# Department of Computing

**CS-213: Advanced Programming**

**Class: BSCS 7AB**

# Lab 12: React Native Login Application

**Date: 12 December, 2019**

**Time: 10:00-01:00pm & 02:00-05:00pm**

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# Lab 12: React Native Login Application

**Introduction**

React Native combines the best parts of native development with React, a best-in-class JavaScript library for building user interfaces.

**Objectives**

This lab will get students familiar with the React Native application Development.

**Tools/Software Requirement**

React native, Android Studio, JDK, node JS

**Description**

**Reference Videos**

<https://www.youtube.com/watch?v=0q3Jy0ZgzIw&list=PLYxzS__5yYQlHANFLwcsSzt3elIbYTG1h&index=23&t=0s>

<https://www.youtube.com/watch?v=6Z3bscC7p5Y&list=PLYxzS__5yYQlHANFLwcsSzt3elIbYTG1h&index=23>

<https://www.youtube.com/watch?v=StT6FZCBgN4&list=PLYxzS__5yYQlHANFLwcsSzt3elIbYTG1h&index=24>

<https://www.youtube.com/watch?v=2Uq3B3lskPM>

<https://www.youtube.com/watch?v=2Ok2dRg5vlk&list=PLYxzS__5yYQlHANFLwcsSzt3elIbYTG1h&index=26>

<https://www.youtube.com/watch?v=LfP7d09xjpI&list=PLYxzS__5yYQlHANFLwcsSzt3elIbYTG1h&index=27>

**Lab Task**

Create a login Application in react native

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| --- |
| Solution |
| Task Code:  App.js file  import React, {Component} from 'react';  import {createAppContainer} from 'react-navigation';  import {createStackNavigator} from 'react-navigation-stack';  import {Home} from './app/components/Home/index';  import {Dashboard} from './app/components/Dashboard/index';  import Constants from "expo-constants";  const { manifest } = Constants;  const appContainer = createStackNavigator(  {home:Home,  dashboard:Dashboard},  {initialRouteName:'home'}  )  export default createAppContainer(appContainer)  Home Index File  import React, {Component} from 'react'  import {View, TextInput, Text, Button, Alert} from 'react-native';  import styles from './styles';  import \* as data from './users.json';  export class Home extends Component {  state = {username:"", password:"", value:false};  static navigationOptions = {  header:null  }  checkLogin()  {  this.setState({value:false})  let username = this.state.username;  let password = this.state.password;    var users = data.users;  var found = users.find(user=>user.username==username && user.password == password)  if (found)  {  console.warn("admin logged in");  this.props.navigation.navigate('dashboard',{username:username})  }    else  {  Alert.alert('Error', 'Username/Password mismatch',[{text:'Okay'}])  }  }  render() {  const {heading, input, parent, button} = styles  return (  <View style={parent}>  <Text style={heading}>Log in to the Application</Text>  <TextInput style = {input} placeholder="username" onChangeText = {text => this.setState({username:text})}/>  <TextInput style = {input} placeholder="password" onChangeText={text => this.setState({password:text})} secureTextEntry={true} />  <Button title="login" onPress={()=>this.checkLogin()} />  </View>  )  }  }  Home Styles File  import {StyleSheet} from 'react-native'  export default StyleSheet.create({  heading:{  fontSize:25,  textAlign:'center',  marginBottom:40,  },  input:{  marginLeft:40,  marginRight:40,  fontSize:20,  marginBottom:40,  borderBottomColor: 'black',  borderBottomWidth: 2,  },  parent:{  flex:1,  justifyContent:'center',    }  })  Home Users JSON File  {  users:  [{  username:"User",  password:"User"  },  {  username:"Teacher",  password:"Teacher"  },  {  username:"Abdullah",  password:"student"  }]  }  Dashboard Index File  import React, {Component} from 'react';  import {View, Text} from 'react-native';  export class Dashboard extends Component{  static navigationOptions = {  header:null  }  render()  {  return(  <View style={{flex:1, justifyContent:"center"}} >  <Text style={{marginBottom:20, fontSize:25}}>DashBoard</Text>  <Text style={{marginBottom:20, fontSize:20, fontWeight:"bold"}}>Welcome</Text>  <Text style={{marginBottom:20, fontSize:20, fontWeight:"bold"}}>{this.props.navigation.getParam('username','default')}</Text>  </View>  )  }    }  Task Output Screenshot:  HOME:    DASHBOARD: |

### Deliverable

Compile a single word document by filling in the solution part and submit this Word file on LMS. This lab grading policy is as follows: The lab is graded between 0 to 10 marks. The submitted solution can get a maximum of 5 marks. At the end of each lab or in the next lab, there will be a viva/quiz related to the tasks. You must show the implementation of the tasks in the designing tool, along with your complete Word document to get your work graded. You must also submit this Word document on the LMS. In case of any problems with submissions on LMS, submit your Lab assignments by emailing it to Ms. Ayesha Asif: [ayesha.asif@seecs.edu.pk](mailto:ayesha.asif@seecs.edu.pk).