



Department of
Media Software

2023 1st semester
Mobile Computing

Prof.
Gabkeun Choi Ph.D.

Mobile Computing

7th Lecture

Cloud 기반 Backend 연동 실습 및 메뉴,화면이동 설계



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Learning objective

클라우드 VM과 연동하여 데이터를 주고 받고 메뉴 및 여러 화면을 구성하여 화면간 이동하는 기능을 설계하고 만드는 방법에 대해 익힌다. 이를 통해 화면설계를 바탕으로 설계된 여러 서비스의 기능 구현이 가능하도록 하는 능력을 배양하며 여기에 사용되는 리액트 네이티브의 dependency 모듈에 대해 알아보고 사용방법을 익힌다.



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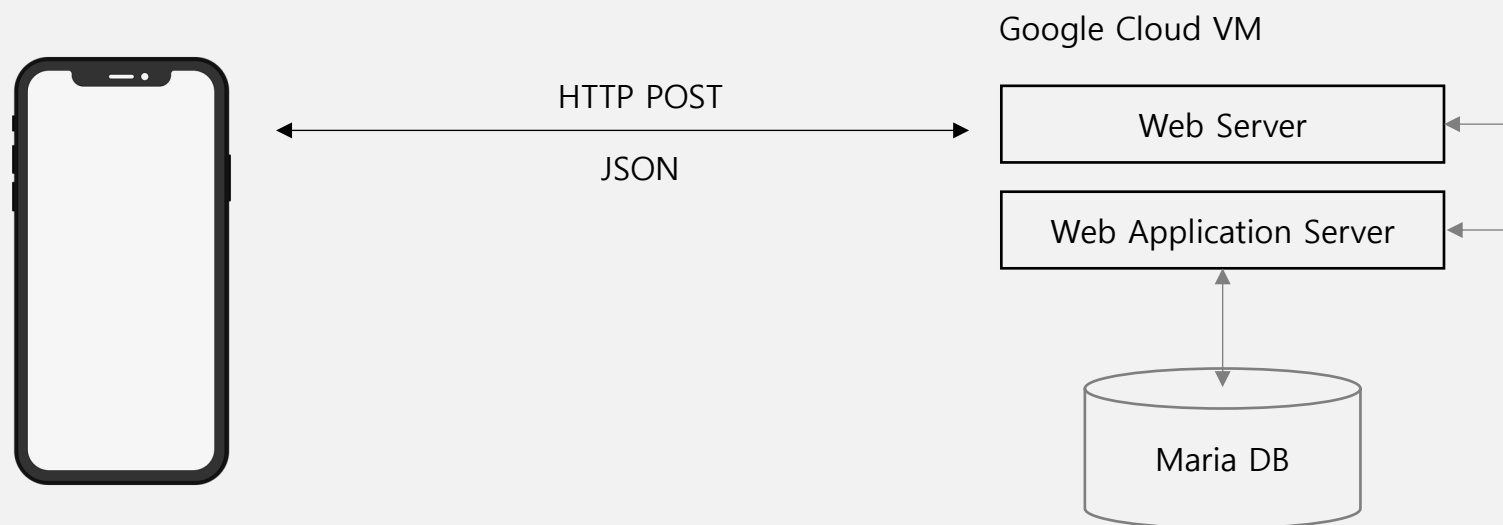
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개발환경

- React-Native
- Apache Web server
- Php
- Maria DataBase





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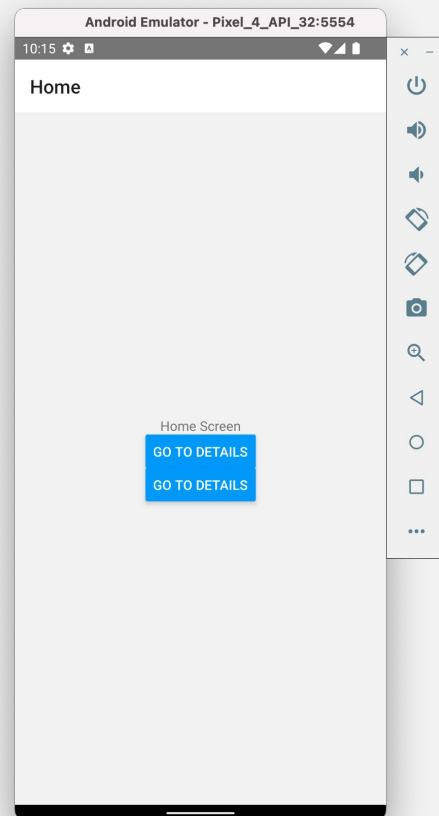
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화면이동



