#### ANGULAR FINAL ASSIGNMENT – FREELANCER HUB

# Step 1: Setting Up the Angular Project

## **Install Angular CLI (If Not Installed)**

npm install -g @angular/17cli

```
D:\>npm install -g @angular/cli@17
npm WARN deprecated read-package-json@7.0.1: This package is no longer supported. Please use @npmcli/package-json instead.

changed 244 packages in 14s

43 packages are looking for funding
    run `npm fund` for details

D:\>
```

## Create a New Angular Project

ng new freelancer-hub -standalone

```
D:\>ng new freelancer-hub --standalone
? Which stylesheet format would you like to use? CSS [https://developer.mozilla.org/docs/Web/CSS]
Do you want to enable Server-Side Rendering (SSR) and Static Site Generation (SSG/Prerendering)? No
CREATE freelancer-hub/package joon (1085 bytes)
CREATE freelancer-hub/package joon (1085 bytes)
CREATE freelancer-hub/README.md (1095 bytes)
CREATE freelancer-hub/tsconfig.spo (309 bytes)
CREATE freelancer-hub/sitignore (629 bytes)
CREATE freelancer-hub/tsconfig.app.json (277 bytes)
CREATE freelancer-hub/tsconfig.app.json (278 bytes)
CREATE freelancer-hub/tsconfig.spo.json (278 bytes)
CREATE freelancer-hub/vscode/extensions.json (134 bytes)
CREATE freelancer-hub/vscode/extensions.json (134 bytes)
CREATE freelancer-hub/src/anin.ts (236 bytes)
CREATE freelancer-hub/src/apic.nin.ts (236 bytes)
CREATE freelancer-hub/src/favicon.ico (15886 bytes)
CREATE freelancer-hub/src/favicon.ico (15886 bytes)
CREATE freelancer-hub/src/app.component.html (20239 bytes)
CREATE freelancer-hub/src/app.component.spec.ts (969 bytes)
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CREATE freelancer-hu
```

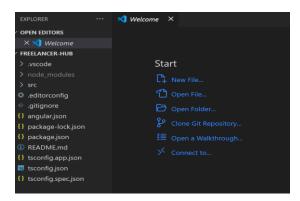
## Navigate to the project folder:

cd freelancer-hub

```
D:\>cd freelancer-hub
D:\freelancer-hub>
```

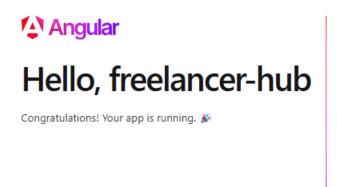
# **Open Project in VSCODE:**

Code.



# Run the project:

ng serve



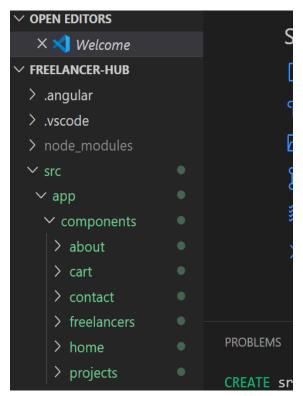


This will start the project at <a href="http://localhost:4200">http://localhost:4200</a>.

# **Step 2: Generate Components**

## **Commands:**

ng generate component components/login
ng generate component components/signin
ng generate component components/home
ng generate component components/projects
ng generate component components/freelancers
ng generate component components/cart
ng generate component components/contact
ng generate component components/about



