

Simple Login application

Name: W.A.S.D.Bandara Wijesundara

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Github: https://github.com/DeshanBandara/React_Native_Login_System.git

Introduction

Simple login app containing Login page, Registration page and Home page. User can register using their first name and suitable password, password and confirm password should be equal and the user can go into the login page and providing the registered user name password user can log into the home page.

Project Requirements

Login Page

- A user-friendly login interface where user can enter their User name and password
- Used form validations techniques to ensure correct inputs
- Redirect user to the Home page after successful login
- Login button to redirect to Home page and Register button to redirect into the Registration page

Registration Page

- Allow new users to sign up by providing the necessary details.
- Validation form inputs and navigate back to the Login Page after Registration

Home Page

- Display a welcome message with the user's name after a successful login.
- Display The Logout button

Development Process

Initial Setup

Creating the project using `npx create-expo-app@latest`

```
C:\Windows\System32\cmd.e  X  +  v  -  □  X
npm warn deprecated sudo-prompt@9.1.1: Package no longer supported. Contact Support at https://www.npmjs.com/support for more info.
npm warn deprecated domexception@4.0.0: Use your platform's native DOMException instead
npm warn deprecated @xmldom/xmldom@0.7.13: this version is no longer supported, please update to at least 0.8.*
npm warn deprecated sudo-prompt@8.2.5: Package no longer supported. Contact Support at https://www.npmjs.com/support for more info.

added 1178 packages, and audited 1179 packages in 4m

105 packages are looking for funding
  run `npm fund` for details

5 low severity vulnerabilities

To address all issues (including breaking changes), run:
  npm audit fix --force

Run `npm audit` for details.

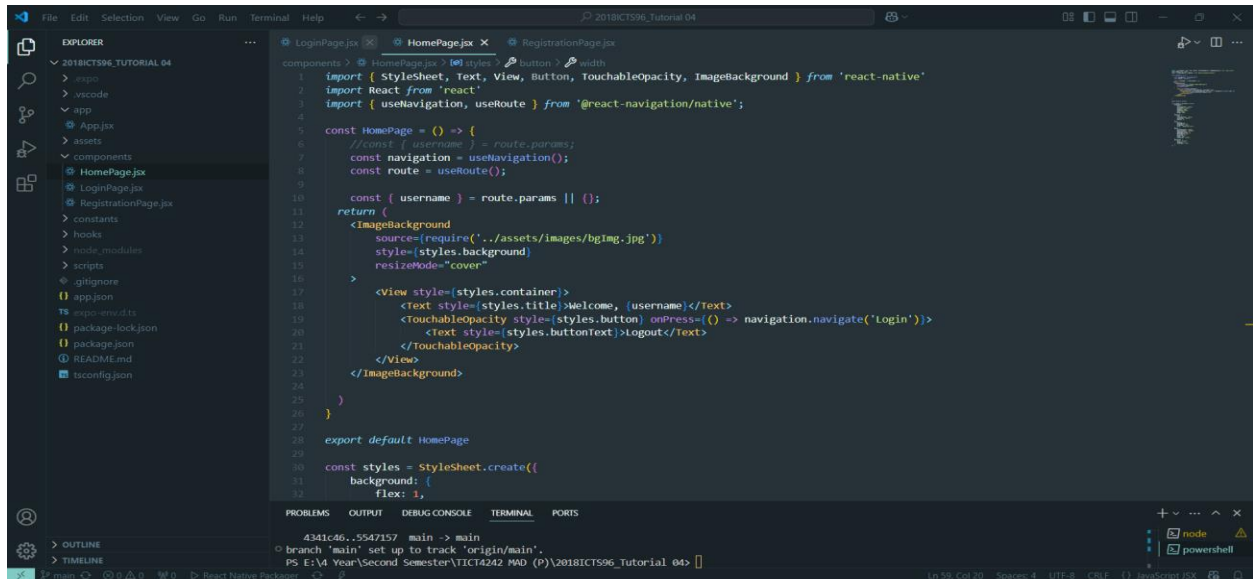
✅ Your project is ready!

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

- cd Tutorial04
- npm run android
- npm run ios # you need to use macOS to build the iOS project - use the Expo app if you need to do iOS development with out a Mac
- npm run web

E:\4 Year\Second Semester\TICT4242 MAD (P)>
```

File Structure



The screenshot shows the Visual Studio Code interface with a React Native project. The Explorer panel on the left displays the file structure:

