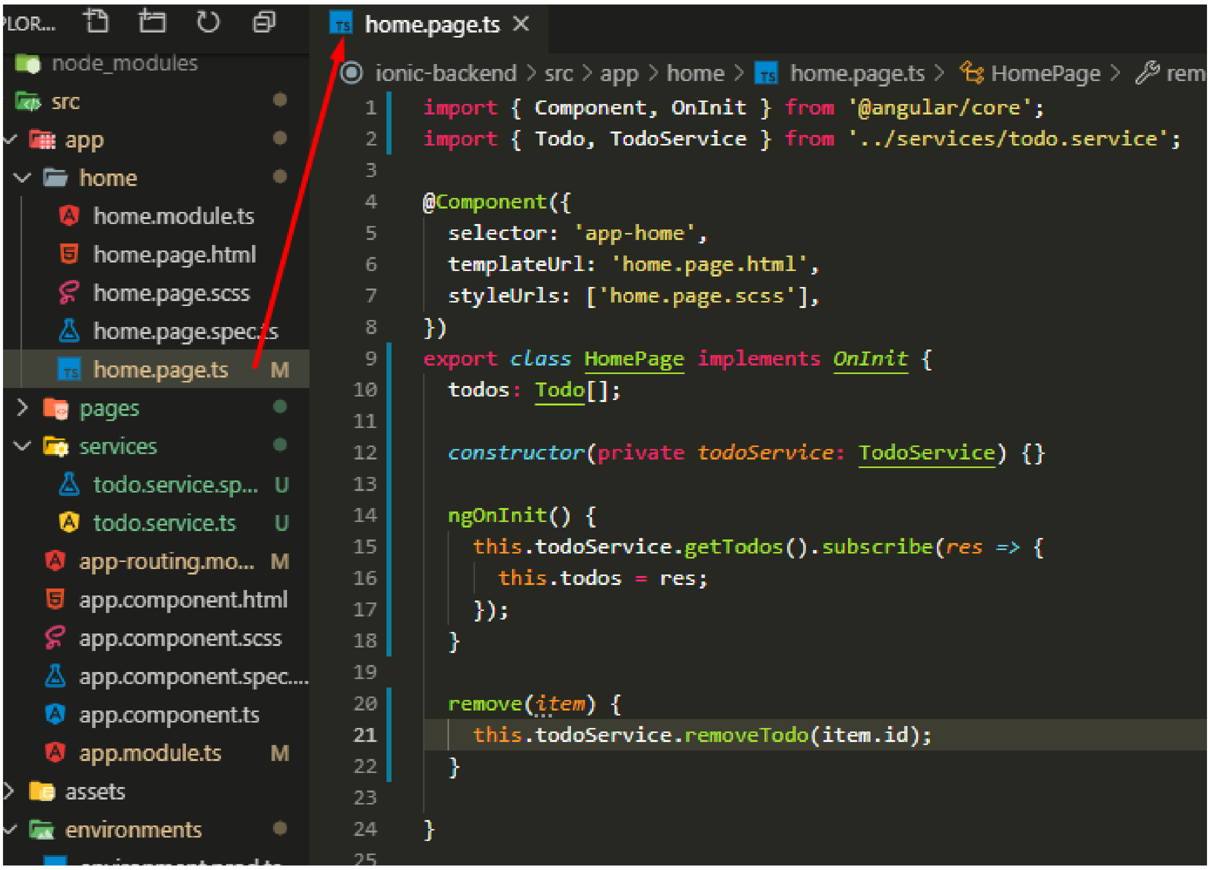


```typescript
import { Injectable } from '@angular/core';
import { AngularFirestore, AngularFirestoreCollection } from '@angular/fire/firestore';
import { Observable } from 'rxjs';
import { map } from 'rxjs/operators';

export interface Todo {
  task: string;
  priority: number;
  createdAt: number;
}

@Injectable({
  providedIn: 'root'
})
export class TodoService {

  private todosCollection: AngularFirestoreCollection<Todo>;
  private todos: Observable<Todo[]>;

  constructor(db: AngularFirestore) {
    this.todosCollection = db.collection<Todo>('todos');

    this.todos = this.todosCollection.snapshotChanges().pipe(
      map(actions => {
        return actions.map(a => {
          const data = a.payload.doc.data();
          const id = a.payload.doc.id;
          return { id, ...data };
        });
      })
    );
  }
```



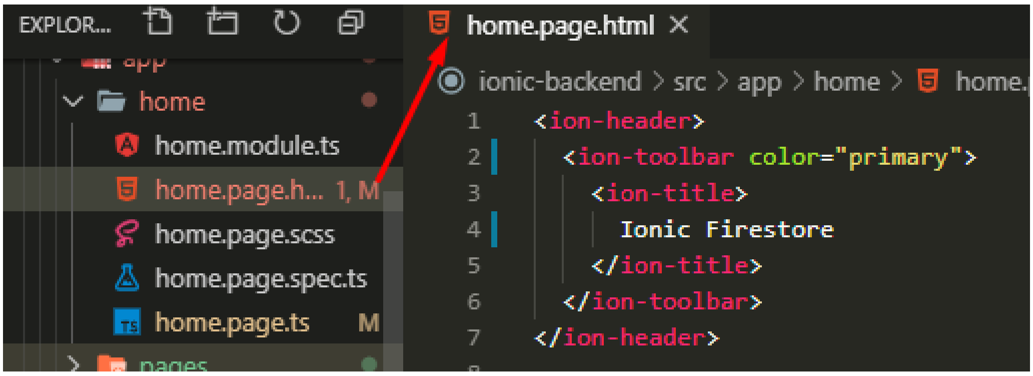
```typescript
  }

  getTodos() {
    return this.todos;
  }

  getTodo(id) {
    return this.todosCollection.doc<Todo>(id).valueChanges();
  }

  updateTodo(todo: Todo, id: string) {
    return this.todosCollection.doc(id).update(todo);
  }

  addTod(todo: Todo) {
    return this.todosCollection.add(todo);
  }

  removeTodo(id) {
    return this.todosCollection.doc(id).delete();
  }

}
```

