Angular IPL App



A Web Application for IPL Team and Player Management

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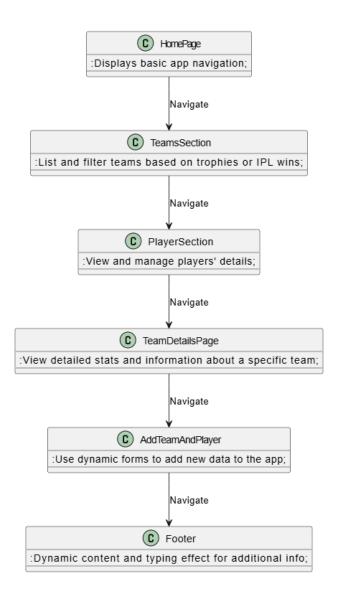
Application Details

- ➤ Manage IPL teams, players, and calculate stats like win chances, display team/player details, and enable interactive features for users.
- Features include viewing teams, players, team highlights, and a responsive UI.
- Dynamic forms for adding new teams and players, filtering teams based on trophies, and displaying detailed information.

Workflow Overview

- ☐ Team and Player Management: Users can view teams and players with their detailed statistics and manage them via forms.
- ☐ **Team Highlights**: Team winning probabilities and key stats are highlighted dynamically.
- ☐ **Team List**: A list of teams with filtering and the option to show only teams that have never won the IPL.
- □Add Team and Player: Users can add new teams and players with the help of dynamic forms.

Application Workflow



Application Workflow

☐ Home Page: Displays basic app navigation. **Teams Section**: List and filter teams based on trophies or whether they have won the IPL. □ Player Section: View and manage players' details. **□Team Details Page**: View detailed stats and information about a specific team. □Add Team and Player: Use dynamic forms to add new data to the app. ☐ Footer: Dynamic content and typing effect for additional info.

Angular Concepts Used

Components: The building blocks of Angular apps consist of a template (HTML), a class (TypeScript), and styles (CSS) that manage UI and behavior.

Parent-Child Components: Communication between components, with @Input for passing data from parent to child and @Output for sending data from child to parent.

Structural and Attribute Directives:

- Structural directives, such as *ngFor and *ngIf, manipulate the DOM by adding or removing elements.
- Attribute directives, such as ngClass and ngStyle, modify the appearance or behavior of elements.
- @Input: A decorator used to pass data from a parent component to a child component, enabling reusability.

Basic Routing: Angular's Router enables navigation between different views or pages, defines routes, and links them to components.

Services: Used to handle data and logic that needs to be shared across multiple components, such as fetching data from an API.

Observables: A mechanism for handling asynchronous operations, typically used for HTTP requests and other asynchronous data sources.

API Calls: Angular's HttpClient is used to fetch data from external APIs, such as JSON Server, for simulating a backend.

Template and Reactive Forms:

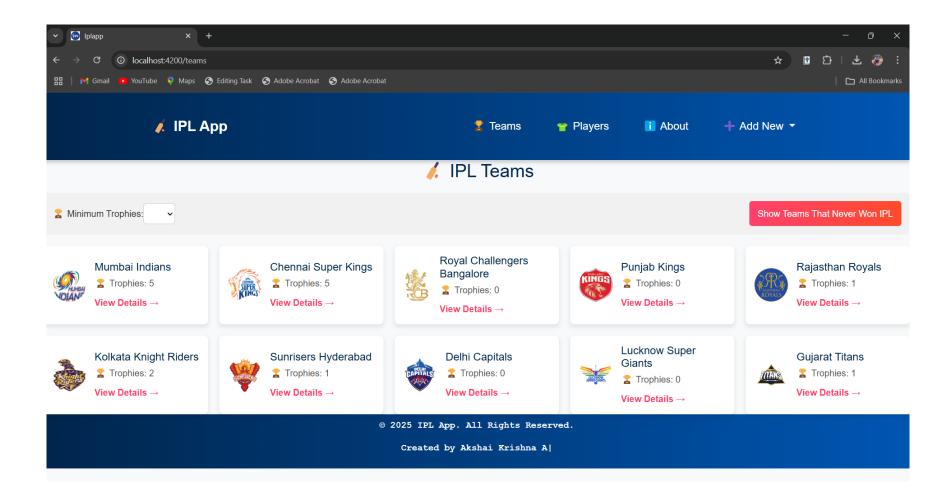
- Template-driven forms: Simple forms that utilize Angular directives within the template.
- Reactive forms: More complex forms where form control logic is managed within the component class.
- Pipes: Used for transforming data in templates. Examples include filtering, formatting dates, and calculating values such as win chances.

