## Navigation

## Tab navigation using Expo Router

- Possibly the most common style of navigation in mobile apps is tabbased navigation. This can be tabs on the bottom of the screen or on the top below the header (or even instead of a header).
- Creating a new Expo app:
  - npx create-expo-app@latest -template tabs@50
  - npx expo start

## Tab navigation using React Navigation

- Creating a new Expo app:
  - npx expo install react-native-screens react-native-safe-area-context
  - npx expo install @react-navigation/native
  - npx expo install @react-navigation/bottom-tabs
  - npx expo install @expo/vector-icons
  - npx expo start

```
EXPLORER
                                         J$ App.js M X J$ mytab.js U
                                                                         J$ setting.js U
                                                                                          JS home.js U
✓ NAV
                                         JS App.js > ...
                                                import MyTabs from './tabs/mytab'
> 🔼 .expo
                                                import { NavigationContainer } from '@react-navigation/native';
> 🐻 assets
> node_modules
                                                export default function App() {

✓ 

screens

                                                  return (
    JS home.js
                                                    <NavigationContainer>
   JS setting.js
                                                      <MyTabs />
</NavigationContainer>
    JS mytab.js
  .gitignore
  JS App.js
                                    М
                                           12
   app.json
  m babel.config.js
  package-lock.json
                                    М
  package.json
                                    М
```

App.js

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EXPLORER
                                       JS App.js M
                                                      JS mytab.js U X JS setting.js U
                                                                                      JS home.js U
NAV
                                       tabs > JS mytab.js > ...
                                              import { createBottomTabNavigator } from '@react-navigation/bottom-tabs';
> 🌠 .expo
                                              import HomeScreen from '../screens/home';
> 👼 assets
                                              import SettingsScreen from '../screens/setting'
> node_modules
const Tab = createBottomTabNavigator();
   JS home.js
  JS setting.js
                                              export default function MyTabs() {
JS mytab.js
                                                  <Tab.Navigator>
  .gitignore
                                                    <Tab.Screen name="Home" component={HomeScreen} />
  JS App.js
                                                    <Tab.Screen name="Settings" component={SettingsScreen} />
                                                  </Tab.Navigator>
  app.json
  babel.config.js
  package-lock.json
                                         15
  package.json
```

mytab.js

```
EXPLORER
                                         JS App.js M
                                                         JS mytab.js U
                                                                          JS home.js U X JS setting.js U
NAV
                                          screens > JS home.js > ♥ HomeScreen
                                                 import { Text, View } from 'react-native'
> 🛂 .expo
> 🔞 assets
                                                 export default function HomeScreen() {
> node_modules

✓ 

screens

                                                       <View style={{ flex: 1, justifyContent: 'center', alignItems: 'center' }}>
   J$ home.js
                                                         <Text>Home!</Text>
   JS setting.js
                                                       </View>

✓ 

diabs

   J$ mytab.js
  .gitignore
  JS App.js
  👫 app.json
  m babel.config.js
  package-lock.json
  package.json
```

home.js

```
EXPLORER
                                         JS App.js M
                                                         JS mytab.js U
                                                                          J$ home.js U
                                                                                           J$ setting.js U X
                           다 다 간 회 screens > JS setting.js > ...
NAV
                                                 import { Text, View } from 'react-native'
> 🔼 .expo
> 🔞 assets
                                                export default function SettingsScreen() {
> node_modules