Ex6_6



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화면이동

```
1 import React from 'react';
2 import { View, Text, Button } from 'react-native';
3 import { createStackNavigator } from '@react-navigation/stack';
4 import { NavigationContainer } from '@react-navigation/native';
5
6 const Stack = createStackNavigator();
7
8 function HomeScreen({ navigation }) {
9   return (
10     <View style={{ flex: 1, alignItems: 'center', justifyContent: 'center' }}>
11       <Text>Home Screen</Text>
12       <Button
13         title="Go to Details"
14         onPress={() => navigation.navigate('Details1')}
15       />
16       <Button
17         title="Go to Details"
18         onPress={() => navigation.navigate('Details2')}
19       />
20     </View>
21   );
22 }
```



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화면이동

```
24 function DetailsScreen1({ navigation }) {
25   return (
26     <View style={{ flex: 1, alignItems: 'center', justifyContent: 'center' }}>
27       <Text>Details Screen1</Text>
28       <Button
29         title="Go back"
30         onPress={() => navigation.goBack()}
31       />
32     </View>
33   );
34 }
35
36 function DetailsScreen2({ navigation }) {
37   return (
38     <View style={{ flex: 1, alignItems: 'center', justifyContent: 'center' }}>
39       <Text>Details Screen2</Text>
40       <Button
41         title="Go back"
42         onPress={() => navigation.goBack()}
43       />
44     </View>
45   );
46 }
47
48 export default function App() {
49   return (
50     <NavigationContainer>
51       <Stack.Navigator>
52         <Stack.Screen name="Home" component={HomeScreen} />
53         <Stack.Screen name="Details1" component={DetailsScreen1} />
54         <Stack.Screen name="Details2" component={DetailsScreen2} />
55       </Stack.Navigator>
56     </NavigationContainer>
57   );
58 }
```



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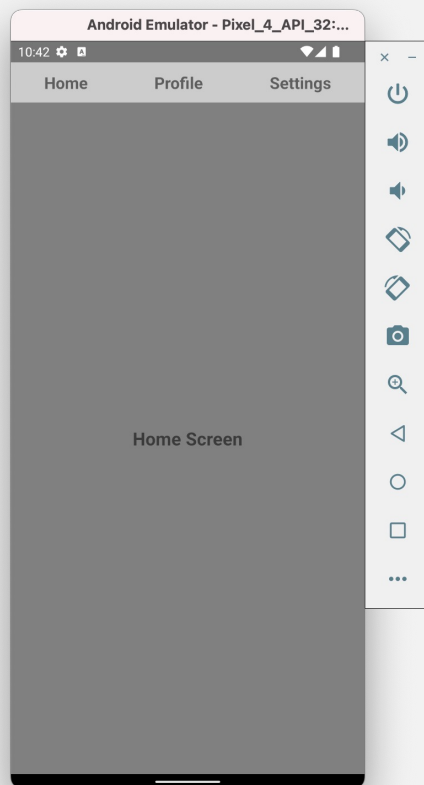
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Style 메뉴를 이용한 화면이동



Ex6_7



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Style을 이용한 화면이동

```
1 import React, { useState } from 'react';
2 import { View, Text, StyleSheet, TouchableOpacity } from 'react-native';
3 import HomeScreen from './screens/HomeScreen';
4 import ProfileScreen from './screens/ProfileScreen';
5 import SettingsScreen from './screens/SettingsScreen';
6
7 const App = () => {
8   const [activeScreen, setActiveScreen] = useState('Home');
9
10  const renderScreen = () => {
11    switch (activeScreen) {
12      case 'Home':
13        return <HomeScreen />;
14      case 'Profile':
15        return <ProfileScreen />;
16      case 'Settings':
17        return <SettingsScreen />;
18      default:
19        return <HomeScreen />;
20    }
21  };
22 }
```