Homepage.ts

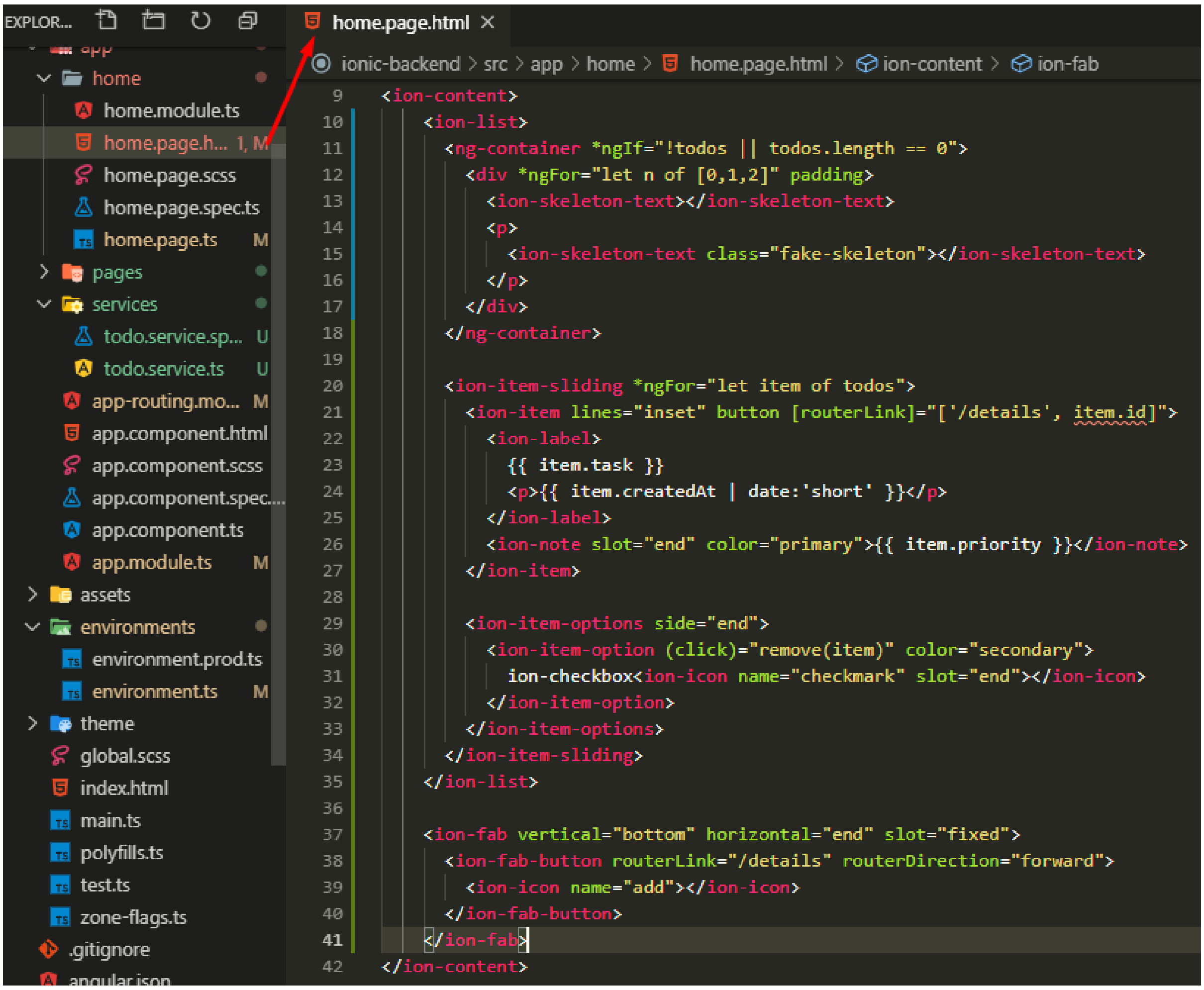


```
import { Component, OnInit } from '@angular/core';
import { Todo, TodoService } from '../services/todo.service';

@Component({
  selector: 'app-home',
  templateUrl: 'home.page.html',
  styleUrls: ['home.page.scss'],
})
export class HomePage implements OnInit {
  todos: Todo[];

  constructor(private todoService: TodoService) {}

  ngOnInit() {
    this.todoService.getTodos().subscribe(res => {
      this.todos = res;
    });
  }

  remove(item) {
    this.todoService.removeTodo(item.id);
  }

}
```

Home.page.html

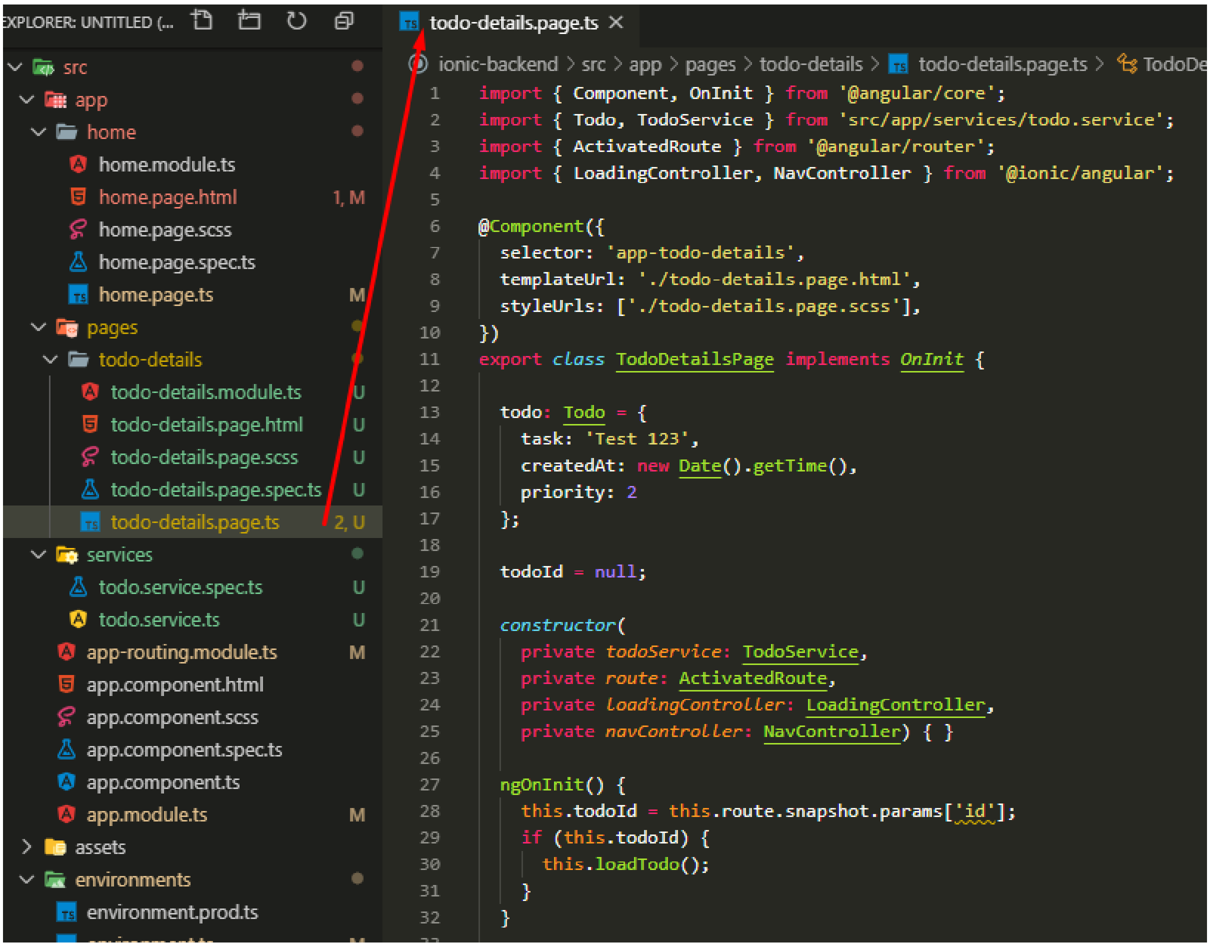


```
<ion-header>
  <ion-toolbar color="primary">
    <ion-title>
      Ionic Firestore
    </ion-title>
  </ion-toolbar>
</ion-header>
```

