Home Screen and Navigation

What is our GOAL for this MODULE?

In this class, we learned to design the home screen by adding different elements such as images and buttons to our app's home screen.

What did we ACHIEVE in the class TODAY?

- Designed the home screen.
- Added elements such as buttons and images to the home screen.

Which CONCEPTS/ CODING BLOCKS did we cover today?

- Created buttons using the button component.
- Added images using the image component.

How did we DO the activities?

1. Add the **styles.titleText** variable for the **Text** component in the ISS Tracker App created in the previous class.

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

export default class HomeScreen extends Component {

    render() {
        return (
            <View style={styles.container}>
                <Text style={styles.titleText}>ISS Tracker App</Text>
            </View>
        );
    }
}
```

2. Use the **Platform.OS** to check the operating system of a mobile phone to set some space for the status bar.

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

export default class HomeScreen extends Component {

    render() {
        return (
            <View style={styles.container}>
                <SafeAreaView style={styles.androidSafeArea} />
                <Text style={styles.titleText}>ISS Tracker App</Text>
            </View>
        );
    }
}

const styles = StyleSheet.create({
    container: {
        flex: 1
    },
    androidSafeArea: {
        marginTop: Platform.OS === "android" ? StatusBar.currentHeight : 0
    },
});
```

3. Import & use **TouchableOpacity** to create the buttons.

```
import React, { Component } from "react";
import {
    View,
    Text,
    StyleSheet,
    SafeAreaView,
    TouchableOpacity,
    Platform,
    StatusBar,
} from "react-native";
```

- Render components.

```
render() {
    return (
        <View style={styles.container}>
            <SafeAreaView style={styles.droidSafeArea} />

            <View style={styles.titleBar}>
                <Text style={styles.titleText}>ISS Tracker App</Text>
            </View>

            <TouchableOpacity>
                <Text>Iss Location</Text>
            </TouchableOpacity>

            <TouchableOpacity>
                <Text>Meteors</Text>
            </TouchableOpacity>

        </View>
    )
}
}
```

- Add styling to the buttons using **routeCard** in **StyleSheet.create()**.

```
routeCard: {
    flex: 0.25,
    marginLeft: 50,
    marginRight: 50,
    marginTop: 50,
    borderRadius: 30,
    backgroundColor: 'white'
},
```

- Add styling to the text using **titleText** & **routeText** in **StyleSheet.create()**

```
titleText: {
    fontSize: 40,
    fontWeight: "bold",
    color: "white"
},
routeText: {
    fontSize: 35,
    fontWeight: "bold",
    color: "black",
    marginTop: 75,
    paddingLeft: 30
},
```

4. Add the image assets to the **project** folder.

5. Import & use the **ImageBackground** component to add a background image to the home screen.
   - Import the relevant components.

```
import {
    View,
    Text,
    StyleSheet,
    SafeAreaView,
    TouchableOpacity,
    Platform,
    StatusBar,
    ImageBackground
} from "react-native";
```

   - Render the **ImageBackground** component.

```
render() {
    return (
        <View style={styles.container}>
            <SafeAreaView style={styles.droidSafeArea} />
            <ImageBackground source={require('../assets/bg.png')} style={styles.backgroundImage}>
                <View style={styles.titleBar}>
                    <Text style={styles.titleText}>ISS Tracker App</Text>
                </View>

                <TouchableOpacity style={styles.routeCard}>
                    <Text style={styles.routeText}>Iss Location</Text>
                </TouchableOpacity>

                <TouchableOpacity style={styles.routeCard}>
                    <Text style={styles.routeText}>Meteors</Text>
                </TouchableOpacity>
            </ImageBackground>
        </View>
    )
}
}
```

- Style the background image using **StyleSheet.create()**.

```
const styles = StyleSheet.create({
    container: {
        flex: 1
    },
    droidSafeArea: {
        marginTop: Platform.OS === "android" ? StatusBar.currentHeight : 0
    },
    backgroundImage: {
        flex: 1,
        resizeMode: 'cover',
    },
    routeCard: {
        flex: 0.2,
        justifyContent: "center",
        alignItems: "center",
        marginLeft: 10,
        marginRight: 10,
        marginTop: 5,
        borderRadius: 10,
        backgroundColor: 'rgba(52, 52, 52, 0.5)'
    },
```