- 2018ICT506_TUTORIAL 04
 - assets
 - srccode
 - app
 - App.jsx
 - assets
 - components
 - HomePage.jsx
 - LoginPage.jsx
 - RegistrationPage.jsx
 - constants
 - hooks
 - node_modules
 - scripts
 - .gitignore
 - app.json
 - expo-ans.d.ts
 - package-lock.json
 - package.json
 - README.md
 - tsconfig.json

The main editor shows the code for `HomePage.jsx`:

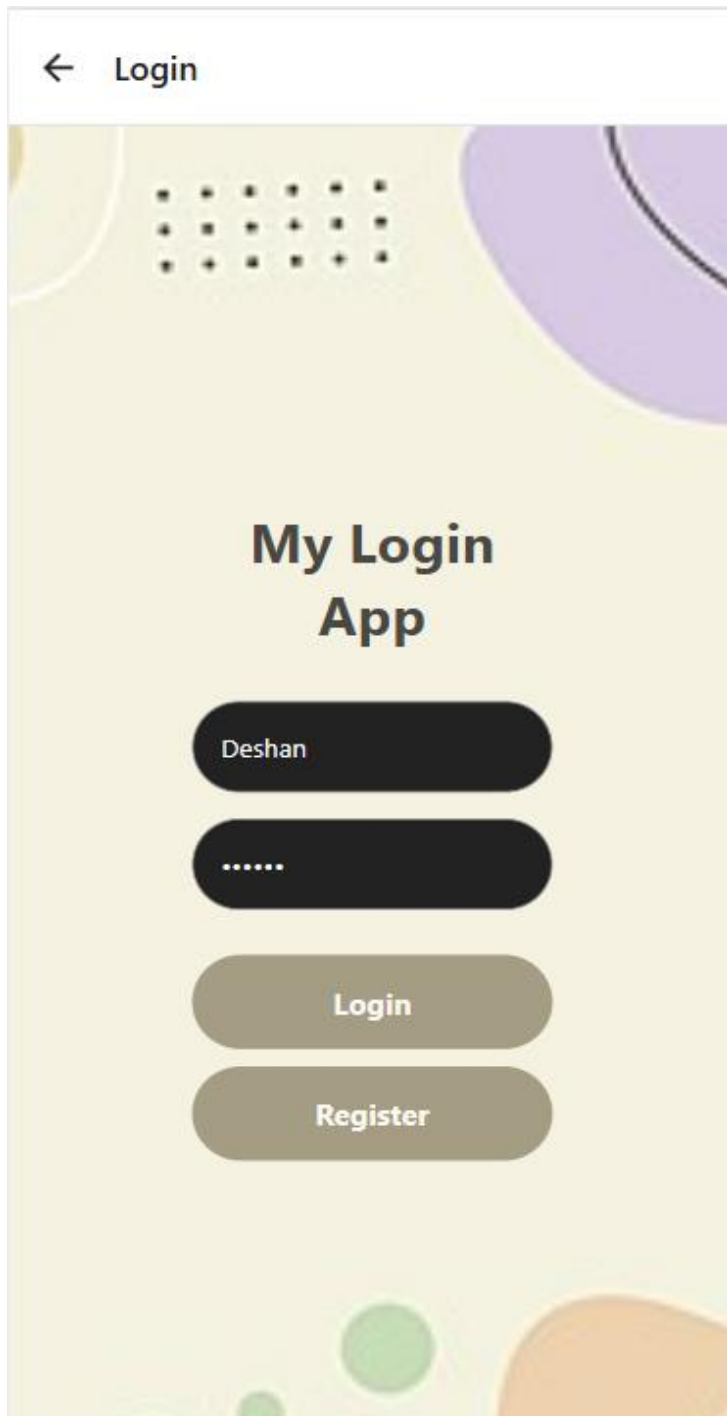
```
1 import { StyleSheet, Text, View, Button, TouchableOpacity, ImageBackground } from 'react-native'
2 import React from 'react'
3 import { useNavigation, useRoute } from '@react-navigation/native';
4
5 const HomePage = () => {
6   //const { username } = route.params;
7   const navigation = useNavigation();
8   const route = useRoute();
9
10  const { username } = route.params || [];
11
12  return (
13    <ImageBackground
14      source={require('../assets/images/bgImg.jpg')}
15      style={styles.background}
16      resizeMode="cover"
17    >
18      <View style={styles.container}>
19        <Text style={styles.title}>Welcome, {username}</Text>
20        <TouchableOpacity style={styles.button} onPress={() => navigation.navigate('Login')}>
21          <Text style={styles.buttonText}>Logout</Text>
22        </TouchableOpacity>
23      </View>
24    </ImageBackground>
25  )
26 }
27
28 export default HomePage
29
30 const styles = StyleSheet.create({
31   background: {
32     flex: 1,
```