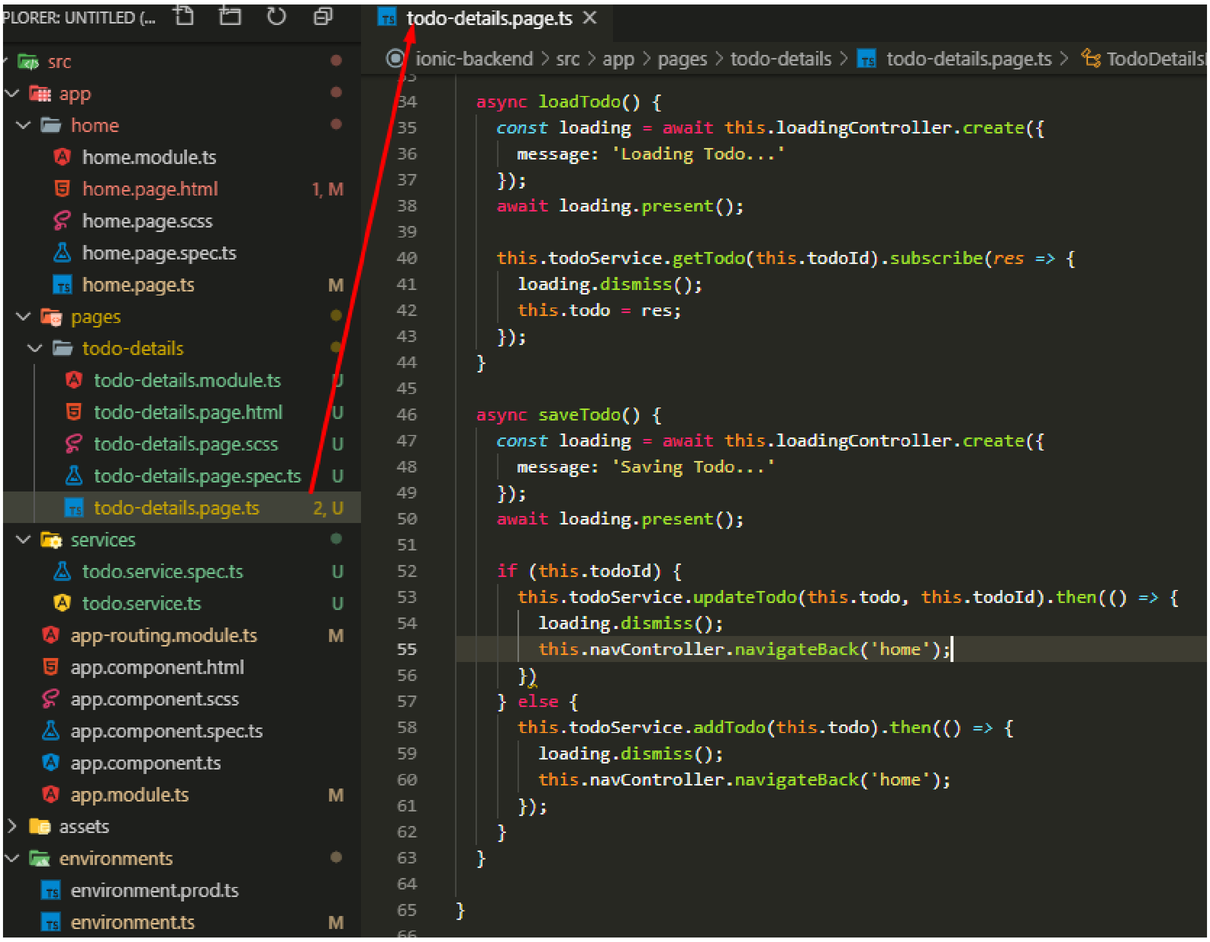


```html
<ion-content>
    <ion-list>
      <ng-container *ngIf="!todos || todos.length == 0">
        <div *ngFor="let n of [0,1,2]" padding>
          <ion-skeleton-text></ion-skeleton-text>
          <p>
            <ion-skeleton-text class="fake-skeleton"></ion-skeleton-text>
          </p>
        </div>
      </ng-container>

      <ion-item-sliding *ngFor="let item of todos">
        <ion-item lines="inset" button [routerLink]="['/details', item.id]">
          <ion-label>
            {{ item.task }}
            <p>{{ item.createdAt | date:'short' }}</p>
          </ion-label>
          <ion-note slot="end" color="primary">{{ item.priority }}</ion-note>
        </ion-item>

        <ion-item-options side="end">
          <ion-item-option (click)="remove(item)" color="secondary">
            ion-checkbox<ion-icon name="checkmark" slot="end"></ion-icon>
          </ion-item-option>
        </ion-item-options>
      </ion-item-sliding>
    </ion-list>

    <ion-fab vertical="bottom" horizontal="end" slot="fixed">
      <ion-fab-button routerLink="/details" routerDirection="forward">
        <ion-icon name="add"></ion-icon>
      </ion-fab-button>
    </ion-fab>
</ion-content>
```

Todo Details page



```
import { Component, OnInit } from '@angular/core';
import { Todo, TodoService } from 'src/app/services/todo.service';
import { ActivatedRoute } from '@angular/router';
import { LoadingController, NavController } from '@ionic/angular';

@Component({
  selector: 'app-todo-details',
  templateUrl: './todo-details.page.html',
  styleUrls: ['./todo-details.page.scss'],
})
export class TodoDetailsPage implements OnInit {

  todo: Todo = {
    task: 'Test 123',
    createdAt: new Date().getTime(),
    priority: 2
  };

  todoId = null;

  constructor(
    private todoService: TodoService,
    private route: ActivatedRoute,
    private loadingController: LoadingController,
    private navController: NavController) { }

  ngOnInit() {
    this.todoId = this.route.snapshot.params['id'];
    if (this.todoId) {
      this.loadTodo();
    }
  }
```

