**COMSATS University Islamabad Lahore Campus**



**Sessional-II (Theory)**

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Course Title: | Mobile App Development | | | | Course Code: | | CSC 303 | Credit Hours: | 3(2,1) |
| Course | Rana M. Ajmal | | | | Program Name: | | BS CS | |  |
| Semester: | 5th - 8th | Batch: | Elective | Section: |  | | Date: | 10.12.2020 |  |
| **Time Allowed:** | **75 Minutes** | | | | **Maximum Marks:** | | | **15** |  |
| Student’s Name: |  | | | | Reg. No. |  | | |  |
| **Important Instructions / Guidelines:** | | | | | | | | |  |
| * Avoid overwriting and cutting. * Read the questions carefully. * Attempt all questions. * Try to attempt the questions in order. If not mark the questions properly. * **Only JavaScript ES 6 and React Hooks syntax will be given credit.** * Submit your code and screen shoots in word file in your Google Class Room. * File name should be your name and roll number separated by underscore | | | | | | | | |

# Question#2 [6 Credits]

Write React Native code to create a screen according to the layout shown in the figure below.

import \* as React from 'react';

import { Text, View, StyleSheet } from 'react-native';

import Constants from 'expo-constants';

export default function App() {

return (

<View style={styles.container}>

<View style={styles.green}>

Lorem1

</View>

<View style={styles.teen}>

<View style={styles.lasttwo}>

<View style={styles.purple}>

Lorem2

</View>

<View style={styles.fav}>

Lorem4

</View>

</View>

<View style={styles.grey}>

Lorem3

</View>

</View>

<View style={styles.blue}>

Lorem5

</View>

</View>

);

}

const styles = StyleSheet.create({

container: {

flex: 1,

flexDirection: "column",

backgroundColor: 'white',

padding: 3,

},

green: {

flex: 40,

flexDirection: "column",

backgroundColor: 'green',

padding: 3,

},

teen: {

flex: 40,

flexDirection: "row",

backgroundColor: 'white',

padding: 3,

},

blue: {

flex: 20,

flexDirection: "column",

backgroundColor: 'blue',

padding: 3,

},

grey: {

flex: 50,

flexDirection: "column",

backgroundColor: 'gray',

padding: 3,

},

lasttwo: {

flex: 50,

flexDirection: "column",

backgroundColor: 'white',

padding: 3,

},

purple: {

flex: 1,

flexDirection: "column",

backgroundColor: 'purple',

padding: 3,

},

fav: {

flex: 1,

flexDirection: "column",

backgroundColor: 'cyan',

padding: 3,

},

})

OUTPUT SCREEENSHOT

Graphical user interface, text, application

Description automatically generated

# Question#1 [3x3 Credits]

Create a React Native App that will show a Tabbed pan at the start. It consists of two tabs: Products Tab and User Tab. The detail of UI Screens in each Tab is given below:

**Products Tab:**

1. Products tab will display Products Screen when it is tapped. The Products Screen should display the id, name and price of each product in a flat list. You can take any 5 sample objects and store in an array.

import { StatusBar } from 'expo-status-bar';

import Reacte,{useState} from 'react';

import { StyleSheet, Text, View,Button,FlatList,TouchableOpacity } from 'react-native';

export default function Product ({navigation})

{

    let [Products,setProducts]=useState([

        {

            id:1,

            name:"lotion",

            Price:250

        },

        {

            id:2,

            name:"Shampoo",

            Price:350

        },

        {

            id:6,

            name:"toothBrush",

            price:50

        },

        {

            id:9,

            name:"BodySpray",

            price:150

        },

        {

            id:11,

            name:"nailPolish",

            price:30

        }

    ])

    return(

        <View styles={styles.container}>

<FlatList

    data={Products}

    renderItem={(Prod)=>{

        <TouchableOpacity onPress={()=>

        {

            navigation.navigate('DetailScreen',Prod)

        }} >

<Text>{Prod.id}</Text>

<Text>{Prod.name}</Text>

<Text>{Prod.price}</Text>

        </TouchableOpacity>

    }}

/>

        </View>

    )}

    const styles = StyleSheet.create({

        container: {

          flex: 1,

          backgroundColor: '#fff',

          alignItems: 'center',

          justifyContent: 'center',

        },

      });

1. When a user taps on any product in products screen, it should show the Detail Screen with the info of the product object that was selected

import { StatusBar } from 'expo-status-bar';

import React from 'react';

import { StyleSheet, Text, View,Button } from 'react-native';

export default function Detail ({navigation})

{

    return(

       <View styles={styles.container}>

           <Text>{navigation.getParam('id')}</Text>

           <Text>{navigation.getParam('name')}</Text>

           <Text>{navigation.getParam('price')}</Text>

       </View>

    )}

    const styles = StyleSheet.create({

        container: {

          flex: 1,

          backgroundColor: '#fff',

          alignItems: 'center',

          justifyContent: 'center',

        },

      });

**User Tab:**

1. User Tab will show Profile Screen when it is tapped. Create a Profile screen that will display user

import { StatusBar } from 'expo-status-bar';

import React from 'react';

import { StyleSheet, Text, View,Button } from 'react-native';

import 'react-native-gesture-handler';

import { NavigationContainer } from '@react-navigation/native';

import { createStackNavigator } from '@react-navigation/stack';

import Product from './Product'

import Detail from './Detail'

import Profile from './Profile'

const Nav = createStackNavigator();

export default function App() {

  return (

    <NavigationContainer>

    <Nav.Navigator>

      <Nav.Screen name="ProductsScreen" component={Product}/>

      <Nav.Screen name="DetailsScreen" component={Detail}/>

      <Nav.Screen name= "ProfileScreen" component={Profile}/>

    </Nav.Navigator>

  </NavigationContainer>

  );

}

 import { StatusBar } from 'expo-status-bar';

import React from 'react';

import { StyleSheet, Text, View,Button } from 'react-native';

export default function Profile ({navigation})

{

    return(

       <View styles={styles.n}>

           <Text>UserName=Moeez</Text>

           <Text>UserRole=Admin</Text>

           <Text>Email=moee@</Text>

       </View>

    )}

    const n = StyleSheet.create({

        container: {

          flex: 1,

          backgroundColor: '#fff',

          alignItems: 'center',

          justifyContent: 'center',

        },

      })