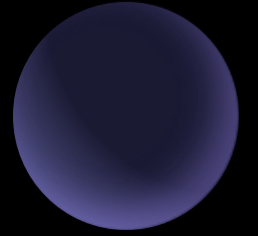
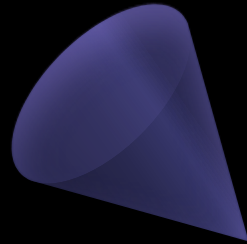




React Projects with APIs

Agenda

- Introduction to APIs
- Project Overview
- Movie API Integration
- Product API Integration
- Food API Integration
- Weather API Integration
- News API Integration



Introduction to APIs

- **What are APIs?**
- Application Programming Interfaces
- Allow applications to communicate with each other
- **Role in React**
- Fetch data dynamically
- Integrate external functionalities



Project Overview

- **Project Scope**

- Integrate multiple APIs into a React application
- Display data in meaningful ways

- **Technologies**

- React, Axios for API calls



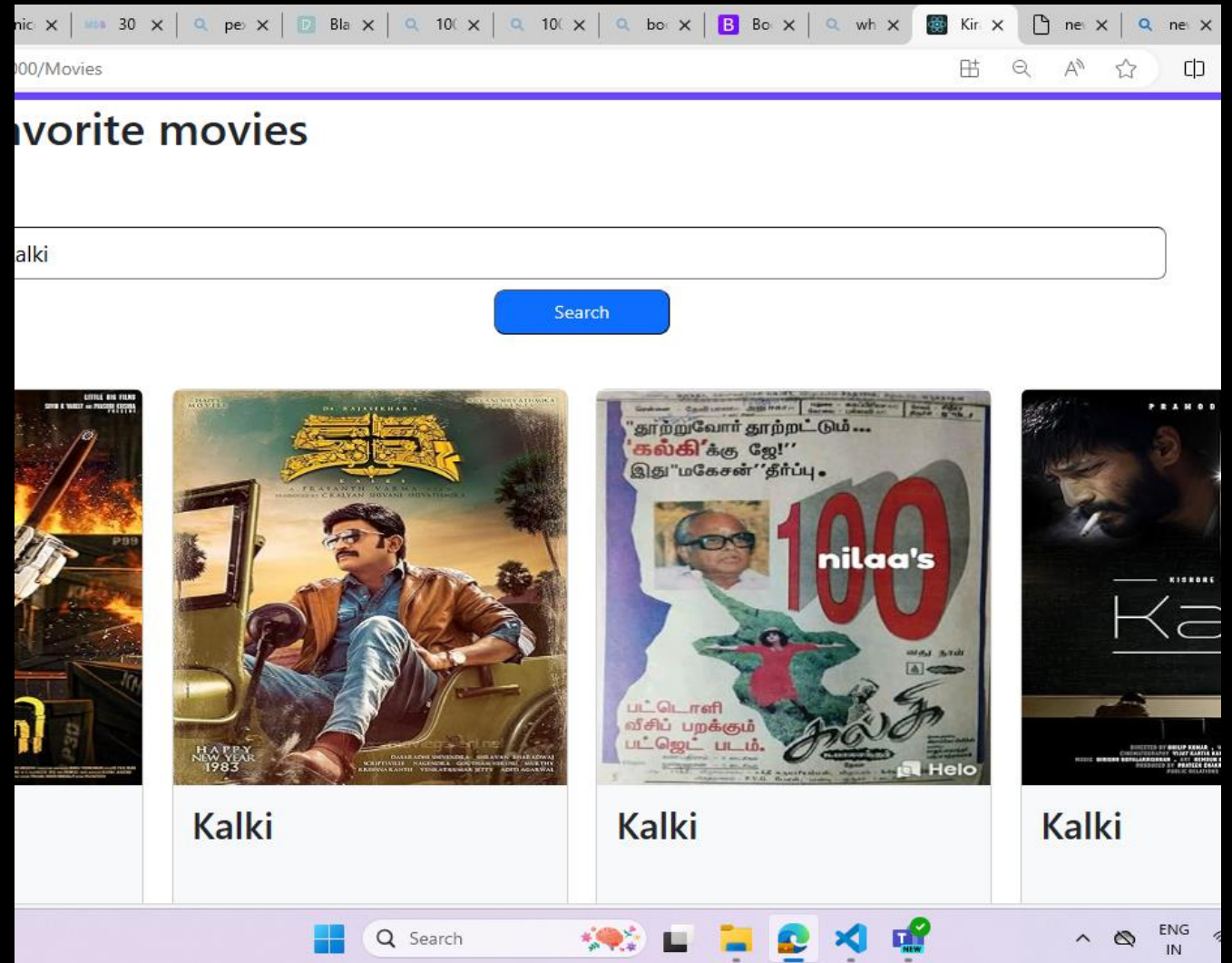
Movie API Integration

Movie API

Fetch movie data (titles, ratings, descriptions)