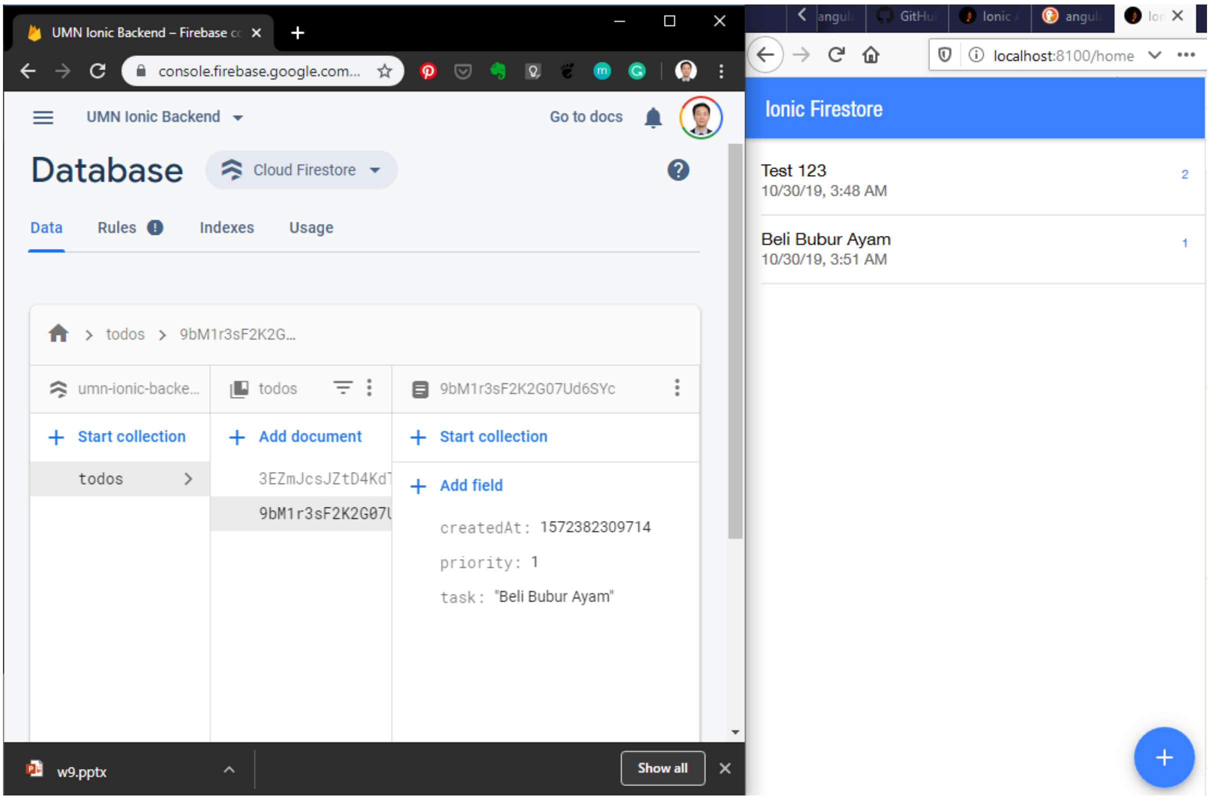


PLORER: UNTITLED (...
todo-details.page.ts ×
ionic-backend > src > app > pages > todo-details > todo-details.page.ts > TodoDetails

```
src
  app
    home
      home.module.ts
      home.page.html                 1, M
      home.page.scss
      home.page.spec.ts
      home.page.ts                   M
    pages
      todo-details
        todo-details.module.ts       U
        todo-details.page.html       U
        todo-details.page.scss       U
        todo-details.page.spec.ts    U
        todo-details.page.ts         2, U
    services
      todo.service.spec.ts           U
      todo.service.ts                U
    app-routing.module.ts            M
    app.component.html
    app.component.scss
    app.component.spec.ts
    app.component.ts
    app.module.ts                    M
  assets
  environments
    environment.prod.ts
    environment.ts                   M
```

```typescript
  async loadTodo() {
    const loading = await this.loadingController.create({
      message: 'Loading Todo...'
    });
    await loading.present();

    this.todoService.getTodo(this.todoId).subscribe(res => {
      loading.dismiss();
      this.todo = res;
    });
  }

  async saveTodo() {
    const loading = await this.loadingController.create({
      message: 'Saving Todo...'
    });
    await loading.present();

    if (this.todoId) {
      this.todoService.updateTodo(this.todo, this.todoId).then(() => {
        loading.dismiss();
        this.navController.navigateBack('home');
      })
    } else {
      this.todoService.addTodo(this.todo).then(() => {
        loading.dismiss();
        this.navController.navigateBack('home');
      });
    }
  }

}
```

Coba di browser



UMN Ionic Backend – Firebase co

console.firebase.google.com...

UMN Ionic Backend

Go to docs

Database

Cloud Firestore

Data Rules Indexes Usage

todos > 9bM1r3sF2K2G...

umn-ionic-backe...	todos	9bM1r3sF2K2G07Ud6SYc
+ Start collection	+ Add document	+ Start collection
todos	3EZmJcsJZtD4Kd7	+ Add field
	9bM1r3sF2K2G07U	createdAt: 1572382309714
		priority: 1
		task: "Beli Bubur Ayam"

w9.pptx

Show all

localhost:8100/home

Ionic Firestore

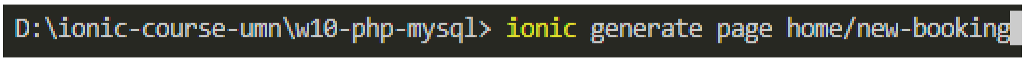
Test 123
10/30/19, 3:48 AM
2

Beli Bubur Ayam
10/30/19, 3:51 AM
1

With PHP & MySQL

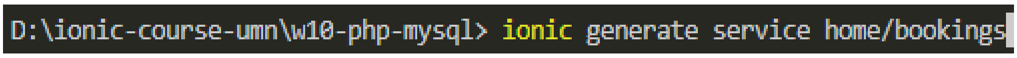
New Project Blank

Generate page



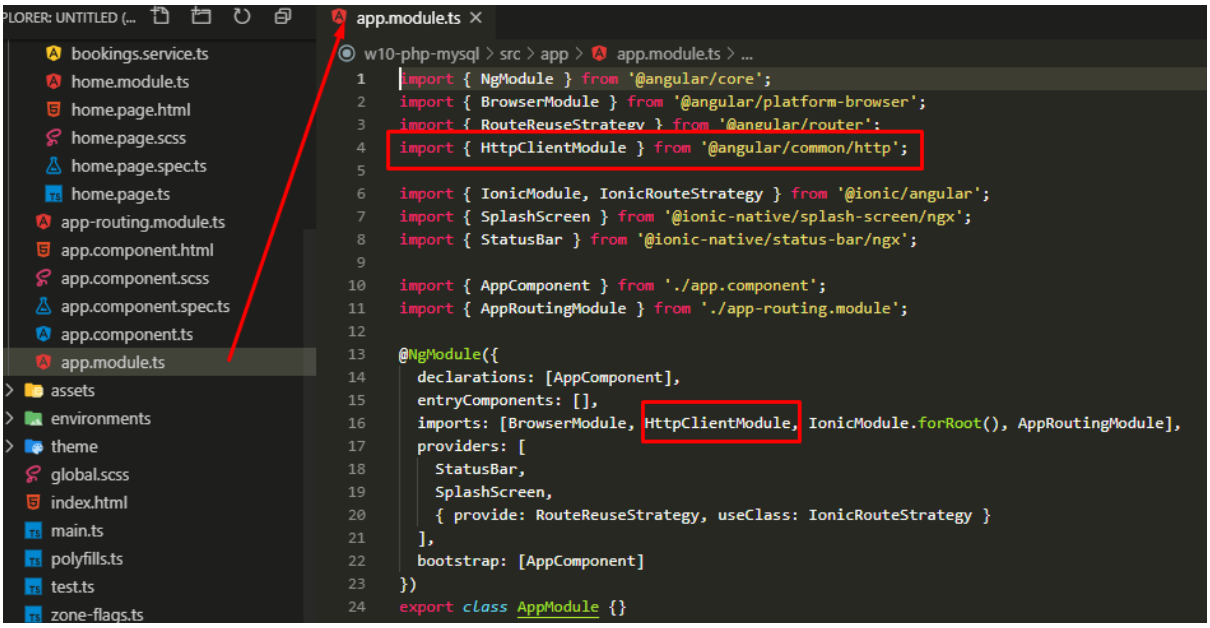
```
D:\ionic-course-umn\w10-php-mysql> ionic generate page home/new-booking
```

Buat service



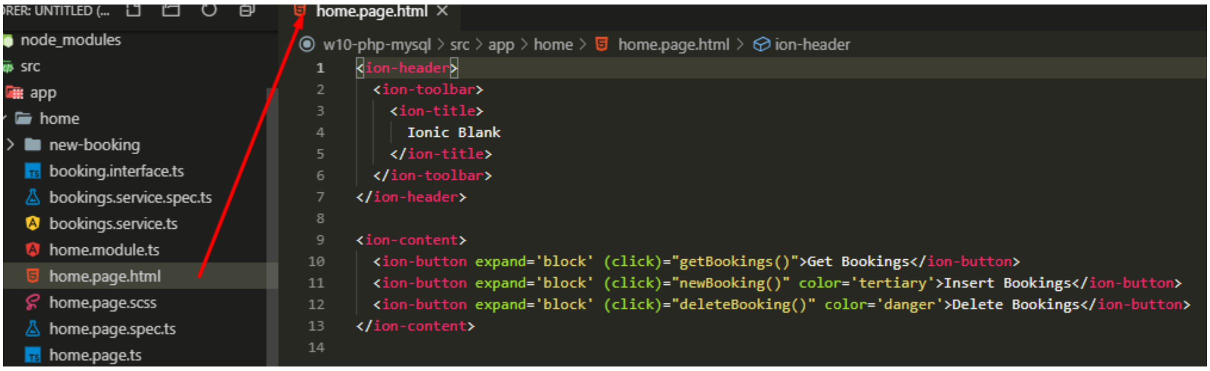
```
D:\ionic-course-umn\w10-php-mysql> ionic generate service home/bookings
```