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Style을 이용한 화면이동

```
23   return (  
24     <View style={styles.container}>  
25       <View style={styles.menu}>  
26         <TouchableOpacity onPress={() => setActiveScreen('Home')}>  
27           <Text style={styles.menuItem}>Home</Text>  
28         </TouchableOpacity>  
29         <TouchableOpacity onPress={() => setActiveScreen('Profile')}>  
30           <Text style={styles.menuItem}>Profile</Text>  
31         </TouchableOpacity>  
32         <TouchableOpacity onPress={() => setActiveScreen('Settings')}>  
33           <Text style={styles.menuItem}>Settings</Text>  
34         </TouchableOpacity>  
35       </View>  
36       {renderScreen()}  
37     </View>  
38   );  
39 };  
40  
41 const styles = StyleSheet.create({  
42   container: {  
43     flex: 1,  
44   },  
45   menu: {  
46     flexDirection: 'row',  
47     justifyContent: 'space-around',  
48     backgroundColor: '#ccc',  
49     paddingVertical: 10,  
50   },  
51   menuItem: {  
52     fontSize: 18,  
53     fontWeight: 'bold',  
54   },  
55 });  
56  
57 export default App;
```



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Style을 이용한 화면이동

```
1 // HomeScreen.js
2 import React from 'react';
3 import { View, Text, StyleSheet } from 'react-native';
4
5 const HomeScreen = () => {
6   return (
7     <View style={styles.container}>
8       <Text style={styles.title}>Home Screen</Text>
9     </View>
10   );
11 };
12
13 const styles = StyleSheet.create({
14   container: {
15     flex: 1,
16     justifyContent: 'center',
17     alignItems: 'center',
18     backgroundColor: 'gray',
19   },
20   title: {
21     fontSize: 20,
22     fontWeight: 'bold',
23   },
24 });
25
26 export default HomeScreen;
```



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Style을 이용한 화면이동

```
1 // ProfileScreen.js
2 import React from 'react';
3 import { View, Text, StyleSheet } from 'react-native';
4
5 const ProfileScreen = () => {
6   return (
7     <View style={styles.container}>
8       <Text style={styles.title}>ProfileScreen</Text>
9     </View>
10   );
11 };
12
13 const styles = StyleSheet.create({
14   container: {
15     flex: 1,
16     justifyContent: 'center',
17     alignItems: 'center',
18   },
19   title: {
20     fontSize: 20,
21     fontWeight: 'bold',
22   },
23 });
24
25 export default ProfileScreen;
```



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Style을 이용한 화면이동

```
1 // SettingsScreen.js
2 import React from 'react';
3 import { View, Text, StyleSheet } from 'react-native';
4
5 const SettingsScreen = () => {
6   return (
7     <View style={styles.container}>
8       <Text style={styles.title}>SettingsScreen</Text>
9     </View>
10   );
11 };
12
13 const styles = StyleSheet.create({
14   container: {
15     flex: 1,
16     justifyContent: 'center',
17     alignItems: 'center',
18   },
19   title: {
20     fontSize: 20,
21     fontWeight: 'bold',
22   },
23 });
24
25 export default SettingsScreen;
```



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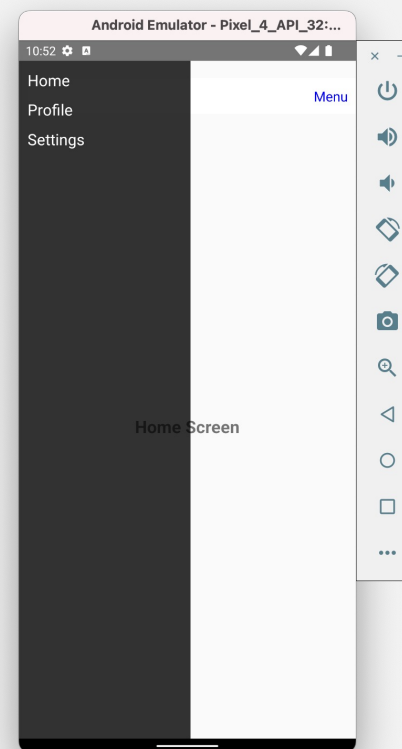
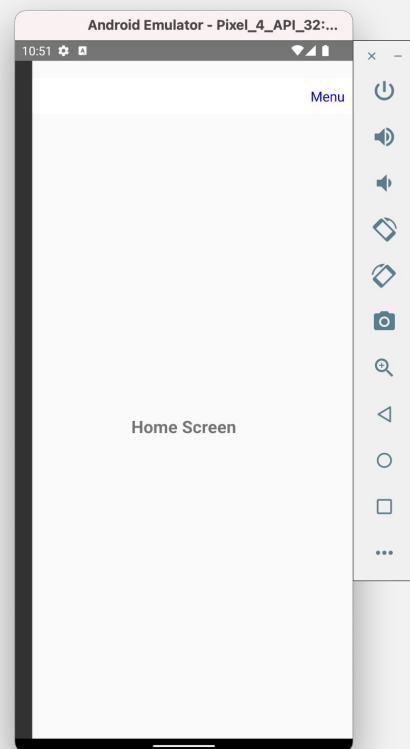
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Style을 이용한 메뉴 화면이동(슬라이드)