Example Code

```
// Code snippet for fetching movies
axios.get('https://api.example.com/movies')
  .then(response => {
    // Handle movie data
  })
  .catch(error => {
    // Handle error
  });
```



Product API Integration

- **Product API**
- Fetch product data (names, prices, descriptions)

- **Example Code**

// Code snippet for fetching products

```
axios.get('https://api.example.com/products')
```

```
.then(response => {
```

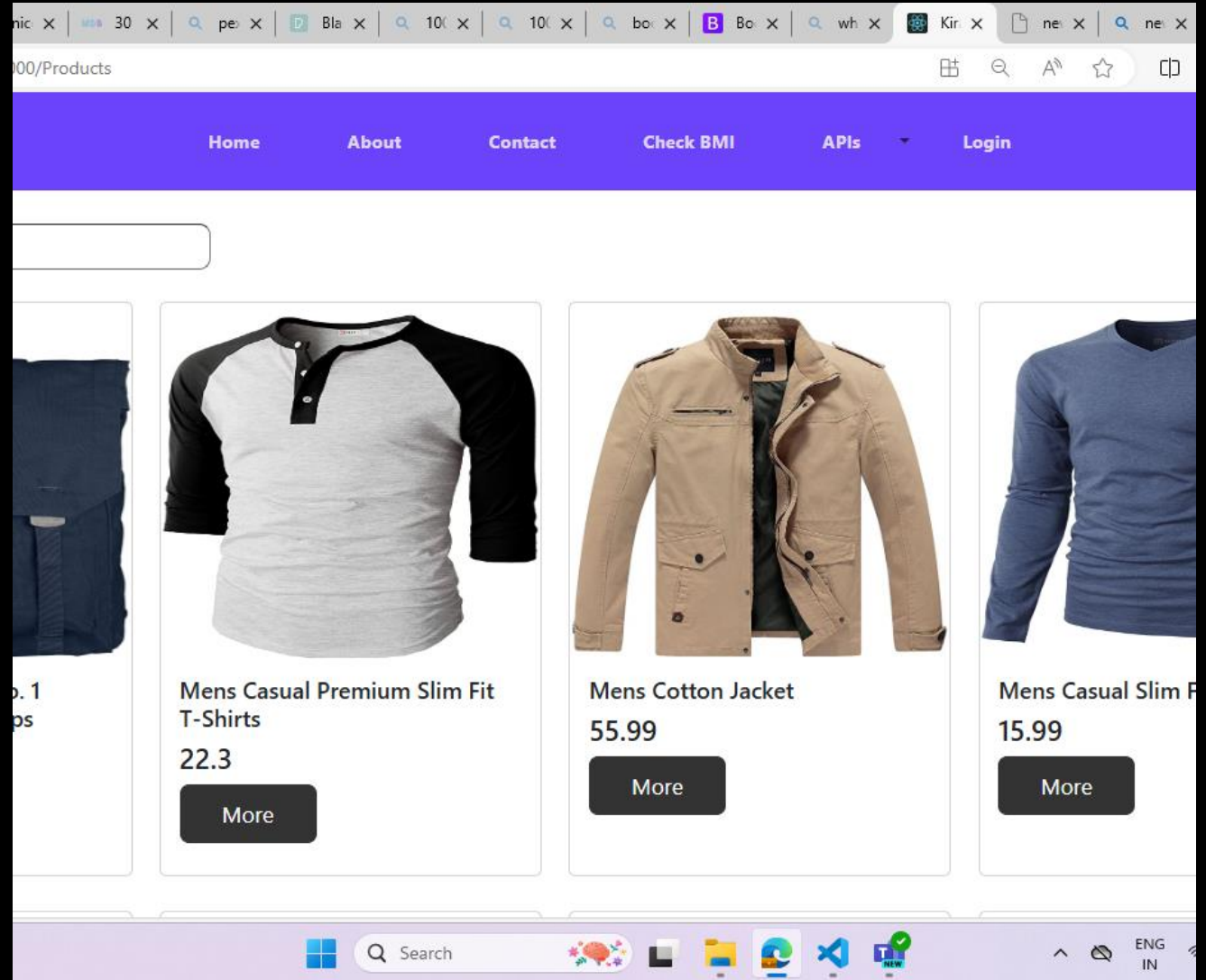
```
  // Handle product data
```

```
})
```

```
.catch(error => {
```

```
  // Handle error
```

```
});
```



Food API Integration

- **Food API**
- Fetch food-related data (recipes, nutritional info)
- **Example Code**