App.module.ts



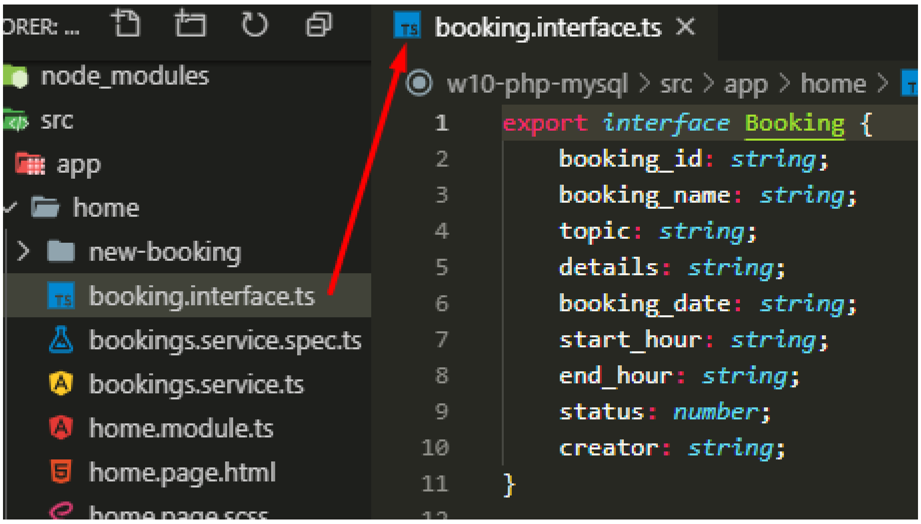
```
import { NgModule } from '@angular/core';
import { BrowserModule } from '@angular/platform-browser';
import { RouteReuseStrategy } from '@angular/router';
import { HttpClientModule } from '@angular/common/http';

import { IonicModule, IonicRouteStrategy } from '@ionic/angular';
import { SplashScreen } from '@ionic-native/splash-screen/ngx';
import { StatusBar } from '@ionic-native/status-bar/ngx';

import { AppComponent } from './app.component';
import { AppRoutingModule } from './app-routing.module';

@NgModule({
  declarations: [AppComponent],
  entryComponents: [],
  imports: [BrowserModule, HttpClientModule, IonicModule.forRoot(), AppRoutingModule],
  providers: [
    StatusBar,
    SplashScreen,
    { provide: RouteReuseStrategy, useClass: IonicRouteStrategy }
  ],
  bootstrap: [AppComponent]
})
export class AppModule {}
```

Home.page.html



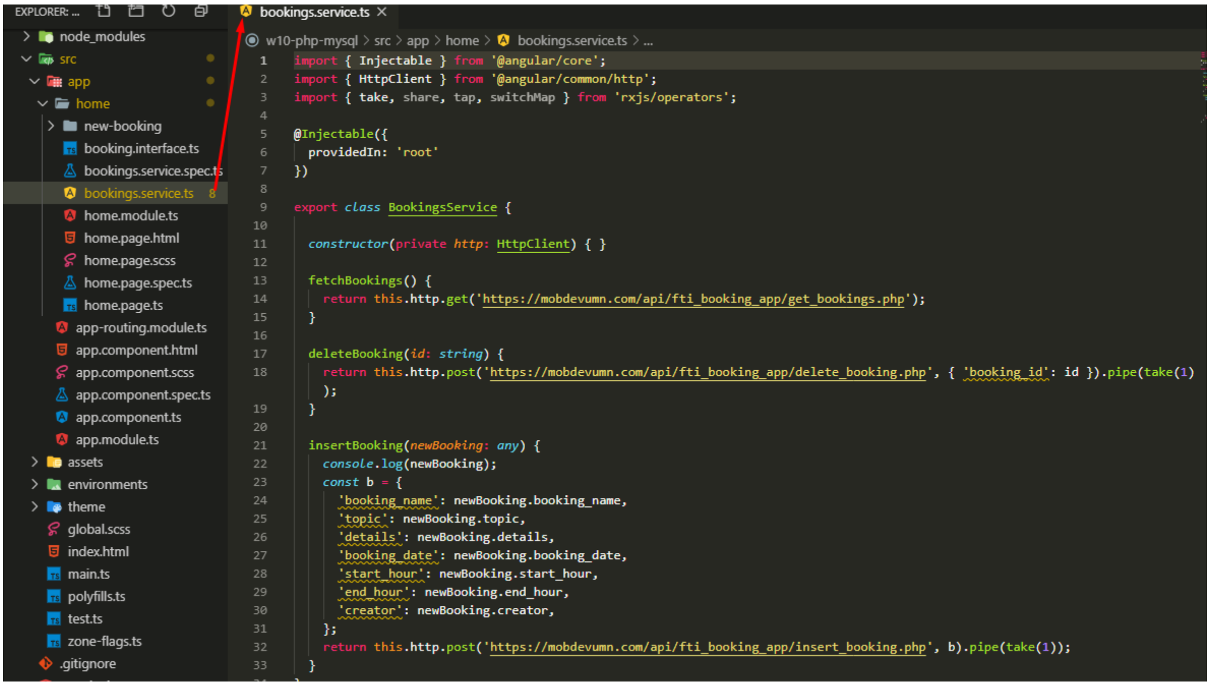
```
<ion-header>
  <ion-toolbar>
    <ion-title>
      Ionic Blank
    </ion-title>
  </ion-toolbar>
</ion-header>

<ion-content>
  <ion-button expand='block' (click)="getBookings()">Get Bookings</ion-button>
  <ion-button expand='block' (click)="newBooking()" color='tertiary'>Insert Bookings</ion-button>
  <ion-button expand='block' (click)="deleteBooking()" color='danger'>Delete Bookings</ion-button>
</ion-content>
```