**Components Created.** 

#### **Step 3: Setup Routing for Components**

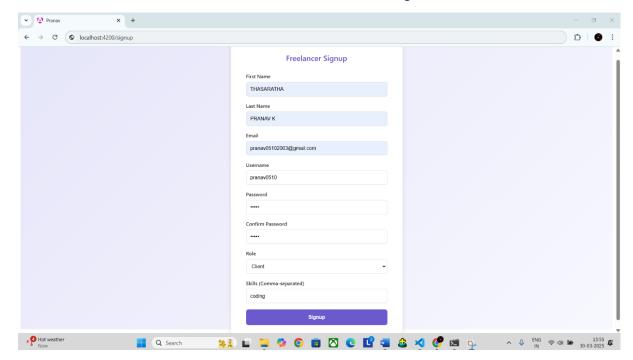
**Step 4: Implement Navigation in App Component** 

```
♦ app.component.html M ×
TS app.routes.ts M
src > app > ↔ app.component.html > ...
      <nav class="navbar">
         <a routerLink="/" class="nav-item">Home</a>
  3
         <a routerLink="/projects" class="nav-item">Projects</a>
        <a routerLink="/freelancers" class="nav-item">Freelancers</a>
        <a routerLink="/cart" class="nav-item">Cart</a>
        <a routerLink="/contact" class="nav-item">Contact</a>
  6
         <a routerLink="/about" class="nav-item">About</a>
       </nav>
 10 1
       <!-- Display the selected route component -->
       <router-outlet></router-outlet>
 11
 12
```

# **Step 5: Implement Content for Each Component**

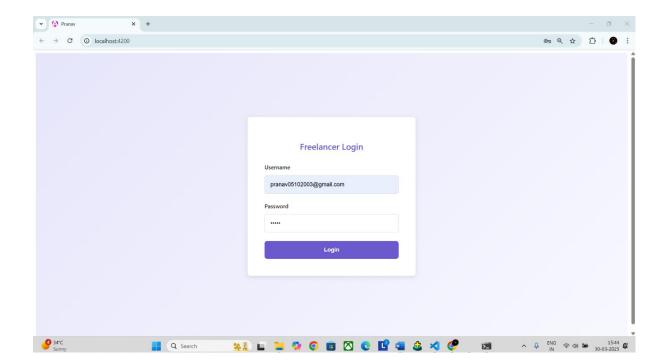
# 1,Signin:

- 1. FormGroup Creation define the form's structure in your component.
- 2. Input Binding connect HTML fields to the defined form.
- 3. Data Validation ensure entered data adheres to requirements.
- 4. Error Feedback display messages for invalid input.
- 5. Backend Submission send the collected data to the local storage.



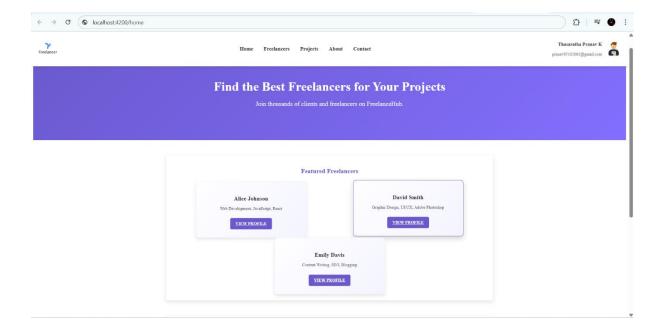
# 2, Login:

- Component Data stores username, password, and error messages.
- Form Binding links HTML inputs to component data using ngModel.
- Service Call sends login data to the UserService for authentication.
- Response Handling navigates on success, displays errors on failure.
- Visual Styling CSS provides a clean login form appearance.



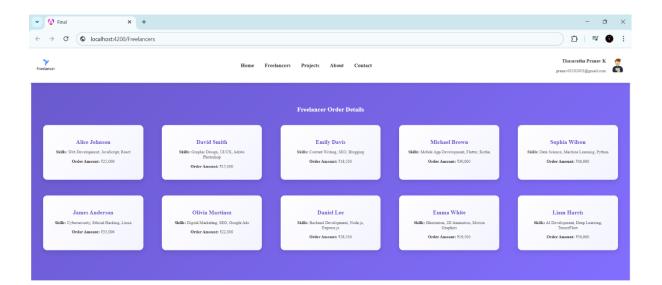
## 3, Home:

- The HomeComponent holds the data for the featured freelancers.
- The FreelancerCardComponent is responsible for displaying each freelancer's information.
- Using @Input() and @Output(), the components communicate effectively, allowing the **parent component** to handle the navigation when a freelancer profile is clicked.
- The freelancer card component is reusable, and the home component is clean.



