Employee Name : Dharshana
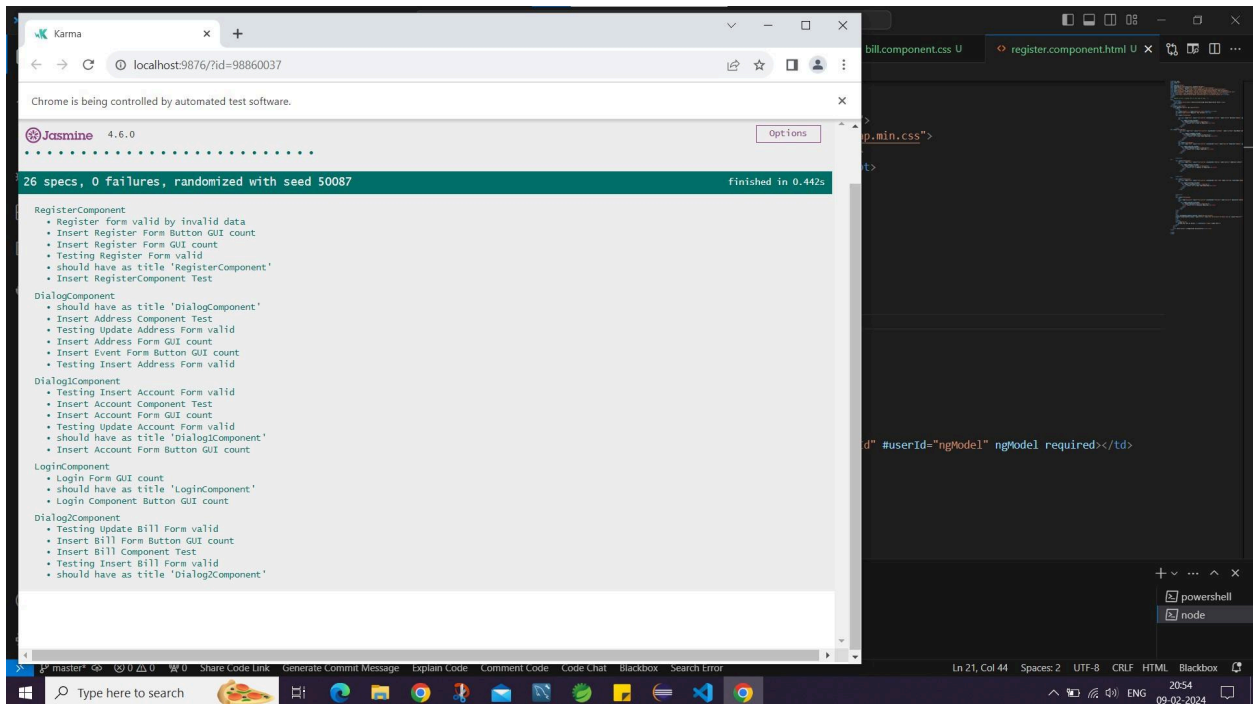
Employee Id : 11953
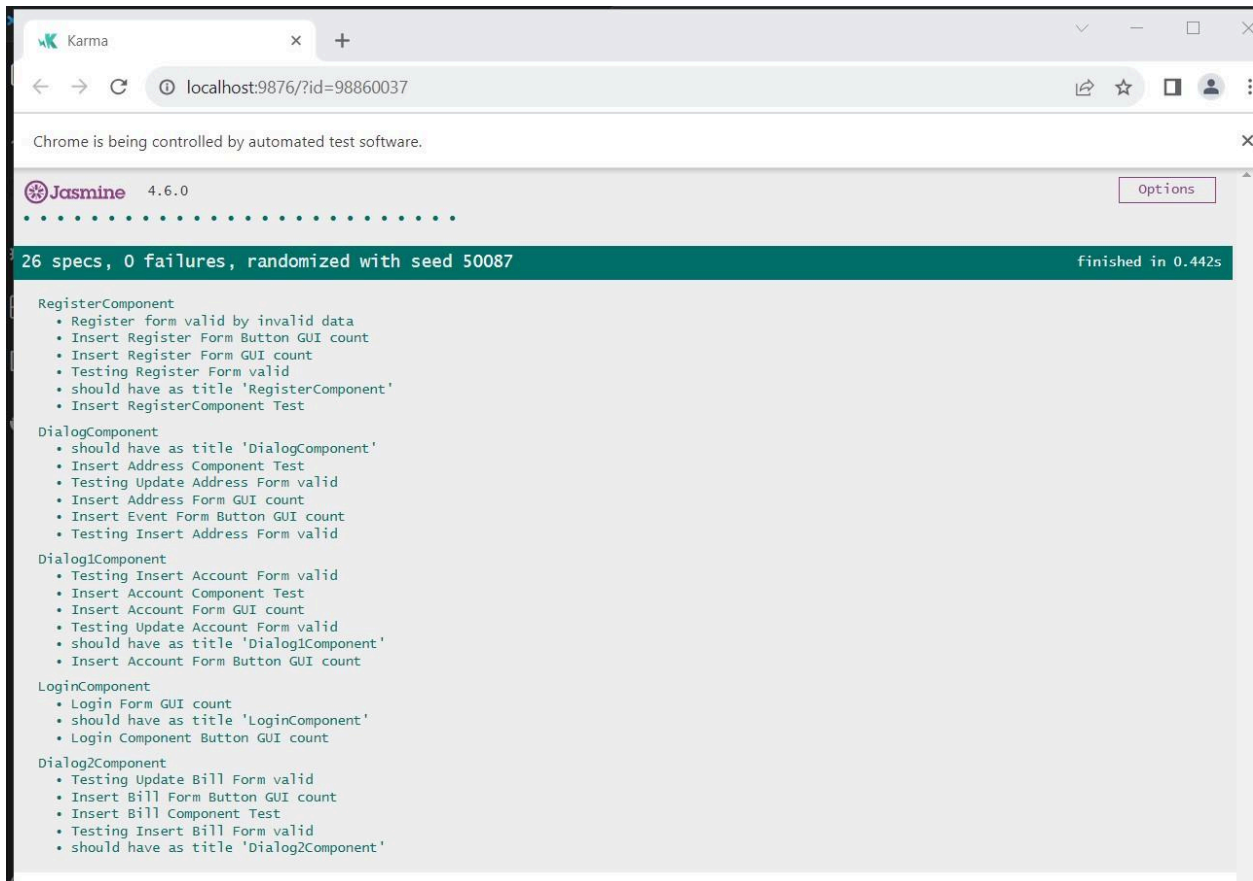
Electricity Billing System

<u>Jasmine & Karma :</u>

<u>Console Output :</u>

Components :

DialogComponent.spect.ts : (Address)

```
import { ComponentFixture, TestBed } from '@angular/core/testing';

import { DialogComponent } from './dialog.component';
import { HttpClientModule } from '@angular/common/http';
import { FormsModule, ReactiveFormsModule } from '@angular/forms';
import { MatButtonModule } from '@angular/material/button';
import { MatDialogModule, MAT_DIALOG_DATA, MatDialogRef } from
'@angular/material/dialog';
import { MatFormFieldModule } from '@angular/material/form-field';
import { MatIconModule } from '@angular/material/icon';
import { MatInputModule } from '@angular/material/input';
import { MatSelectModule } from '@angular/material/select';
import { MatTableModule } from '@angular/material/table';
import { MatToolbarModule } from '@angular/material/toolbar';
```

```typescript
import { BrowserModule } from '@angular/platform-browser';
import { BrowserAnimationsModule } from '@angular/platform-browser/animations';
import { AppRoutingModule } from '../app-routing.module';
import { RegisterComponent } from '../register/register.component';
import { AppComponent } from '../app.component';
import { LoginComponent } from '../login/login.component';
import { UserComponent } from '../user/user.component';
import { AddressComponent } from '../address/address.component';
import { AccountComponent } from '../account/account.component';
import { Dialog1Component } from '../dialog1/dialog1.component';
import { Dialog2Component } from '../dialog2/dialog2.component';
import { Dialog3Component } from '../dialog3/dialog3.component';
import { BillComponent } from '../bill/bill.component';
import { HomeComponent } from '../home/home.component';
import { MatCardModule } from '@angular/material/card';
import { MatNativeDateModule } from '@angular/material/core';
import { MatDatepickerModule } from '@angular/material/datepicker';
import { MatPaginatorModule } from '@angular/material/paginator';
import { MatRadioModule } from '@angular/material/radio';
import { MatSortModule } from '@angular/material/sort';
import { LoginService } from '../login.service';
import { RegisterService } from '../register.service';
import { BillService } from '../bill.service';
import { AccountService } from '../account.service';
import { AddressService } from '../address.service';
import { HttpClientTestingModule, HttpTestingController } from '@angular/common/http/testing';

describe('DialogComponent', () => {
  let component: DialogComponent;
  let fixture: ComponentFixture<DialogComponent>;
  beforeEach(() => {
    TestBed.configureTestingModule({
      declarations: [DialogComponent,AppComponent,
        RegisterComponent,
        LoginComponent,
        UserComponent,
        AddressComponent,
        AccountComponent,
        Dialog1Component,
      Dialog2Component,Dialog3Component,BillComponent,HomeComponent],

      imports:[BrowserModule,
        AppRoutingModule,
        BrowserAnimationsModule, MatToolbarModule, MatIconModule,
        MatSelectModule,MatButtonModule, MatDialogModule,
        MatFormFieldModule, MatInputModule, MatDatepickerModule,
        MatNativeDateModule, MatRadioModule, ReactiveFormsModule, FormsModule,
```