Buat file booking interface



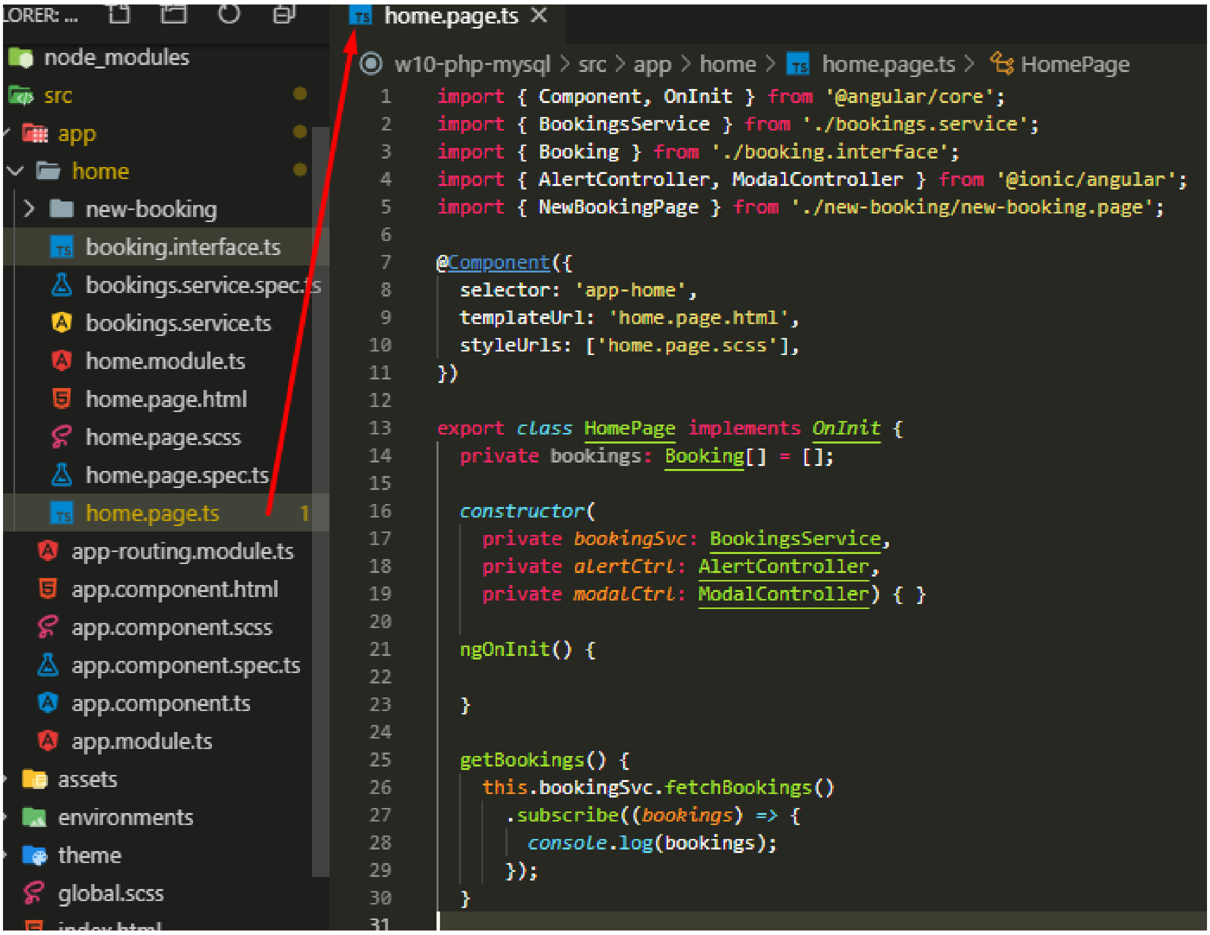
```typescript
export interface Booking {
    booking_id: string;
    booking_name: string;
    topic: string;
    details: string;
    booking_date: string;
    start_hour: string;
    end_hour: string;
    status: number;
    creator: string;
}
```

Bookings.service.ts

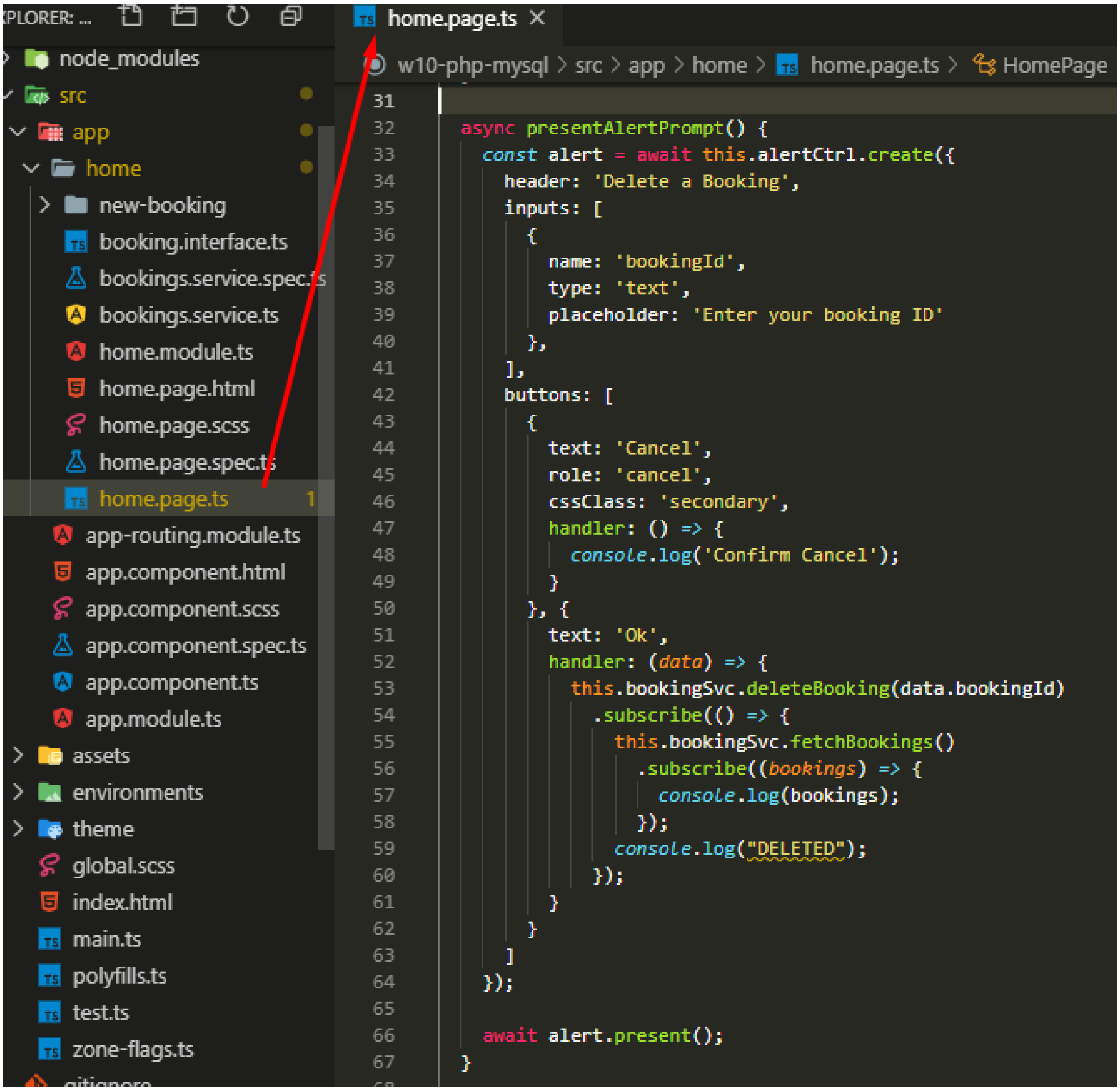


```typescript
import { Injectable } from '@angular/core';
import { HttpClient } from '@angular/common/http';
import { take, share, tap, switchMap } from 'rxjs/operators';

@Injectable({
  providedIn: 'root'
})

export class BookingsService {

  constructor(private http: HttpClient) { }

  fetchBookings() {
    return this.http.get('https://mobdevumn.com/api/fti_booking_app/get_bookings.php');
  }

  deleteBooking(id: string) {
    return this.http.post('https://mobdevumn.com/api/fti_booking_app/delete_booking.php', { 'booking_id': id }).pipe(take(1)
    );
  }

  insertBooking(newBooking: any) {
    console.log(newBooking);
    const b = {
      'booking_name': newBooking.booking_name,
      'topic': newBooking.topic,
      'details': newBooking.details,
      'booking_date': newBooking.booking_date,
      'start_hour': newBooking.start_hour,
      'end_hour': newBooking.end_hour,
      'creator': newBooking.creator,
    };
    return this.http.post('https://mobdevumn.com/api/fti_booking_app/insert_booking.php', b).pipe(take(1));
  }
```