#### 4, Freelancers:

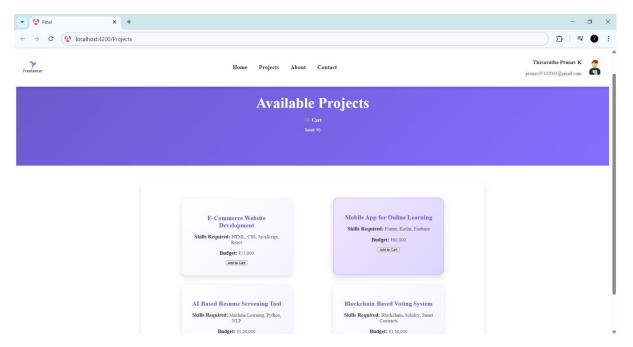
- The FreelancerListComponent holds an array of freelancers containing data about each freelancer
- The HTML template uses \*ngFor to dynamically generate the freelancer cards.
- The CSS styles the layout, creating a responsive grid for the cards and applying styles to each card
- The \*ngFor directive simplifies the process of displaying a list of data without manually creating each card, making the code more efficient and maintainable.
- It is the child component



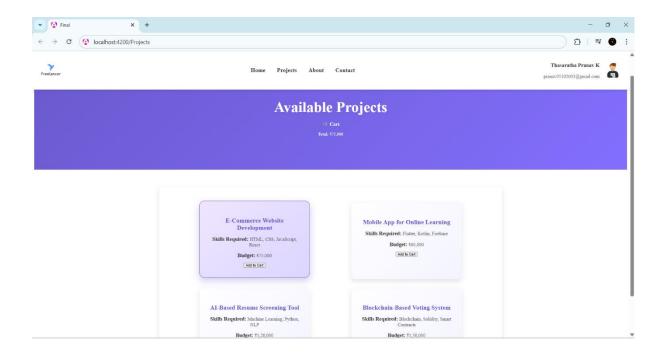
## 5, Projects:

The ProjectsComponent holds an array of projects with data about each project.

- The HTML template uses \*ngFor to dynamically generate the project cards.
- The CurrencyPipe formats the budget property for each project, making it more user-friendly.
- The addToCart() method increases the cartCount for a project when the "Add to Cart" button is clicked.
- The CSS styles the layout, creating a responsive grid for the cards and applying styles to each card.

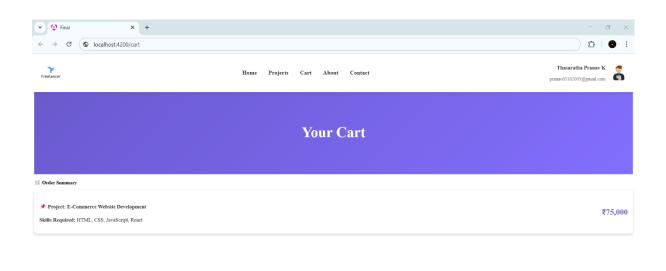


Selecting the required project the amount will be updated in cart.



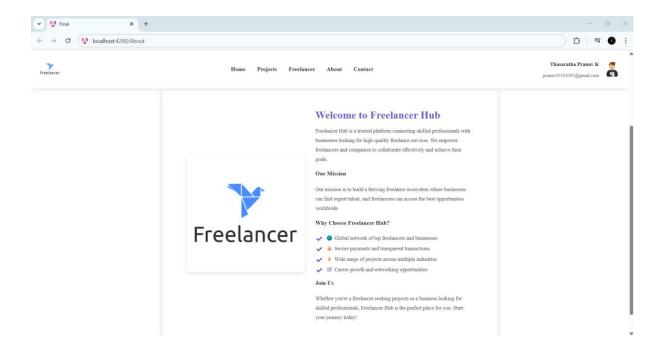
# 7, Cart

- The CartComponent retrieves and displays the cart items from local storage.
- The ProjectsComponent (or wherever the "Add to Cart" functionality is) stores the cart items in local storage.
- Local storage allows us to persist the cart data even if the user refreshes the page or closes the browser.
- Local storage is a simple key-value storage mechanism that is available in the browser.
- It is useful for storing small amounts of data that don't need to be sent to a local storage.