The bottom panel shows the terminal output:

```
4341c46,.5547157 main -> main
branch 'main' set up to track 'origin/main'.
PS E:\4 Year\Second Semester\TIC14242 MAD (P)\2018ICT506_Tutorial 04>
```


Application Screenshots

Login Page



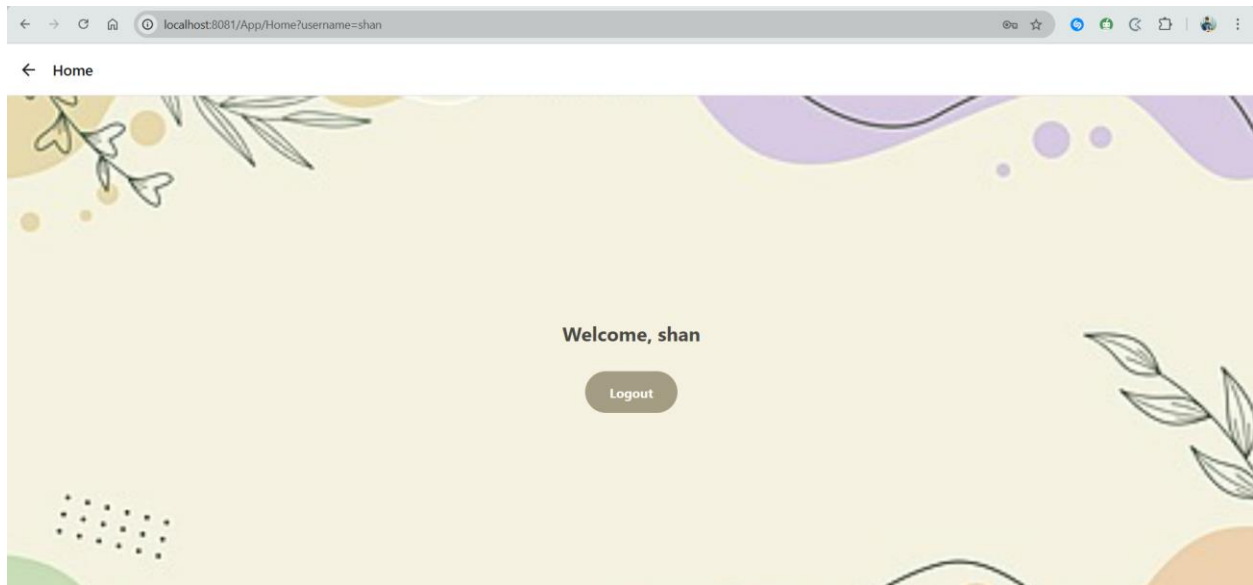
Registration Page

[← Register](#)