```
      HttpClientModule, MatTableModule, MatPaginatorModule, MatSortModule,
MatCardModule, HttpClientTestingModule],
    providers:[
     { provide: MAT_DIALOG_DATA, useValue: {} },
      { provide: MatDialogRef, useValue: {} },
      BillService,AccountService,AddressService,AccountService,LoginService,RegisterService
    ]
  });
  fixture = TestBed.createComponent(DialogComponent);
  component = fixture.componentInstance;
  fixture.detectChanges();
 });


 it(`should have as title 'DialogComponent'`, () => {
  const fixture = TestBed.createComponent(DialogComponent);
  const app = fixture.componentInstance;
  expect(app.title).toEqual('DialogComponent');
 });


 it('Insert Address Component Test', () => {
  const fixture = TestBed.createComponent(DialogComponent);
  const Address = fixture.componentInstance;
  expect(Address).toBeTruthy();
 });


 it('Insert Address Form GUI count', () => {
  const fixture = TestBed.createComponent(DialogComponent);
  const formElement = fixture.debugElement.nativeElement.querySelector("#addressForm");
  const inputElements = formElement.querySelectorAll("input");
  expect(inputElements.length).toEqual(4);
 });

 it('Testing Insert Address Form valid', () => {
  const fixture = TestBed.createComponent(DialogComponent);
  const Address = fixture.componentInstance;
  Address.addressForm.controls?.['doorNo'].setValue("321");
  Address.addressForm.controls?.['street'].setValue("Vnr");
  Address.addressForm.controls?.['city'].setValue("Madurai");
  Address.addressForm.controls?.['state'].setValue("TamilNadu");
  Address.addressForm.controls?.['pinCode'].setValue("369852");

  expect(Address.addressForm.valid).toBeTruthy();
 });
```

```
  it('Testing Update Address Form valid', () => {
    const fixture = TestBed.createComponent(DialogComponent);
    const Address = fixture.componentInstance;
    Address.addressForm.controls?.['doorNo'].setValue("321");
    Address.addressForm.controls?.['street'].setValue("Vnr");
    Address.addressForm.controls?.['city'].setValue("Madurai");
    Address.addressForm.controls?.['state'].setValue("TamilNadu");
    Address.addressForm.controls?.['pinCode'].setValue("369852");

    expect(Address.addressForm.valid).toBeTruthy();
  });




  it('Insert Event Form Button GUI count', () => {
    const fixture = TestBed.createComponent(DialogComponent);
    const formElement = fixture.debugElement.nativeElement.querySelector("#addressForm");
    const inputElements = formElement.querySelectorAll("mat-option");
    expect(inputElements.length).toEqual(0);
  });


});
```

Dialog1Component.spec.ts : (Account)

```
import { ComponentFixture, TestBed } from '@angular/core/testing';

import { Dialog1Component } from './dialog1.component';
import { HttpClientModule } from '@angular/common/http';
import { HttpClientTestingModule } from '@angular/common/http/testing';
import { ReactiveFormsModule, FormsModule } from '@angular/forms';
import { MatButtonModule } from '@angular/material/button';
import { MatCardModule } from '@angular/material/card';
import { MatNativeDateModule } from '@angular/material/core';
import { MatDatepickerModule } from '@angular/material/datepicker';
import { MatDialogModule, MAT_DIALOG_DATA, MatDialogRef } from
'@angular/material/dialog';
```

```typescript
import { MatFormFieldModule } from '@angular/material/form-field';
import { MatIconModule } from '@angular/material/icon';