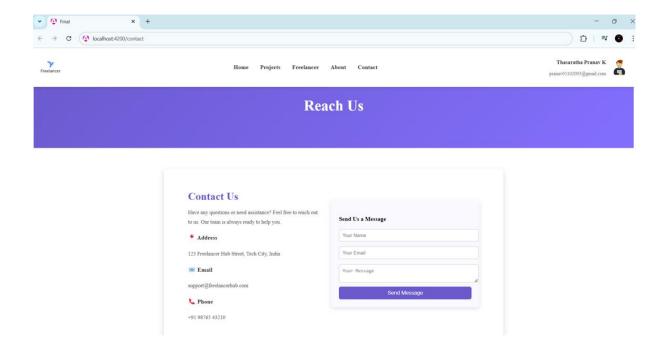
#### 8, About

- The AboutComponent holds the data for the about page.
- The HTML template uses \*ngFor to dynamically generate the list of reasons to choose Freelancer Hub.
- We created a custom CapitalizePipe that capitalizes the first letter of each word in a string.
- By using {{ title | capitalize }}, {{ mission | capitalize }}, {{ item | capitalize }}, and {{ joinUs | capitalize }}, we apply the custom pipe to the text, making the first letter of each word uppercase.
- The custom pipe is declared in the app.module.ts to make it available for use in the template.



## 9, Reach us

- The ContactComponent holds the contact information and message data.
- The HTML template uses template-driven forms to create the message form.
- The NgForm directive and ngModel enable data binding and validation.
- The sendMessage() method logs the message data to the console (you would typically send this data to a backend API).
- The CSS styles the contact page layout and form (Form Handling).



### 10, Guard:

Implementing guard:

```
EXPLORER
                    ··· U TS project.service.ts U X TS app.component.ts M TS freelancer.service.ts U
> OPEN EDITORS
                          src > app > guards > TS auth.guard.ts > ...
                          1 import { Injectable } from '@angular/core';
∨ FREELAN... 🖺 📮 ひ 🗊
                                 import { CanActivate, Router } from '@angular/router';
 > .angular
 > .vscode
   4 5 6 7 7 2 components 8 9 guards TS auth.guard
                                @Injectable({
                                 providedIn: 'root'
                                 export class AuthGuard implements CanActivate {
                                   canActivate(): boolean {
 TS auth.guard.spe... U
                                   const isAuthenticated = localStorage.getItem('user');
    TS auth.guard.ts U
                                     if (!isAuthenticated) {
                                       this.router.navigate(['/']);
   > pipes
   # app.component.css
   ⇔ app.component.... M
```

## 11, pipes

implementing pipes:

#### 12, Services:

Two services implemented:

1,project.model.ts

2, freelancer. model.ts

```
TS project.model.ts U
                                                                       TS freelancer.model.ts U
                                                                                                           TS project.service.ts U X TS freelancer.service.ts U
OPEN EDITORS
                                      import { Injectable } from '@angular/core';
import { Observable, of } from 'rxjs';
import { Project } from '../models/project.model';
FREELANCER-HUB
∨ src
                                     4
5 @Injectable({
covidedIn:
  TS capitalize.pipe.ts U 7
TS currency.pipe.s... U 8
TS currency.pipe.ts U 9
V services 10
TS freelance
                                              providedIn: 'root'
                                           export class ProjectService {
                                           private projects: Project[] = [
                                               { id: 1, title: 'E-Commerce Website', skills: ['HTML', 'CSS', 'React'], budget: 75000 
 { id: 2, title: 'Mobile App Development', skills: ['Flutter', 'Dart'], budget: 120000
                                                 getProjects(): Observable<Project[]> {
  # app.component.css
                                                   return of(this.projects);
  TS app.component.spec.ts 16
```