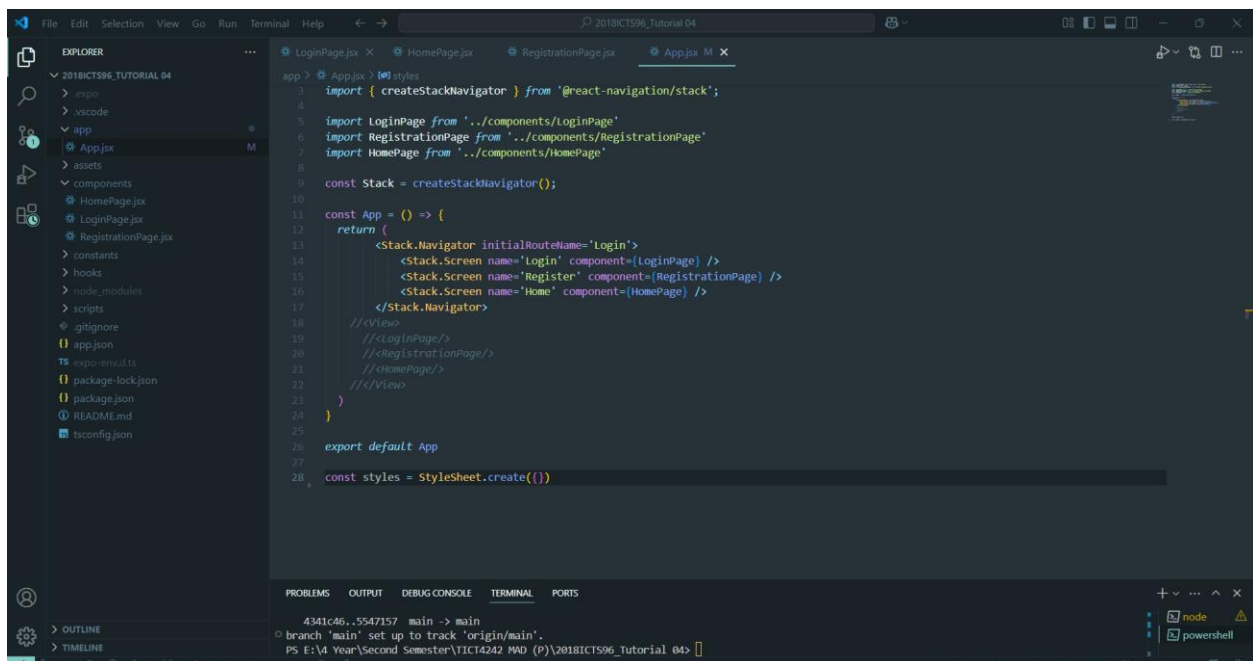
My Login App

Home Page

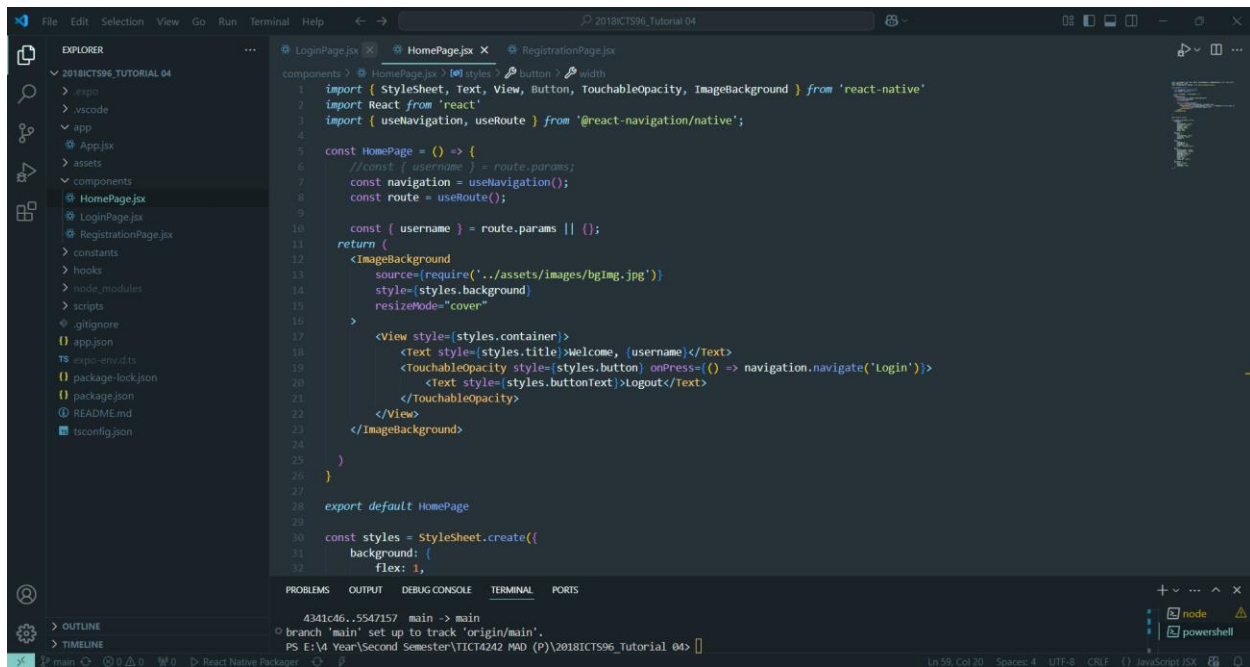


Code Section

App.jsx

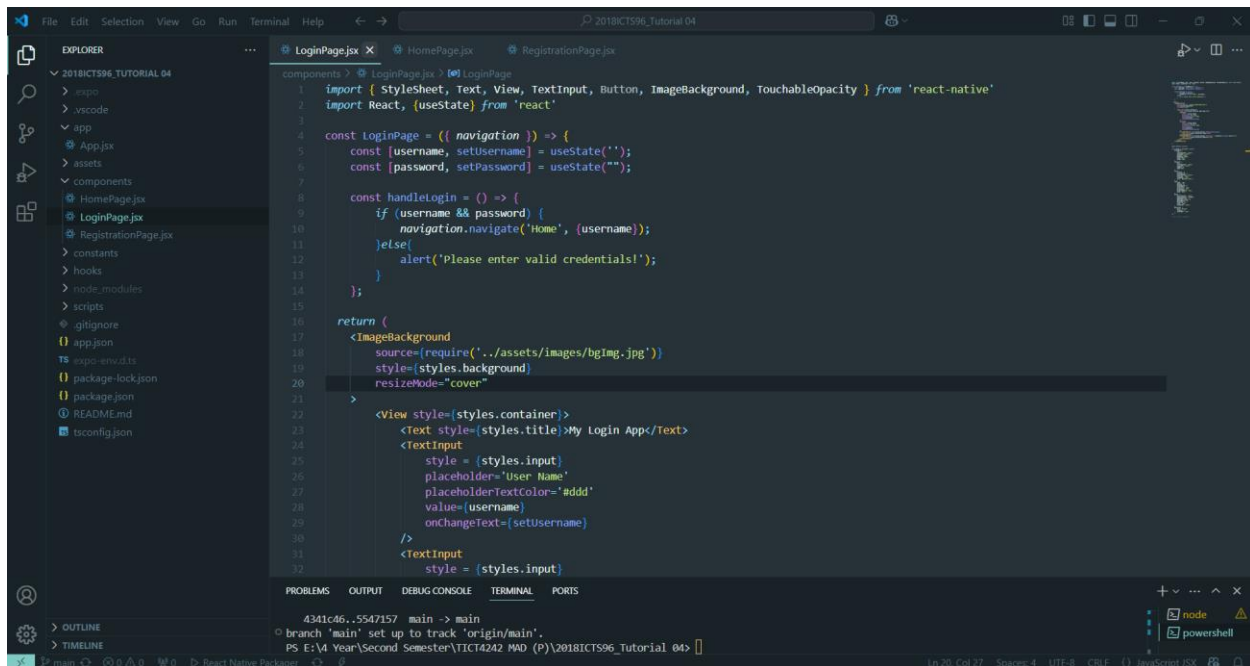


HomePage.jsx



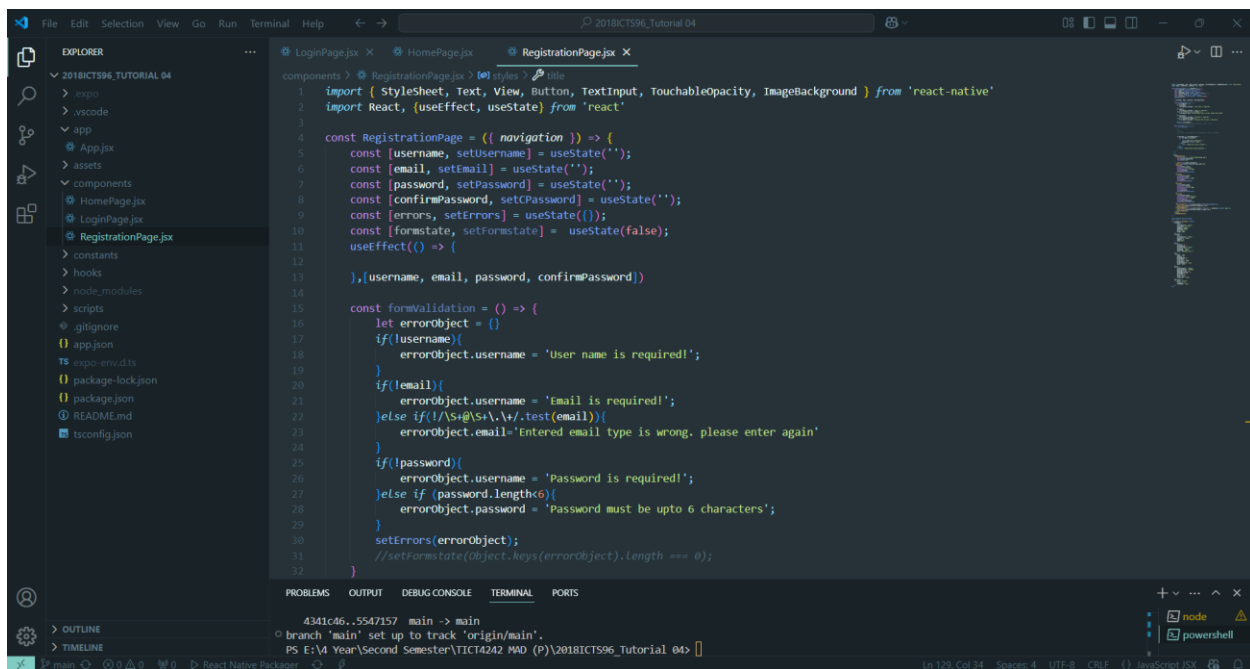
```
1 import { StyleSheet, Text, View, Button, TouchableOpacity, ImageBackground } from 'react-native'
2 import React from 'react'
3 import { useNavigation, useRoute } from '@react-navigation/native';
4
5 const HomePage = () => {
6   //const { username } = route.params;
7   const navigation = useNavigation();
8   const route = useRoute();
9
10  const { username } = route.params || {};
11  return (
12    <ImageBackground
13      source={require('../assets/images/bgimg.jpg')}
14      style={styles.background}
15      resizeMode="cover"
16    >
17      <View style={styles.container}>
18        <Text style={styles.title}>Welcome, {username}</Text>
19        <TouchableOpacity style={styles.button} onPress={() => navigation.navigate('Login')}>
20          <Text style={styles.buttonText}>Logout</Text>
21        </TouchableOpacity>
22      </View>
23    </ImageBackground>
24  )
25 }
26
27 export default HomePage
28
29 const styles = StyleSheet.create({
30   background: {
31     flex: 1,
```