import { MatInputModule } from '@angular/material/input';
import { MatPaginatorModule } from '@angular/material/paginator';
import { MatRadioModule } from '@angular/material/radio';
import { MatSelectModule } from '@angular/material/select';
import { MatSortModule } from '@angular/material/sort';
import { MatTableModule } from '@angular/material/table';
import { MatToolbarModule } from '@angular/material/toolbar';
import { BrowserModule } from '@angular/platform-browser';
import { BrowserAnimationsModule } from '@angular/platform-browser/animations';
import { AccountService } from '../account.service';
import { AccountComponent } from '../account/account.component';
import { AddressService } from '../address.service';
import { AddressComponent } from '../address/address.component';
import { AppRoutingModule } from '../app-routing.module';
import { AppComponent } from '../app.component';
import { BillService } from '../bill.service';
import { BillComponent } from '../bill/bill.component';
import { DialogComponent } from '../dialog/dialog.component';
import { Dialog2Component } from '../dialog2/dialog2.component';
import { Dialog3Component } from '../dialog3/dialog3.component';
import { HomeComponent } from '../home/home.component';
import { LoginService } from '../login.service';
import { LoginComponent } from '../login/login.component';
import { RegisterService } from '../register.service';
import { RegisterComponent } from '../register/register.component';
import { UserComponent } from '../user/user.component';

describe('Dialog1Component', () => {
  let component: Dialog1Component;
  let fixture: ComponentFixture<Dialog1Component>;
  beforeEach(() => {
    TestBed.configureTestingModule({
      declarations: [DialogComponent,AppComponent,
        RegisterComponent,
        LoginComponent,
        UserComponent,
        AddressComponent,
        AccountComponent,
        Dialog1Component,
      Dialog2Component,Dialog3Component,BillComponent,HomeComponent],

      imports:[BrowserModule,
        AppRoutingModule,
        BrowserAnimationsModule, MatToolbarModule, MatIconModule,
        MatSelectModule,MatButtonModule, MatDialogModule,
```

```
      MatFormFieldModule, MatInputModule, MatDatepickerModule,
      MatNativeDateModule, MatRadioModule, ReactiveFormsModule, FormsModule,
      HttpClientModule, MatTableModule, MatPaginatorModule, MatSortModule,
MatCardModule, HttpClientTestingModule],
    providers:[
      { provide: MAT_DIALOG_DATA, useValue: {} },
       { provide: MatDialogRef, useValue: {} },
       BillService,AccountService,AddressService,AccountService,LoginService,RegisterService
    ]
  });
  fixture = TestBed.createComponent(Dialog1Component);
  component = fixture.componentInstance;
  fixture.detectChanges();
});


it(`should have as title 'Dialog1Component'`, () => {
  const fixture = TestBed.createComponent(Dialog1Component);
  const app = fixture.componentInstance;
  expect(app.title).toEqual('Dialog1Component');
});


it('Insert Account Component Test', () => {
  const fixture = TestBed.createComponent(DialogComponent);
  const Account = fixture.componentInstance;
  expect(Account).toBeTruthy();
});


it('Insert Account Form GUI count', () => {
  const fixture = TestBed.createComponent(Dialog1Component);
  const formElement = fixture.debugElement.nativeElement.querySelector("#accountForm");
