Introduction to React & React Native

Welcome to Front-End Development

- What is React?
- What is React Native?
- Setup your development environment
- Create your first "Hello World" app

Why React?

- Developed by Facebook, used by Instagram, WhatsApp, Netflix
- Component-based architecture: Think of Lego blocks
- Fast UI rendering with Virtual DOM
- Great developer tools & large ecosystem

React vs React Native

Feature	React (Web)	React Native (Mobile)
Platform	Browsers	iOS & Android
Output	HTML	Native Components
Styling	CSS	StyleSheet API
Navigation	React Router	React Navigation

Real–Life Analogy

React is like building a house with Lego blocks.

- Each block = Component
- You can reuse blocks everywhere
- Easy to rearrange & update

Environment Setup

React (Web):

- Install Node.js & VSCode
- npm create vite@latest hello-react-app
- Choose "React" + JavaScript

React Native:

- Install Node.js, VSCode, Android Studio
- Install react-native-cli
- Run: npx react-native init HelloMobile

First React Web App

```
function App() {
  return <h1>Hello World from React!</h1>;
}
export default App;
```

- Open browser to see your app
- Use React DevTools extension

First React Native App

```
import { Text, View } from 'react-native';
export default function App() {
  return (
    <View>
      <Text>Hello World from React Native!</Text>
    </View>
  );
}
```

- Use Android/iOS emulator to preview
- Can also use physical device with Expo or USB

Lab Exercise

Build a simple counter app

- One button to increment a number
- Show the number on screen
- **React Web & React Native versions**

Wrap-Up

- Recap: React, React Native, environment setup
- What we built: Hello World + Counter App
- Next session: JSX, Components, and Props
- Homework: Customize your counter (add reset button, style it)