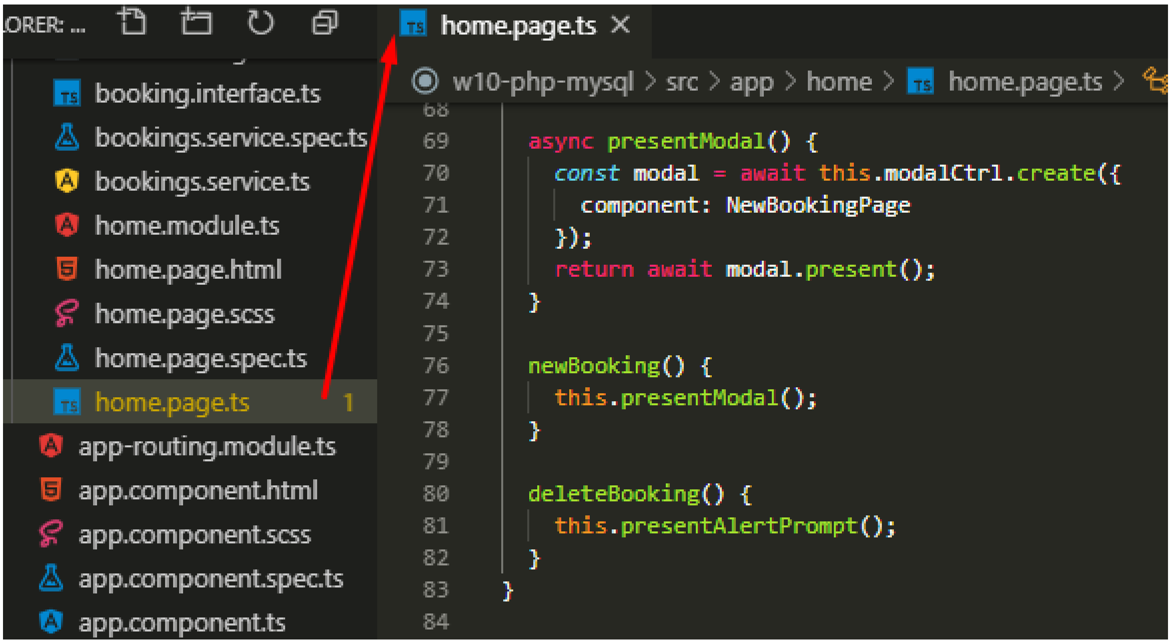
Home.page.ts



```
import { Component, OnInit } from '@angular/core';
import { BookingsService } from './bookings.service';
import { Booking } from './booking.interface';
import { AlertController, ModalController } from '@ionic/angular';
import { NewBookingPage } from './new-booking/new-booking.page';

@Component({
  selector: 'app-home',
  templateUrl: 'home.page.html',
  styleUrls: ['home.page.scss'],
})

export class HomePage implements OnInit {
  private bookings: Booking[] = [];

  constructor(
    private bookingSvc: BookingsService,
    private alertCtrl: AlertController,
    private modalCtrl: ModalController) { }

  ngOnInit() {

  }

  getBookings() {
    this.bookingSvc.fetchBookings()
      .subscribe((bookings) => {
        console.log(bookings);
      });
  }
```

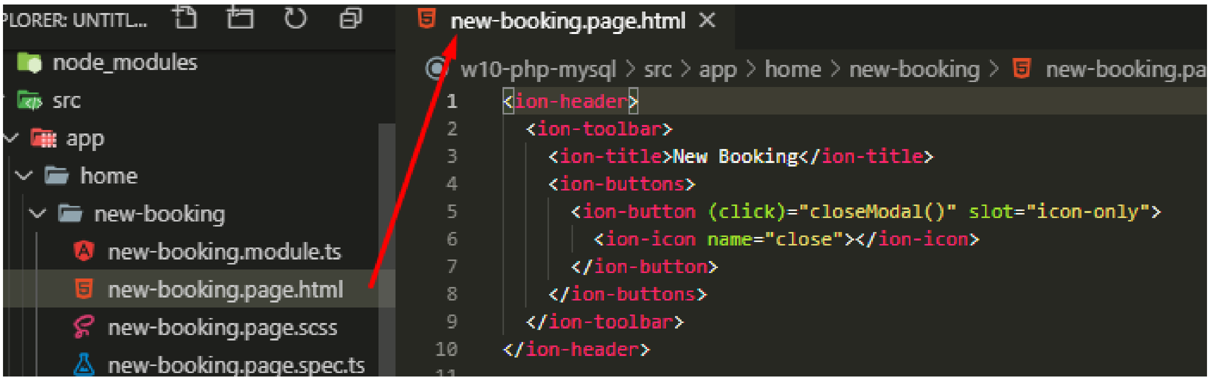


```
  async presentAlertPrompt() {
    const alert = await this.alertCtrl.create({
      header: 'Delete a Booking',
      inputs: [
        {
          name: 'bookingId',
          type: 'text',
          placeholder: 'Enter your booking ID'
        },
      ],
      buttons: [
        {
          text: 'Cancel',
          role: 'cancel',
          cssClass: 'secondary',
          handler: () => {
            console.log('Confirm Cancel');
          }
        }, {
          text: 'Ok',
          handler: (data) => {
            this.bookingSvc.deleteBooking(data.bookingId)
              .subscribe(() => {
                this.bookingSvc.fetchBookings()
                  .subscribe((bookings) => {
                    console.log(bookings);
                  });
                console.log("DELETED");
              });
          }
        }
      ]
    });

    await alert.present();
  }
```

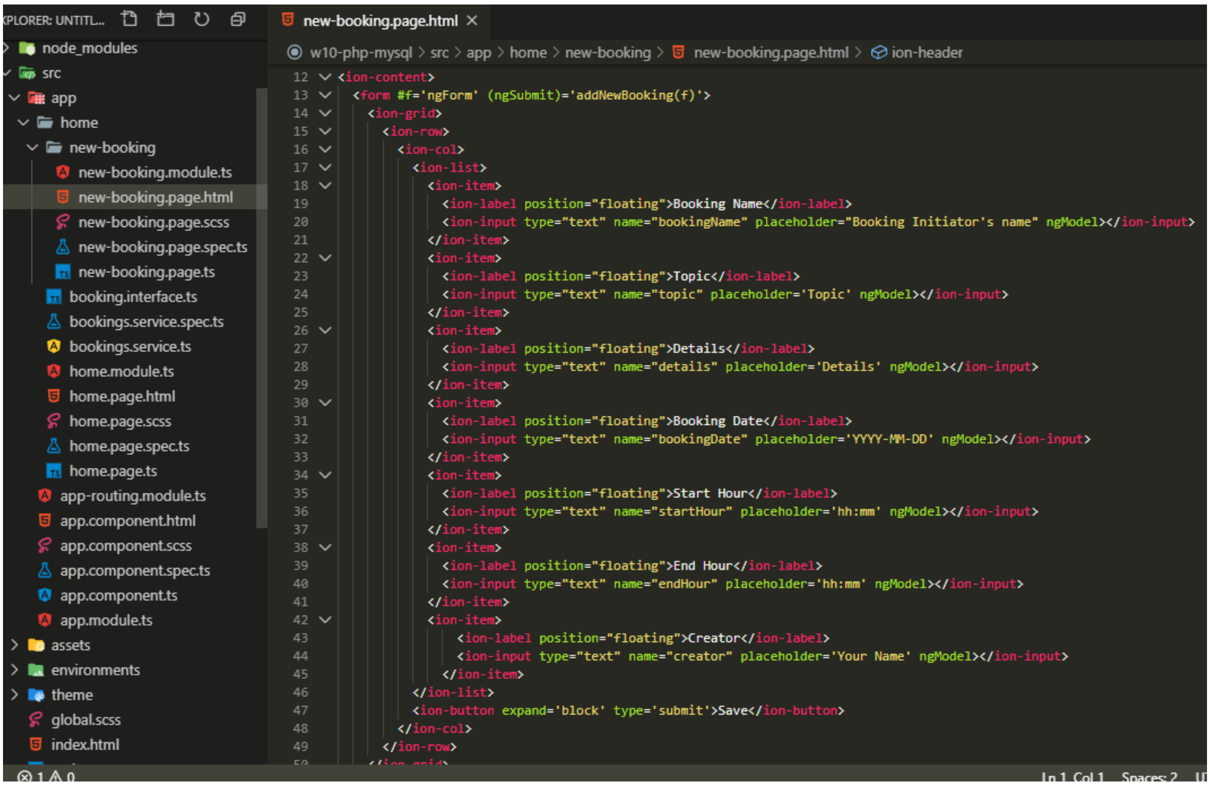


```
  async presentModal() {
    const modal = await this.modalCtrl.create({
      component: NewBookingPage
    });
    return await modal.present();
  }

  newBooking() {
    this.presentModal();
  }

  deleteBooking() {
    this.presentAlertPrompt();
  }
}
```