  const inputElements = formElement.querySelectorAll("input");
  expect(inputElements.length).toEqual(4);
});

it('Testing Insert Account Form valid', () => {
  const fixture = TestBed.createComponent(Dialog1Component);
  const Account = fixture.componentInstance;
  Account.accountForm.controls?.['accountId'].setValue("5");
  Account.accountForm.controls?.['accountNo'].setValue("365214789");
  Account.accountForm.controls?.['accountType'].setValue("Domestic");
  Account.accountForm.controls?.['accountStatus'].setValue("Paid");


  expect(Account.accountForm.valid).toBeTruthy();
```

```
  });


  it('Testing Update Account Form valid', () => {
    const fixture = TestBed.createComponent(Dialog1Component);
    const Account = fixture.componentInstance;
    Account.accountForm.controls?.['accountId'].setValue("5");
    Account.accountForm.controls?.['accountNo'].setValue("365214789");
    Account.accountForm.controls?.['accountType'].setValue("Domestic");
    Account.accountForm.controls?.['accountStatus'].setValue("Paid");



    expect(Account.accountForm.valid).toBeTruthy();
  });

  it('Insert Account Form Button GUI count', () => {
    const fixture = TestBed.createComponent(Dialog1Component);
    const formElement = fixture.debugElement.nativeElement.querySelector("#accountForm");
    const inputElements = formElement.querySelectorAll("mat-option");
    expect(inputElements.length).toEqual(0);
  });


});
```

Dialog2Component.spec.ts : (Bill)

```
import { ComponentFixture, TestBed } from '@angular/core/testing';

import { Dialog2Component } from './dialog2.component';
import { HttpClientModule } from '@angular/common/http';
import { HttpClientTestingModule } from '@angular/common/http/testing';
import { ReactiveFormsModule, FormsModule } from '@angular/forms';
import { MatButtonModule } from '@angular/material/button';
import { MatCardModule } from '@angular/material/card';
import { MatNativeDateModule } from '@angular/material/core';
import { MatDatepickerModule } from '@angular/material/datepicker';
import { MatDialogModule, MAT_DIALOG_DATA, MatDialogRef } from
'@angular/material/dialog';
import { MatFormFieldModule } from '@angular/material/form-field';
import { MatIconModule } from '@angular/material/icon';
import { MatInputModule } from '@angular/material/input';
```

```typescript
import { MatPaginatorModule } from '@angular/material/paginator';
import { MatRadioModule } from '@angular/material/radio';
import { MatSelectModule } from '@angular/material/select';
import { MatSortModule } from '@angular/material/sort';
import { MatTableModule } from '@angular/material/table';
import { MatToolbarModule } from '@angular/material/toolbar';
import { BrowserModule } from '@angular/platform-browser';
import { BrowserAnimationsModule } from '@angular/platform-browser/animations';
import { AccountService } from '../account.service';
import { AccountComponent } from '../account/account.component';
import { AddressService } from '../address.service';
import { AddressComponent } from '../address/address.component';
import { AppRoutingModule } from '../app-routing.module';
import { AppComponent } from '../app.component';
import { BillService } from '../bill.service';
import { BillComponent } from '../bill/bill.component';
import { DialogComponent } from '../dialog/dialog.component';
import { Dialog1Component } from '../dialog1/dialog1.component';