// Code snippet for fetching recipes

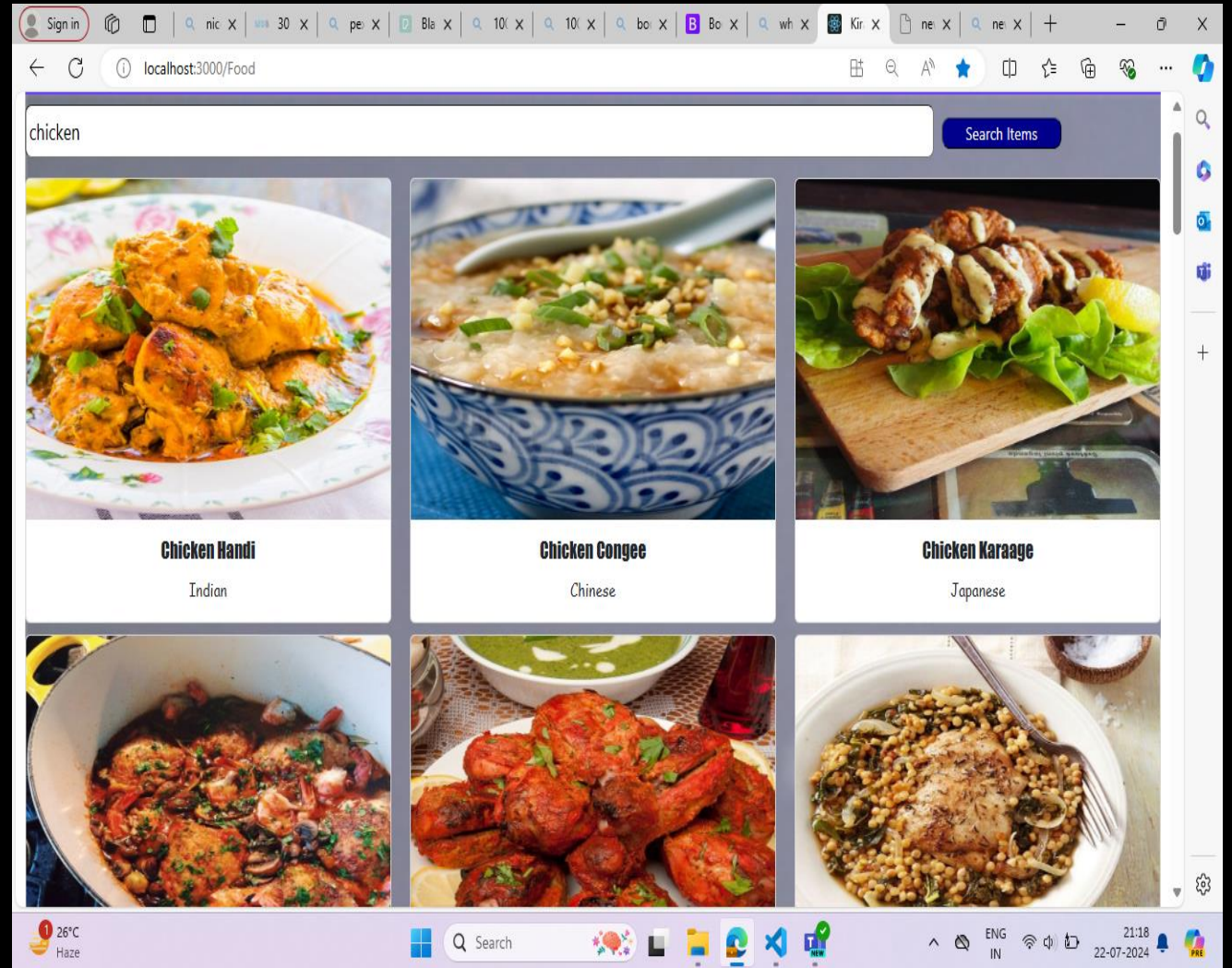
```
axios.get('https://api.example.com/recipes')
```

```
.then(response => {  
  // Handle recipe data
```

```
})
```

```
.catch(error => {  
  // Handle error
```

