Expo Router

File Based Routing in React Native

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Jonathan Bones & Oliver Kwast • Kiel React (Native) Meetup • 06.12.2022

The Spec.

- View a feed of posts

- View a list of profiles

- Tap on a profile to view more detailed user information

- Needs to be hardcore

- MVP deadline: End of this talk 🚀

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Fleeter 🐦

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So where do we begin?

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Navigation

- Entry-point

- Stack

- Tabs

- A modal for creating posts

- Drawer (optional)

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@react-navigation

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```
function FeedScreen() {
  return (
    <View style={{ flex: 1, alignItems: 'center', justifyContent: 'center'
}}>   <Text>Feed</Text>
    </View>
  );
}

function ProfileListScreen() {
  return (
    <View style={{ flex: 1, alignItems: 'center', justifyContent: 'center'
}}>   <Text>Profile List</Text>
    </View>
  );
}

const Stack = createNativeStackNavigator();

function App() {
  return (
    <NavigationContainer>
      <Stack.Navigator initialRouteName="Feed">
        <Stack.Screen name="Feed" component={FeedScreen} />
        <Stack.Screen name="Profiles" component={ProfileListScreen} />
      </Stack.Navigator>
    </NavigationContainer>
  );
}

export default App;
```

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How about file-based routing?

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File Based Routing
expo-router

- File location determines navigation hierarchy

  - Single source of truth 🥇

- Scalable solution that requires less boilerplate

- Easier to maintain and simpler to refactor

- Tooling automatically takes care of many tedious configuration tasks

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Getting Started

- Update entry-point

- Babel plugin (whilst in Beta)

```js
module.exports = function (api) {
  api.cache(true);
  return {
    presets: ["babel-preset-expo"],
    plugins: [
      // NOTE: `expo-router/babel` is a temporary extension to `babel-preset-expo`.
      require.resolve("expo-router/babel"),
      "react-native-reanimated/plugin",
    ],
  };
};
```

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An initial screen

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A stack for your thoughts

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How about tabs?

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Modal? 🔵

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Bet you can't make a drawer

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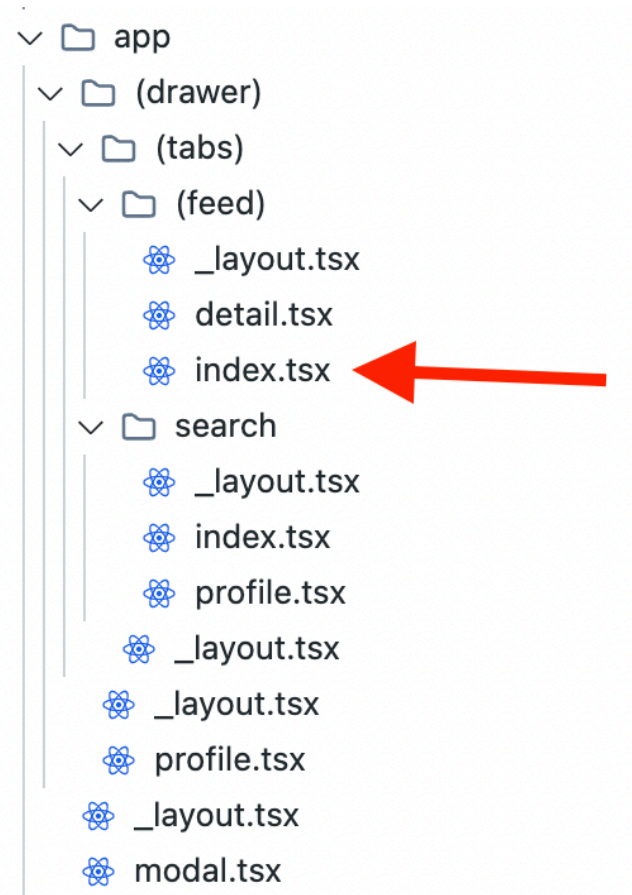
Ok, ok... Deep-Links?

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Our Experience

- File-based routing mindset

- Still in beta (⚠️ changes ahead)

  - Issues with FastRefresh

  - TS support will improve

- Feels quick and relatively intuitive

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```
∨ 📁 app
  ∨ 📁 (drawer)
    ∨ 📁 (tabs)
      ∨ 📁 (feed)
          ⚛ _layout.tsx
          ⚛ detail.tsx
          ⚛ index.tsx
      ∨ 📁 search
          ⚛ _layout.tsx
          ⚛ index.tsx
          ⚛ profile.tsx
        ⚛ _layout.tsx
      ⚛ _layout.tsx
      ⚛ profile.tsx
    ⚛ _layout.tsx
    ⚛ modal.tsx
```

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```
∨ 📁 app
  ∨ 📁 (drawer)
    ∨ 📁 (tabs)
      ∨ 📁 (feed)
          ⚛ _layout.tsx
          ⚛ detail.tsx
          ⚛ index.tsx          ⬅
      ∨ 📁 search
          ⚛ _layout.tsx
          ⚛ index.tsx
          ⚛ profile.tsx
        ⚛ _layout.tsx
      ⚛ _layout.tsx
      ⚛ profile.tsx
    ⚛ _layout.tsx
    ⚛ modal.tsx
```

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Future Roadmap 🛣️

- Universal scroll-to-top

- Improved TS support

- Web improvements (e.g. Server components)

- View-restoration

- App-clips (iOS)

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Thanks for listening!

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