RegistrationPage.jsx



```
1 import { StyleSheet, Text, View, TextInput, Button, ImageBackground, TouchableOpacity } from 'react-native'
2 import React, { useState } from 'react'
3
4 const RegistrationPage = ({ navigation }) => {
5   const [username, setUsername] = useState('');
6   const [password, setPassword] = useState('');
7
8   const handleLogin = () => {
9     if (username && password) {
10       navigation.navigate('Home', {username});
11     } else {
12       alert('Please enter valid credentials!');
13     }
14   };
15
16   return (
17     <ImageBackground
18       source={require('../assets/images/bgimg.jpg')}
19       style={styles.background}
20       resizeMode="cover"
21     >
22       <View style={styles.container}>
23         <Text style={styles.title}>My Login App</Text>
24         <TextInput
25           style={styles.input}
26           placeholder="User Name"
27           placeholderTextColor="#ddd"
28           value={username}
29           onChangeText={setUsername}
30         />
31         <TextInput
32           style={styles.input}
```

LoginPage.jsx



```
1 import { StyleSheet, Text, View, Button, TextInput, TouchableOpacity, ImageBackground } from 'react-native'
2 import React, { useEffect, useState } from 'react'
3
4
5 const RegistrationPage = ({ navigation }) => {
6   const [username, setUsername] = useState('');
7   const [email, setEmail] = useState('');
8   const [password, setPassword] = useState('');
9   const [confirmPassword, setConfirmPassword] = useState('');
10  const [errors, setErrors] = useState({});
11  const [formstate, setFormstate] = useState(false);
12  useEffect(() => {
13    }, [username, email, password, confirmPassword])
14
15  const formValidation = () => {
16    let errorObject = {}
17    if(!username){
18      errorObject.username = 'User name is required!';
19    }
20    if(!email){
21      errorObject.email = 'Email is required!';
22    }else if(!/^[a-zA-Z0-9+@-]+\.[a-zA-Z0-9+@-]+$/i.test(email)){
23      errorObject.email = 'Entered email type is wrong, please enter again'
24    }
25    if(!password){
26      errorObject.password = 'Password is required!';
27    }else if (password.length < 6){
28      errorObject.password = 'Password must be upto 6 characters';
29    }
30    setErrors(errorObject);
31    //setFormstate(object.keys(errorObject).length === 0);
32  }
```

Features

- Navigation
- Form Validation

Application Screens

- **Login Page** – Including validation and successful login behavior.
- **Registration** – Include validation and successful registration behavior.
- **Home** – Include Welcome note with user name, logout button.