

BLUEPRINTS AND STACK NAVIGATOR



What is our GOAL for this MODULE?

In this lesson, we learned to design the blueprints for the ISS Tracker App. Create multiple screens for the app. Learn about Stack Navigator and add the screen to the Stack Navigator.

What did we ACHIEVE in the class TODAY?

- Designed blueprints for different screens of an ISS Tracker App.
- Created a Stack Navigator and added the screen to the app.

Which CONCEPTS/ CODING BLOCKS did we cover today?

- Stack Navigation.

How did we DO the activities?

1. Using “**expo init**” we created a new app:

```
ashura@ashura-Lenovo-ThinkBook-14-IML:~/Desktop$ expo init ISS-Tracker
✓ Choose a template: > blank a minimal app as clean as an empty canvas
✓ Downloaded and extracted project files.

📦 Using npm to install packages.
✓ Installed JavaScript dependencies.
✓ Your project is ready!

To run your project, navigate to the directory and run one of the following npm commands.

- cd ISS-Tracker
- npm start # you can open iOS, Android, or web from here, or run them directly with the commands below.
- npm run android
- npm run ios # requires an iOS device or macOS for access to an iOS simulator
- npm run web
```

2. Create a screens folder, inside the folder we created a **Home.js** file.
3. Create a basic **Home.js** file with basic code to display home text:

```
screens > JS Home.js > HomeScreen
1  import React, { Component } from 'react';
2  import { Text, View } from 'react-native';
3
4  export default class HomeScreen extends Component {
5    render() {
6      return (
7        <View
8          style={{
9            flex: 1,
10           justifyContent: "center",
11           alignItems: "center"
12         }}>
13         <Text>Home Screen!</Text>
14       </View>
15     )
16   }
17 }
```

4. Run the code using **expo start** to check the output:

```
ashura@ashura-Lenovo-ThinkBook-14-IML:~/Desktop/ISS-Tracker$ expo start
Starting project at /home/ashura/Desktop/ISS-Tracker
Expo DevTools is running at http://localhost:19002
Opening DevTools in the browser... (press shift-d to disable)
Starting Metro Bundler

exp://192.168.29.239:19000
```



```
To run the app, choose one of:
> Scan the QR code above with the Expo app (Android) or the Camera app (iOS).
```

OUTPUT:



5. Create other screens:

- Meteor screen:

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

export default class MeteorScreen extends Component {
  render() {
    return (
      <View
        style={{
          flex: 1,
          justifyContent: "center",
          alignItems: "center"
        }}>
        <Text>Meteor Screen!</Text>
      </View>
    )
  }
}
```

- Import the screen inside the App.js file:

```
import { StatusBar } from 'expo-status-bar';
import React from 'react';
import { StyleSheet, Text, View } from 'react-native';

import HomeScreen from "../screens/Home";
import IssLocationScreen from "../screens/IssLocation";
import MeteorScreen from "../screens/Meteor";

export default function App() {
  return (
    <View style={styles.container}>\
      <MeteorScreen/>
      <StatusBar style="auto" />
    </View>
  );
}

const styles = StyleSheet.create({
  container: {
    flex: 1,
    backgroundColor: '#fff',
    alignItems: 'center',
    justifyContent: 'center',
  },
});
```

OUTPUT:

Meteor Screen!

6. Install and add the react navigation packages:

```
ashura@ashura-Lenovo-ThinkBook-14-IML:~/Desktop/ISS-Tracker$ npm install @react-navigation/stack
npm WARN @react-navigation/stack@5.14.0 requires a peer of @react-native-community/masked-view@>=
0.1.0 but none is installed. You must install peer dependencies yourself.
npm WARN @react-navigation/stack@5.14.0 requires a peer of @react-navigation/native@^5.0.5 but none
is installed. You must install peer dependencies yourself.
npm WARN @react-navigation/stack@5.14.0 requires a peer of react-native-screens@>= 2.0.0-alpha.0 |
| >= 2.0.0-beta.0 || >= 2.0.0 but none is installed. You must install peer dependencies yourself.
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules/fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":
s:"darwin","arch":"any"} (current: {"os":"linux","arch":"x64"})

+ @react-navigation/stack@5.14.0
added 3 packages from 1 contributor and audited 1042 packages in 7.933s
```

```
ashura@ashura-Lenovo-ThinkBook-14-IML:~/Desktop/ISS-Tracker$ npm install @react-navigation/native
npm WARN @react-navigation/stack@5.14.0 requires a peer of @react-native-community/masked-view@>=
0.1.0 but none is installed. You must install peer dependencies yourself.
npm WARN @react-navigation/stack@5.14.0 requires a peer of react-native-screens@>= 2.0.0-alpha.0 |
| >= 2.0.0-beta.0 || >= 2.0.0 but none is installed. You must install peer dependencies yourself.
npm WARN optional SKIPPING OPTIONAL DEPENDENCY: fsevents@1.2.13 (node_modules/fsevents):
npm WARN notsup SKIPPING OPTIONAL DEPENDENCY: Unsupported platform for fsevents@1.2.13: wanted {"os":
s:"darwin","arch":"any"} (current: {"os":"linux","arch":"x64"})

+ @react-navigation/native@5.9.1
added 10 packages from 3 contributors and audited 1052 packages in 8.378s
```

7. Import all the packages in **App.js**:

```
import 'react-native-gesture-handler';
import * as React from 'react';
import { NavigationContainer } from '@react-navigation/native';
import { createStackNavigator } from '@react-navigation/stack';
```

8. Import all the screens:

```
import HomeScreen from "./screens/Home";
import IssLocationScreen from "./screens/IssLocation";
import MeteorScreen from "./screens/Meteors";
```

9. Create a stack navigator and pass all the screens to it:

```
const Stack = createStackNavigator();

function App() {
  return (
    <NavigationContainer>
      <Stack.Navigator initialRouteName="Home" screenOptions={{
        headerShown: false
      }}>
        <Stack.Screen name="Home" component={HomeScreen} />
        <Stack.Screen name="IssLocation" component={IssLocationScreen} />
        <Stack.Screen name="Meteors" component={MeteorScreen} />
      </Stack.Navigator>
    </NavigationContainer>
  );
}

export default App;
```

What's NEXT?

In the next class, we will be working on designing and creating the elements of the homescreen.

EXTEND YOUR KNOWLEDGE

Tab Navigation: <https://reactnavigation.org/docs/stack-navigator/>

WhiteHat Jr + WhiteHat Jr + WhiteHat Jr