React Native Tutorial — Lesson Notes

What is React Native?

React Native is a framework for building native mobile apps using React and JavaScript. Write once, run on both iOS and Android.

Core Concepts

Setting Up with Expo

```
npx create-expo-app MyApp
cd MyApp
npx expo start
```

Core Components

React Native	Web Equivalent	Purpose
`<View>`	`<div>`	Container
`<Text>`	`<p>` / `<span>`	Display text
`<Image>`	`<img>`	Display images
`<ScrollView>`	Scrollable `<div>`	Scrollable container
`<TextInput>`	`<input>`	Text input field
`<TouchableOpacity>`	`<button>`	Touchable element
`<FlatList>`	Mapped list	Performant long lists

Basic Component

```
import { View, Text, StyleSheet } from 'react-native';

export default function WelcomeScreen() {
  return (
    <View style={styles.container}>
      <Text style={styles.title}>Welcome!</Text>
      <Text style={styles.subtitle}>Start learning today</Text>
    </View>
```

```
  );
}

const styles = StyleSheet.create({
  container: { flex: 1, justifyContent: 'center', alignItems:
        'center' },
  title: { fontSize: 28, fontWeight: 'bold' },
  subtitle: { fontSize: 16, color: '#666', marginTop: 8 },
});
```

Navigation

```
import { NavigationContainer } from '@react-navigation/native';
import { createStackNavigator } from '@react-navigation/stack';

const Stack = createStackNavigator();

function App() {
  return (
    <NavigationContainer>
      <Stack.Navigator>
        <Stack.Screen name="Home" component={HomeScreen} />
        <Stack.Screen name="Details" component={DetailsScreen} />
      </Stack.Navigator>
    </NavigationContainer>
  );
}
```

Key Takeaways

1. React Native uses native components, not a WebView — real native performance.
2. Styling uses `StyleSheet` (similar to CSS but with camelCase properties).
3. Use Expo for quick setup; eject to bare workflow for advanced native modules.
4. `FlatList` is essential for performant scrolling lists.