✓ 

screens

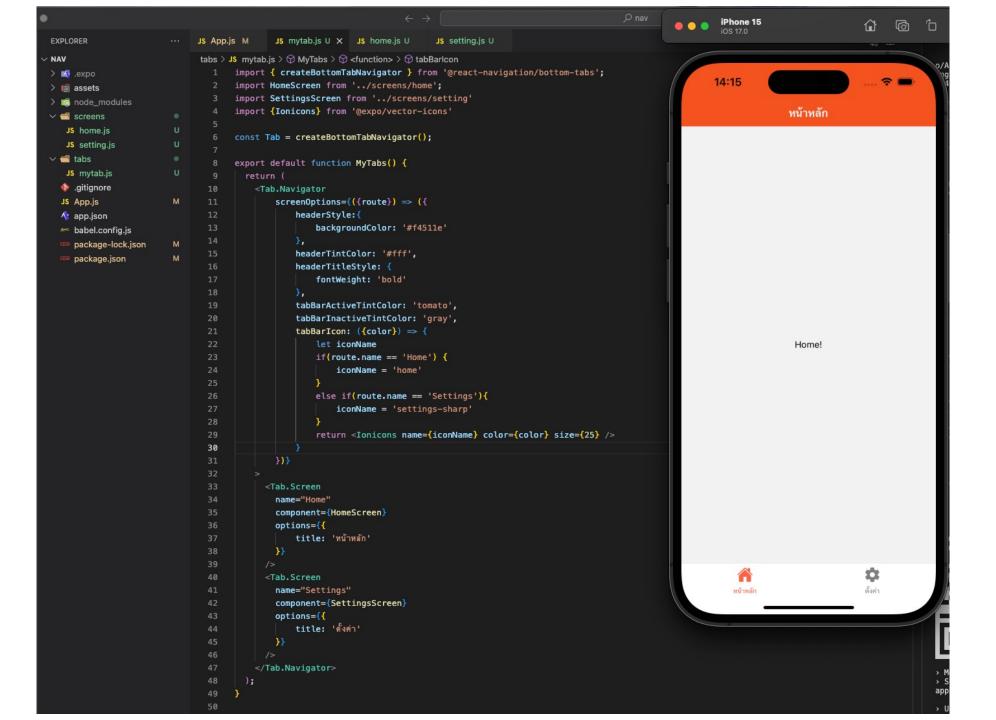
                                                       <View style={{ flex: 1, justifyContent: 'center', alignItems: 'center' }}>
   JS home.js
                                                         <Text>Settings!</Text>
   JS setting.js
                                                       </View>

✓ 

diabs

   JS mytab.js
  .gitignore
                                            10
  JS App.js
  👫 app.json
  m babel.config.js
  package-lock.json
  package.json
```

setting.js



## Stack navigation using React Navigation

- Stack Navigator provides a way for your app to transition between screens where each new screen is placed on top of a stack.
- Installation:
  - npx expo install @react-navigation/native-stack

```
iPhone 15
EXPLORER
                              JS App.js M
                                              JS mytab.js U
                                                              JS home.js U
                                                                              JS setting.js U •
                              screens > JS setting.js > ♥ Settings1
                                     import { Text, View, Button } from 'react-native'
> .expo
                                      import { createNativeStackNavigator } from '@react-navigation/native-stack'
> iii assets
                                                                                                                                      14:53
> node_modules
                                     function Settings1({navigation}) {

✓ 

screens

                                                                                                                                                        S1
  JS home.js
                                            <View style={{ flex: 1, justifyContent: 'center', alignItems: 'center' }}>
  JS setting.js
                                              <Button
∨ <del>=</del> tabs
                                                  title="Go to Settings2"
   JS mytab.js
                                                  onPress={() => navigation.navigate('S2')}
  .gitignore
  JS App.js
                                           </View>
                                12
  4 app.json
  make babel.config.js
    package-lock.json
                                        function Settings2({navigation}) {
    package.json
                                         return (
                                           <View style={{ flex: 1, justifyContent: 'center', alignItems: 'center' }}>
                                              <Button title="Go back" onPress={() => navigation.goBack()} />
                                           </View>
                                       const Stack = createNativeStackNavigator();
                                                                                                                                                 Go to Settings2
                                        function MyStack() {
                                            <Stack.Navigator>
                                              <Stack.Screen name="S1" component={Settings1} />
                                              <Stack.Screen name="S2" component={Settings2} />
                                           </Stack.Navigator>
                                     export default function SettingsScreen() {
                                              <MyStack />
```

```
<Tab.Screen
      name="Home"
      component={HomeScreen}
      options={{
          title: 'หน้าหลัก'
      }}
    <Tab.Screen
      name="Settings"
      component={SettingsScreen}
      options={{
          title: 'ตั้งคำ',
          headerShown: false
  </Tab.Navigator>
);
```