6. Import & use the **Image** component to add the three buttons, **ISS Location** and **Meteors**.

```
<TouchableOpacity style={styles.routeCard}>
    <Text style={styles.routeText}>ISS Location</Text>
    <Text style={styles.knowMore}>{"Know More --->"}</Text>
    <Text style={styles.bgDigit}>1</Text>
    <Image source={require("../assets/iss_icon.png")} style={styles.iconImage}></Image>
</TouchableOpacity>

<TouchableOpacity style={styles.routeCard}>
    <Text style={styles.routeText}>Meteors</Text>
    <Text style={styles.knowMore}>{"Know More --->"}</Text>
    <Text style={styles.bgDigit}>2</Text>
    <Image source={require("../assets/meteor_icon.png")} style={styles.iconImage}></Image>
</TouchableOpacity>
```

7. Once again, add styling to the images using **StyleSheet.create()**.

```
knowMore: {
    paddingLeft: 30,
    color: "red",
    fontSize: 15
},
bgDigit: {
    position: "absolute",
    color: "rgba(183, 183, 183, 0.5)",
    fontSize: 150,
    right: 20,
    bottom: -15,
    zIndex: -1
},
iconImage: {
    position: "absolute",
    height: 200,
    width: 200,
    resizeMode: "contain",
    right: 20,
    top: -80
}
```

8. Use the **onPress** property of the **TouchableOpacity** to add the navigation to the screens.

- Navigate to **ISSLocation** Screen.

```
<TouchableOpacity style={styles.routeCard} onPress={() =>
    this.props.navigation.navigate("IssLocation")
}>
    <Text style={styles.routeText}>ISS Location</Text>
    <Text style={styles.knowMore}>{"Know More --->"}</Text>
    <Text style={styles.bgDigit}>1</Text>
    <Image source={require("../assets/iss_icon.png")} style={styles.iconImage}></Image>
</TouchableOpacity>
```
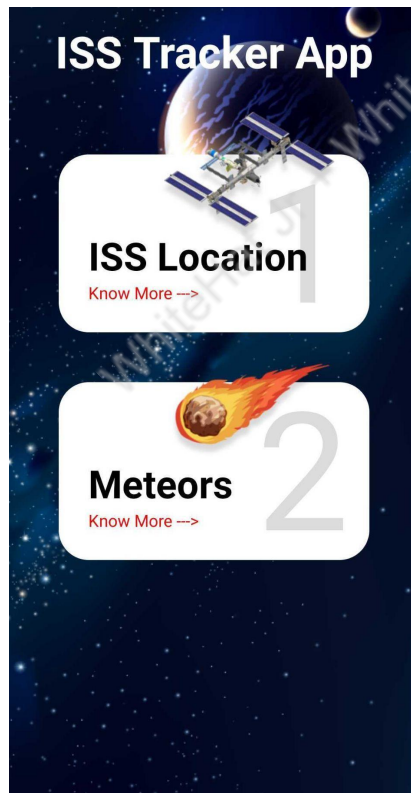
- Navigate to Meteor Screen.

```
<TouchableOpacity style={styles.routeCard} onPress={() =>
    this.props.navigation.navigate("Meteors")
}>
    <Text style={styles.routeText}>Meteors</Text>
    <Text style={styles.knowMore}>{"Know More --->"}</Text>
    <Text style={styles.bgDigit}>2</Text>
    <Image source={require("../assets/meteor_icon.png")} style={styles.iconImage}></Image>
</TouchableOpacity>
```

9. Run the code to check the output.

What's NEXT?

In the next class, we will be working on designing the ISS location screen.

EXTEND YOUR KNOWLEDGE

Bookmark the following link: to know more about Stack Navigation

https://reactnavigation.org/docs/stack-navigator/