import { Dialog3Component } from '../dialog3/dialog3.component';
import { HomeComponent } from '../home/home.component';
import { LoginService } from '../login.service';
import { LoginComponent } from '../login/login.component';
import { RegisterService } from '../register.service';
import { RegisterComponent } from '../register/register.component';
import { UserComponent } from '../user/user.component';

describe('Dialog2Component', () => {
  let component: Dialog2Component;
  let fixture: ComponentFixture<Dialog2Component>;

  beforeEach(() => {
    TestBed.configureTestingModule({
      declarations: [DialogComponent,AppComponent,
        RegisterComponent,
        LoginComponent,
        UserComponent,
        AddressComponent,
        AccountComponent,
        Dialog1Component,
      Dialog2Component,Dialog3Component,BillComponent,HomeComponent],

      imports:[BrowserModule,
        AppRoutingModule,
        BrowserAnimationsModule, MatToolbarModule, MatIconModule,
        MatSelectModule,MatButtonModule, MatDialogModule,
        MatFormFieldModule, MatInputModule, MatDatepickerModule,
        MatNativeDateModule, MatRadioModule, ReactiveFormsModule, FormsModule,
```

```
      HttpClientModule, MatTableModule, MatPaginatorModule, MatSortModule,
MatCardModule, HttpClientTestingModule],
    providers:[
     { provide: MAT_DIALOG_DATA, useValue: {} },
      { provide: MatDialogRef, useValue: {} },
      BillService,AccountService,AddressService,AccountService,LoginService,RegisterService
    ]
  });
  fixture = TestBed.createComponent(Dialog2Component);
  component = fixture.componentInstance;
  fixture.detectChanges();
 });


 it(`should have as title 'Dialog2Component'`, () => {
  const fixture = TestBed.createComponent(Dialog2Component);
  const app = fixture.componentInstance;
  expect(app.title).toEqual('Dialog2Component');
 });


 it('Insert Bill Component Test', () => {
  const fixture = TestBed.createComponent(DialogComponent);
  const Bill = fixture.componentInstance;
  expect(Bill).toBeTruthy();
 });


 // it('Insert Bill A Form GUI count', () => {
 //   const fixture = TestBed.createComponent(Dialog1Component);
 //   const formElement = fixture.debugElement.nativeElement.querySelector("#billForm");
 //   const inputElements = formElement.querySelectorAll("input");
 //   expect(inputElements.length).toEqual(6);
 // });

 it('Testing Insert Bill Form valid', () => {
  const fixture = TestBed.createComponent(Dialog2Component);
  const Bill = fixture.componentInstance;
  Bill.billForm.controls?.['billNo'].setValue("104");
  Bill.billForm.controls?.['electroboardId'].setValue("1005");
  Bill.billForm.controls?.['amount'].setValue("60000");
  Bill.billForm.controls?.['billDate'].setValue("05-09-2024");
  Bill.billForm.controls?.['billStatus'].setValue("Paid");
  Bill.billForm.controls?.['accountNo'].setValue("854632197");


  expect(Bill.billForm.valid).toBeTruthy();
```

```
  });


  it('Testing Update Bill Form valid', () => {
    const fixture = TestBed.createComponent(Dialog2Component);
    const Bill = fixture.componentInstance;
    Bill.billForm.controls?.['billNo'].setValue("104");
    Bill.billForm.controls?.['electroboardId'].setValue("1005");
    Bill.billForm.controls?.['amount'].setValue("60000");
    Bill.billForm.controls?.['billDate'].setValue("05-09-2024");
    Bill.billForm.controls?.['billStatus'].setValue("Paid");