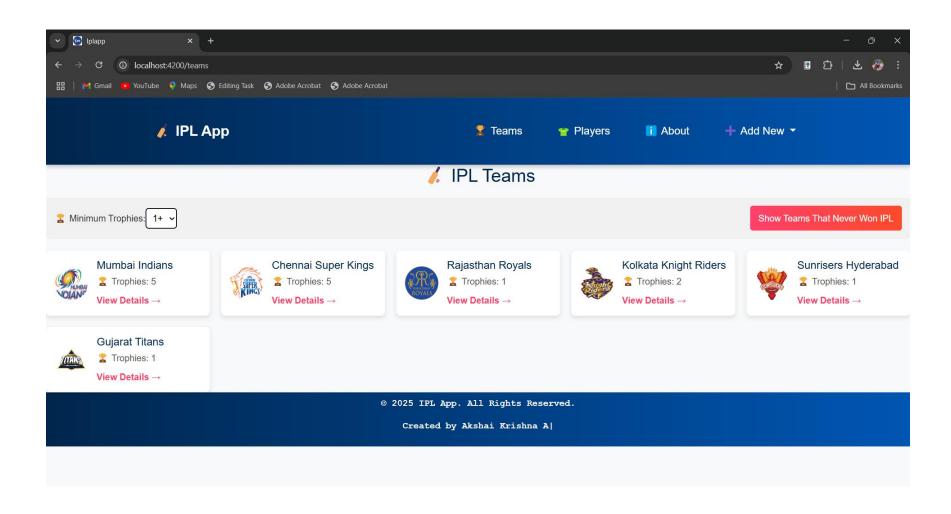
NGINX: Used as the webserver to serve the Angular application in a production environment.

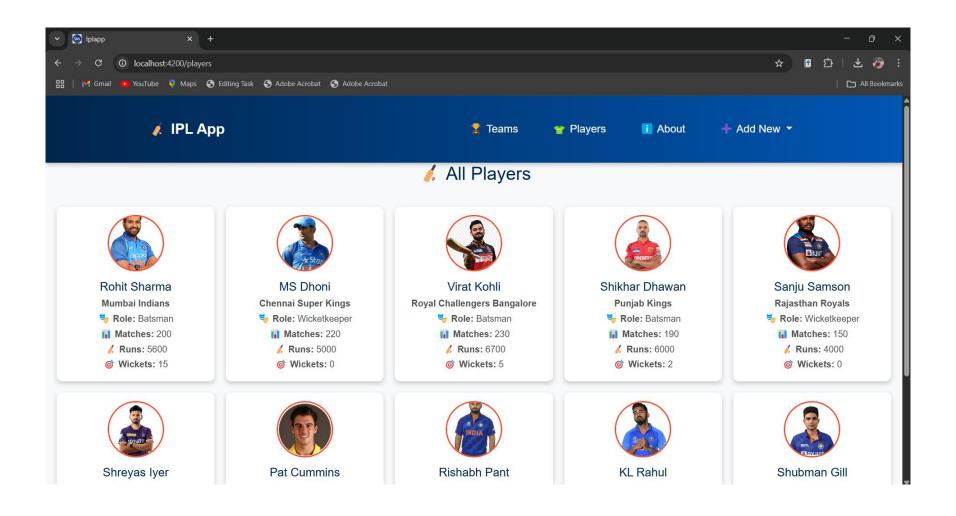
JSON Server: Used to mock a RESTful API, simulate a backend for development purposes, and provide data for the Angular app.