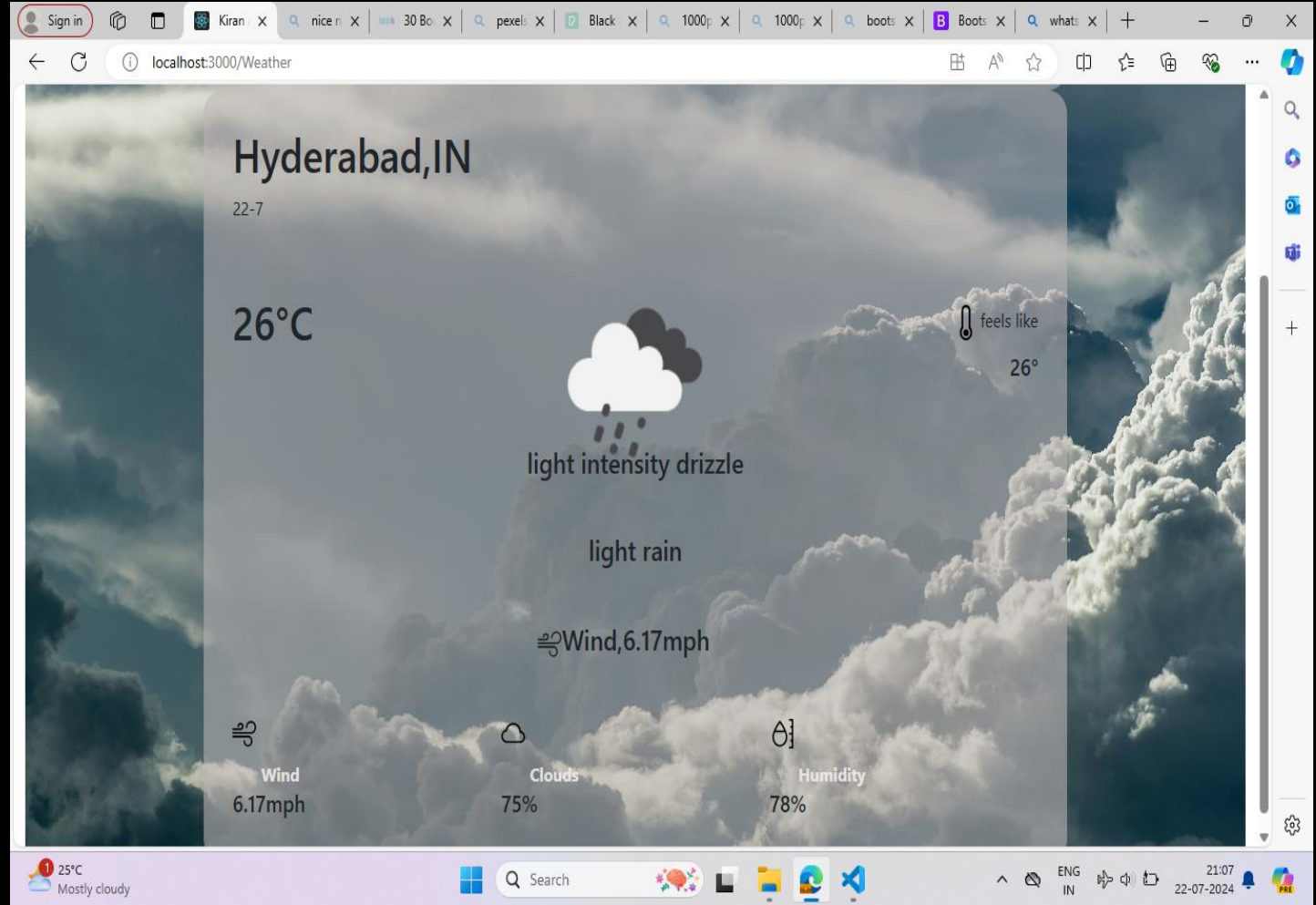
```
});
```



Weather API Integration

- **Weather API**
- Fetch weather data (current conditions, forecasts)
- **Example Code**

```
// Code snippet for fetching weather
axios.get('https://api.example.com/weather')
.then(response => {
  // Handle weather data
})
.catch(error => {
  // Handle error
});
```



News API Integration

- **News API**
- Fetch news articles (headlines, summaries)
- **Example Cod**

// Code snippet for fetching news

```
axios.get('https://api.example.com/news')
```

```
.then(response => {
```

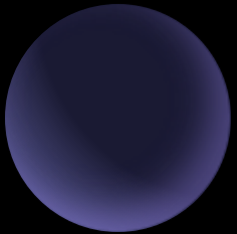
```
  // Handle news data
```

```
});
```

```
.catch(error => {
```

```
  // Handle error
```

```
});
```



BMI API Integration

- **BMI API**
- Calculate BMI based on user input (height, weight)
- **Example Code**

```
axios.post('https://api.example.com/bmi', {  
  height: userHeight,  
  weight: userWeight  
})  
  .then(response => {  
    // Handle BMI calculation  
  })  
  .catch(error => {  
    // Handle error  
  });
```

BMI Calculator

Weight (Kg) 75

Height (cm) 183

Submit

Reload

Your BMI is: 22.40
You are Healthy

000/CheckBMI

Challenges and Solutions

- **Challenges**

- + Data formatting inconsistencies
- + Handling API rate limits

- **Solutions**

- + Standardize data parsing
- + Implement caching strategies

Conclusion

- **Key Takeaways**
- APIs enhance functionality and data accessibility in React apps
- Integration of diverse APIs enriches user experience
- **Future Directions**
- Expand API integrations
- Enhance UI/UX features based on user feedback

Thank you

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