    Bill.billForm.controls?.['accountNo'].setValue("854632197");

    expect(Bill.billForm.valid).toBeTruthy();
  });




  it('Insert Bill Form Button GUI count', () => {
    const fixture = TestBed.createComponent(Dialog2Component);
    const formElement = fixture.debugElement.nativeElement.querySelector("#billForm");
    const inputElements = formElement.querySelectorAll("input");
    const inputElements1 = formElement.querySelectorAll("mat-option");
    expect(inputElements1.length).toEqual(0);
    expect(inputElements.length).toEqual(6);
  });
});
```

LoginComponent.spec.ts :

```
import { ComponentFixture, TestBed } from '@angular/core/testing';

import { LoginComponent } from './login.component';
import { HttpClientModule } from '@angular/common/http';
import { HttpClientTestingModule } from '@angular/common/http/testing';
import { ReactiveFormsModule, FormsModule } from '@angular/forms';
import { MatButtonModule } from '@angular/material/button';
import { MatCardModule } from '@angular/material/card';
import { MatNativeDateModule } from '@angular/material/core';
```

```typescript
import { MatDatepickerModule } from '@angular/material/datepicker';
import { MatDialogModule, MAT_DIALOG_DATA, MatDialogRef } from
'@angular/material/dialog';
import { MatFormFieldModule } from '@angular/material/form-field';
import { MatIconModule } from '@angular/material/icon';
import { MatInputModule } from '@angular/material/input';
import { MatPaginatorModule } from '@angular/material/paginator';
import { MatRadioModule } from '@angular/material/radio';
import { MatSelectModule } from '@angular/material/select';
import { MatSortModule } from '@angular/material/sort';
import { MatTableModule } from '@angular/material/table';
import { MatToolbarModule } from '@angular/material/toolbar';
import { BrowserModule } from '@angular/platform-browser';
import { BrowserAnimationsModule } from '@angular/platform-browser/animations';
import { AccountService } from '../account.service';
import { AccountComponent } from '../account/account.component';
import { AddressService } from '../address.service';
import { AddressComponent } from '../address/address.component';
import { AppRoutingModule } from '../app-routing.module';
import { AppComponent } from '../app.component';
import { BillService } from '../bill.service';
import { BillComponent } from '../bill/bill.component';
import { DialogComponent } from '../dialog/dialog.component';
import { Dialog1Component } from '../dialog1/dialog1.component';
import { Dialog2Component } from '../dialog2/dialog2.component';
import { Dialog3Component } from '../dialog3/dialog3.component';
import { HomeComponent } from '../home/home.component';
import { LoginService } from '../login.service';
import { RegisterService } from '../register.service';
import { RegisterComponent } from '../register/register.component';
import { UserComponent } from '../user/user.component';

describe('LoginComponent', () => {
  let component: LoginComponent;
  let fixture: ComponentFixture<LoginComponent>;

  beforeEach(() => {
    TestBed.configureTestingModule({
      declarations: [DialogComponent,AppComponent,
        RegisterComponent,
        LoginComponent,
        UserComponent,
        AddressComponent,
        AccountComponent,
        Dialog1Component,
      Dialog2Component,Dialog3Component,BillComponent,HomeComponent],
```

```
    imports:[BrowserModule,