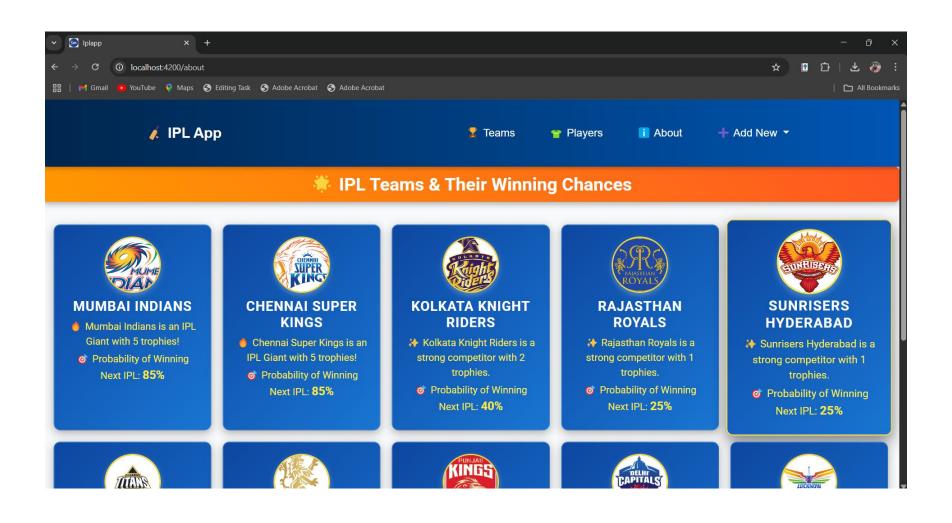
Technologies Used

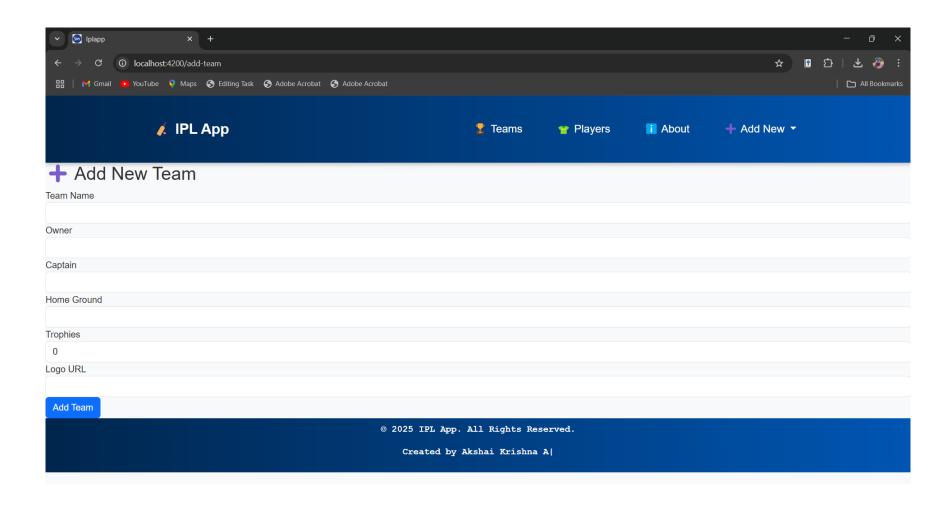
- > Frontend: Angular (for SPA functionality)
- ➤ Backend Simulation: JSON Server (for mocking the backend API during development)
- >Styling: CSS (including custom styling for components)
- **≻Libraries**: Angular Forms, Router, and Pipes
- ➤ Web Server: NGINX (used for serving the Angular app in a production environment)
- **≻Tools**: Visual Studio Code, Angular CLI

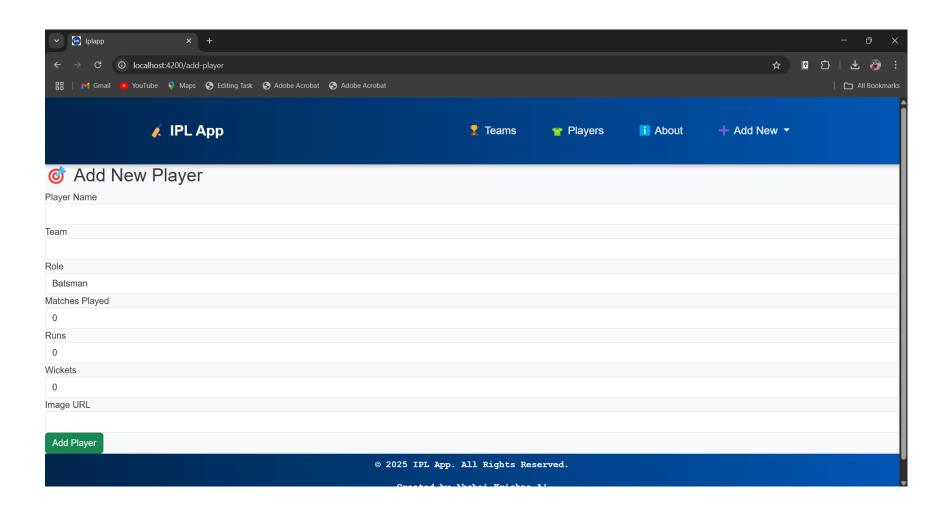












Conclusion

- □Summary: A fully interactive and responsive Angular application for managing IPL teams and players.
- ☐ Future Improvements: Integrating with a backend for dynamic data, adding more complex statistical analysis, and integrating real-time match data.

Thank you