New booking page

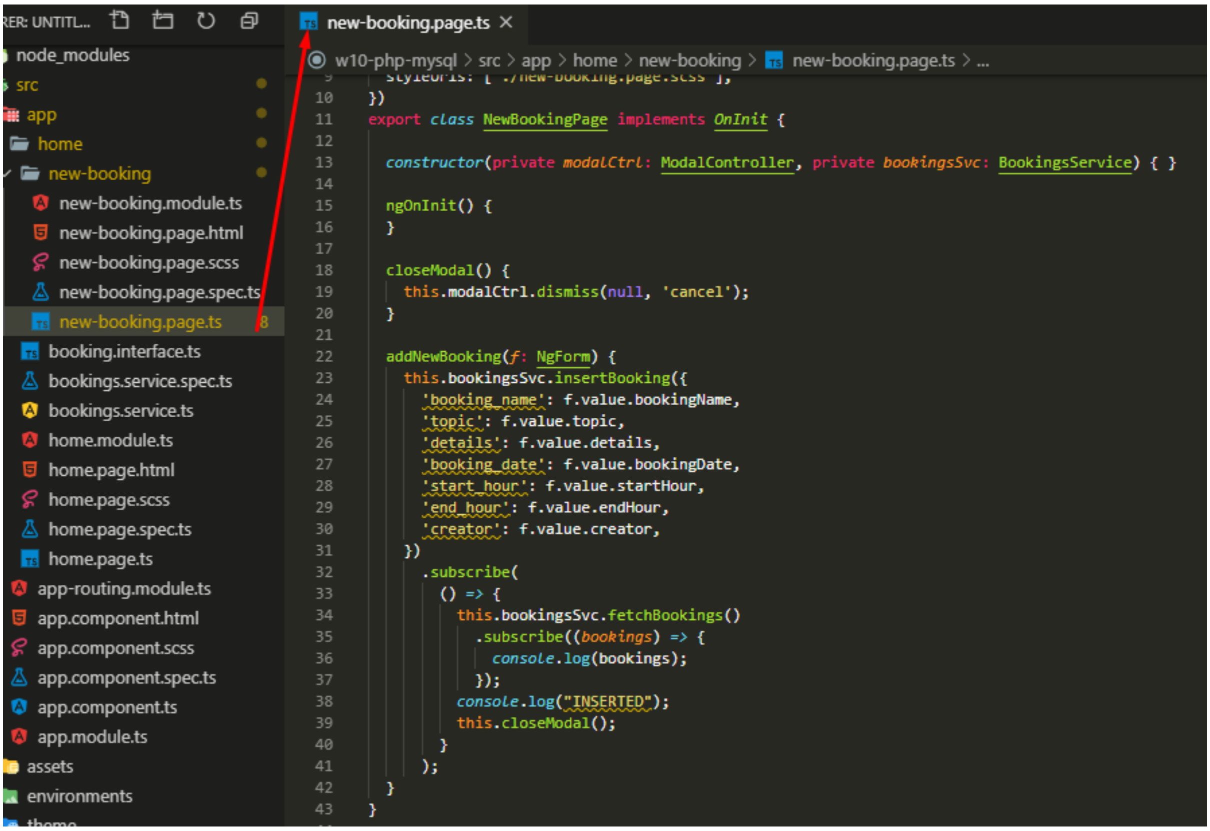


```html
<ion-header>
  <ion-toolbar>
    <ion-title>New Booking</ion-title>
    <ion-buttons>
      <ion-button (click)="closeModal()" slot="icon-only">
        <ion-icon name="close"></ion-icon>
      </ion-button>
    </ion-buttons>
  </ion-toolbar>
</ion-header>
```



```html
<ion-content>
  <form #f='ngForm' (ngSubmit)='addNewBooking(f)'>
    <ion-grid>
      <ion-row>
        <ion-col>
          <ion-list>
            <ion-item>
              <ion-label position="floating">Booking Name</ion-label>
              <ion-input type="text" name="bookingName" placeholder="Booking Initiator's name" ngModel></ion-input>
            </ion-item>
            <ion-item>
              <ion-label position="floating">Topic</ion-label>
              <ion-input type="text" name="topic" placeholder='Topic' ngModel></ion-input>
            </ion-item>
            <ion-item>
              <ion-label position="floating">Details</ion-label>
              <ion-input type="text" name="details" placeholder='Details' ngModel></ion-input>
            </ion-item>
            <ion-item>
              <ion-label position="floating">Booking Date</ion-label>
              <ion-input type="text" name="bookingDate" placeholder='YYYY-MM-DD' ngModel></ion-input>
            </ion-item>
            <ion-item>
              <ion-label position="floating">Start Hour</ion-label>
              <ion-input type="text" name="startHour" placeholder='hh:mm' ngModel></ion-input>
            </ion-item>
            <ion-item>
              <ion-label position="floating">End Hour</ion-label>
              <ion-input type="text" name="endHour" placeholder='hh:mm' ngModel></ion-input>
            </ion-item>
            <ion-item>
                <ion-label position="floating">Creator</ion-label>
                <ion-input type="text" name="creator" placeholder='Your Name' ngModel></ion-input>
              </ion-item>
          </ion-list>
          <ion-button expand='block' type='submit'>Save</ion-button>
        </ion-col>
      </ion-row>
    </ion-grid>
```

New-booking.page.ts



```
  styleUrls: ['./new-booking.page.scss'],
})
export class NewBookingPage implements OnInit {

  constructor(private modalCtrl: ModalController, private bookingsSvc: BookingsService) { }

  ngOnInit() {
  }

  closeModal() {
    this.modalCtrl.dismiss(null, 'cancel');
  }

  addNewBooking(f: NgForm) {
    this.bookingsSvc.insertBooking({
      'booking_name': f.value.bookingName,
      'topic': f.value.topic,
      'details': f.value.details,
      'booking_date': f.value.bookingDate,
      'start_hour': f.value.startHour,
      'end_hour': f.value.endHour,
      'creator': f.value.creator,
    })
      .subscribe(
        () => {
          this.bookingsSvc.fetchBookings()
            .subscribe((bookings) => {
              console.log(bookings);
            });
          console.log("INSERTED");
          this.closeModal();
        }
      );
  }
}
```