     AppRoutingModule,
     BrowserAnimationsModule, MatToolbarModule, MatIconModule,
     MatSelectModule,MatButtonModule, MatDialogModule,
     MatFormFieldModule, MatInputModule, MatDatepickerModule,
     MatNativeDateModule, MatRadioModule, ReactiveFormsModule, FormsModule,
     HttpClientModule, MatTableModule, MatPaginatorModule, MatSortModule,
MatCardModule, HttpClientTestingModule],

  });
  fixture = TestBed.createComponent(LoginComponent);
  component = fixture.componentInstance;
  fixture.detectChanges();
 });
 it(`should have as title 'LoginComponent'`, () => {
  const fixture = TestBed.createComponent(LoginComponent);
  const app = fixture.componentInstance;
  expect(app.title).toEqual('LoginComponent');
 });


 it('Login Form GUI count', () => {
  const fixture = TestBed.createComponent(LoginComponent);
  const formElement = fixture.debugElement.nativeElement.querySelector("#myform");
  const inputElements = formElement.querySelectorAll("input");
  expect(inputElements.length).toEqual(2);
 });
 it('Login Component Button GUI count', () => {
  const fixture = TestBed.createComponent(LoginComponent);
  const formElement = fixture.debugElement.nativeElement.querySelector("#myform");
  const inputElements = formElement.querySelectorAll("button");
  expect(inputElements.length).toEqual(1);
 });

});
```

RegisterComponent.spec.ts :

```
import { ComponentFixture, TestBed } from '@angular/core/testing';

import { RegisterComponent } from './register.component';
```

```typescript
import { HttpClientModule } from '@angular/common/http';
import { HttpClientTestingModule } from '@angular/common/http/testing';
import { ReactiveFormsModule, FormsModule } from '@angular/forms';
import { MatButtonModule } from '@angular/material/button';
import { MatCardModule } from '@angular/material/card';
import { MatNativeDateModule } from '@angular/material/core';
import { MatDatepickerModule } from '@angular/material/datepicker';
import { MatDialogModule } from '@angular/material/dialog';
import { MatFormFieldModule } from '@angular/material/form-field';
import { MatIconModule } from '@angular/material/icon';
import { MatInputModule } from '@angular/material/input';
import { MatPaginatorModule } from '@angular/material/paginator';
import { MatRadioModule } from '@angular/material/radio';
import { MatSelectModule } from '@angular/material/select';
import { MatSortModule } from '@angular/material/sort';
import { MatTableModule } from '@angular/material/table';
import { MatToolbarModule } from '@angular/material/toolbar';
import { BrowserModule } from '@angular/platform-browser';
import { BrowserAnimationsModule } from '@angular/platform-browser/animations';
import { AccountComponent } from '../account/account.component';
import { AddressComponent } from '../address/address.component';
import { AppRoutingModule } from '../app-routing.module';
import { AppComponent } from '../app.component';
import { BillComponent } from '../bill/bill.component';
import { DialogComponent } from '../dialog/dialog.component';
import { Dialog1Component } from '../dialog1/dialog1.component';
import { Dialog2Component } from '../dialog2/dialog2.component';
import { Dialog3Component } from '../dialog3/dialog3.component';
import { HomeComponent } from '../home/home.component';
import { LoginComponent } from '../login/login.component';
import { UserComponent } from '../user/user.component';