Ex6_8





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Style을 이용한 화면이동

```
1 import React, { useState, useRef } from 'react';
2 import {
3   View,
4   Text,
5   TouchableOpacity,
6   StyleSheet,
7   Animated,
8 } from 'react-native';
9
10 import HomeScreen from './screens/HomeScreen';
11 import ProfileScreen from './screens/ProfileScreen';
12 import SettingsScreen from './screens/SettingsScreen';
13
14 const App = () => {
15   const [activeScreen, setActiveScreen] = useState('Home');
16   const [menuOpen, setMenuOpen] = useState(false);
17   const menuWidth = useRef(new Animated.Value(0)).current;
18
19   const toggleMenu = () => {
20     setMenuOpen(!menuOpen);
21
22     Animated.timing(menuWidth, {
23       toValue: menuOpen ? 0 : 200,
24       duration: 300,
25       useNativeDriver: false,
26     }).start();
27   };
28 }
```



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Style을 이용한 화면이동

```
29   const changeScreen = (screen) => {  
30     setActiveScreen(screen);  
31     toggleMenu();  
32   };  
33  
34   const renderScreen = () => {  
35     switch (activeScreen) {  
36       case 'Home':  
37         return <HomeScreen />;  
38       case 'Profile':  
39         return <ProfileScreen />;  
40       case 'Settings':  
41         return <SettingsScreen />;  
42       default:  
43         return <HomeScreen />;  
44     }  
45   };  
46
```



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Style을 이용한 화면이동

```
46
47   return (
48     <View style={styles.container}>
49       <TouchableOpacity onPress={toggleMenu} style={styles.menuButton}>
50         <Text style={styles.menuButtonText}>Menu</Text>
51       </TouchableOpacity>
52       <Animated.View style={[styles.menu, { width: menuWidth }]}>
53         <TouchableOpacity onPress={() => changeScreen('Home')}>
54           <Text style={styles.menuItem}>Home</Text>
55         </TouchableOpacity>
56         <TouchableOpacity onPress={() => changeScreen('Profile')}>
57           <Text style={styles.menuItem}>Profile</Text>
58         </TouchableOpacity>
59         <TouchableOpacity onPress={() => changeScreen('Settings')}>
60           <Text style={styles.menuItem}>Settings</Text>
61         </TouchableOpacity>
62       </Animated.View>
63       {renderScreen()}
64     </View>
65   );
66 }
```




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Style을 이용한 화면이동

```
67
68   const styles = StyleSheet.create({
69     container: {
70       flex: 1,
71     },
72     menuButton: {
73       backgroundColor: 'white',
74       padding: 10,
75       marginTop: 20,
76       marginLeft: 10,
77     },
78     menuButtonText: {
79       color: 'blue',
80       fontSize: 16,
81       textAlign: 'right',
82     },
83     menu: {
84       position: 'absolute',
85       left: 0,
86       top: 0,
87       bottom: 0,
88       backgroundColor: 'rgba(0, 0, 0, 0.8)',
89       padding: 10,
90     },
91     menuItem: {
92       fontSize: 18,
93       color: 'white',
94       marginBottom: 10,
95     },
96   });
97
98   export default App;
```



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```
1 // HomeScreen.js
2 import React from 'react';
3 import { View, Text, StyleSheet } from 'react-native';
4
5 const HomeScreen = () => {
6   return (
7     <View style={styles.container}>
8       <Text style={styles.title}>Home Screen</Text>
9     </View>
10   );
11 };
12
13 const styles = StyleSheet.create({
14   container: {
15     flex: 1,
16     justifyContent: 'center',
17     alignItems: 'center',
18     backgroundColor: 'gray',
19   },
20   title: {
21     fontSize: 20,
22     fontWeight: 'bold',
23   },
24 });
25
26 export default HomeScreen;
```

나머지는 Ex6_7과 같음