describe('RegisterComponent', () => {
  let component: RegisterComponent;
  let fixture: ComponentFixture<RegisterComponent>;
  beforeEach(() => {
    TestBed.configureTestingModule({
      declarations: [DialogComponent,AppComponent,
        RegisterComponent,
        LoginComponent,
        UserComponent,
        AddressComponent,
        AccountComponent,
        Dialog1Component,
      Dialog2Component,Dialog3Component,BillComponent,HomeComponent],

      imports:[BrowserModule,
```

```
        AppRoutingModule,
        BrowserAnimationsModule, MatToolbarModule, MatIconModule,
        MatSelectModule,MatButtonModule, MatDialogModule,
        MatFormFieldModule, MatInputModule, MatDatepickerModule,
        MatNativeDateModule, MatRadioModule, ReactiveFormsModule, FormsModule,
        HttpClientModule, MatTableModule, MatPaginatorModule, MatSortModule,
MatCardModule, HttpClientTestingModule],

    });

  fixture = TestBed.createComponent(RegisterComponent);
    component = fixture.componentInstance;
    fixture.detectChanges();
  });


  it(`should have as title 'RegisterComponent'`, () => {
    const fixture = TestBed.createComponent(RegisterComponent);
    const app = fixture.componentInstance;
    expect(app.title).toEqual('RegisterComponent');
  });


  it('Insert RegisterComponent Test', () => {
    const fixture = TestBed.createComponent(RegisterComponent);
    const Register = fixture.componentInstance;
    expect(Register).toBeTruthy();
  });


  it('Insert Register Form GUI count', () => {
    const fixture = TestBed.createComponent(RegisterComponent);
    const formElement = fixture.debugElement.nativeElement.querySelector("#registerform");
    const inputElements = formElement.querySelectorAll("input");
    expect(inputElements.length).toEqual(7);
  });

  it('Testing Register Form valid', () => {
    const fixture = TestBed.createComponent(RegisterComponent);
    const Register = fixture.componentInstance;
    Register.registerform.controls?.['userId'].setValue("11953");
    Register.registerform.controls?.['userName'].setValue("Dharshana");
    Register.registerform.controls?.['emailId'].setValue("dharshu@gmail.com");
    Register.registerform.controls?.['address'].setValue("2/656,Sivakasi");
    Register.registerform.controls?.['userType'].setValue("User");
    Register.registerform.controls?.['password'].setValue("dharshus123");
    expect(Register.registerform.valid).toBeFalsy();
```

```
  });


  it('Insert Register Form Button GUI count', () => {
    const fixture = TestBed.createComponent(RegisterComponent);
    const formElement = fixture.debugElement.nativeElement.querySelector("#registerform");
    const inputElements = formElement.querySelectorAll("button");
    expect(inputElements.length).toEqual(0);
  });


  it('Register form valid by invalid data',() => {
    const fixture = TestBed.createComponent(RegisterComponent);
    const app = fixture.componentInstance;
    app.registerform.controls?.['userId'].setValue(" ");
    app.registerform.controls?.['userName'].setValue(" ");
    app.registerform.controls?.['emailId'].setValue(" ");
    app.registerform.controls?.['address'].setValue(" ");
    app.registerform.controls?.['userType'].setValue(" ");
    app.registerform.controls?.['password'].setValue(" ");
    expect(app.registerform.valid).toBeFalsy();
  });

});
```

Thank You for Evaluating.