Pemograman Perangkat Bergerak

Review

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Component

Component

React Class Component

```
import { Text, View } from 'react-native'
import React, { Component } from 'react'

export class Hello extends Component {
   render() {
      return (
         <View>
            <Text>Hello</Text>
         </View>
      )
   }
}

export default Hello
```

React Function Component

```
import { View, Text } from 'react-native'
import React from 'react'

const Hellow = () => {
   return (
      <View>
         <Text>ExpClass</Text>
      </View>
   )
}

export default Hellow
```

Component

Tentukan mana **RCC** dan mana **RFC** Berdasarkan MOCK UP disamping?

FRONTEND

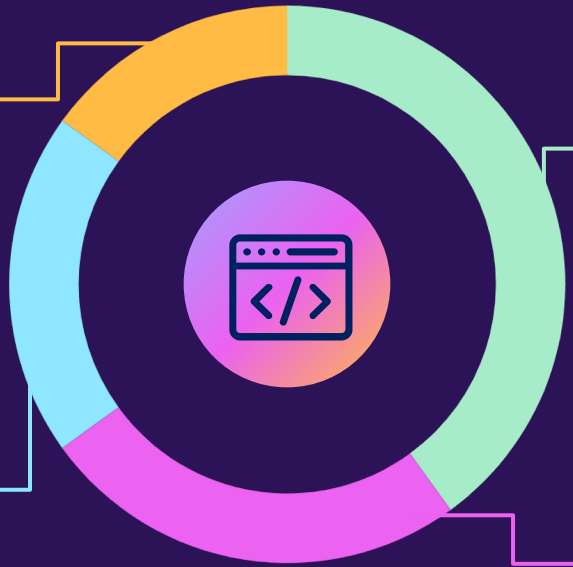
Container

View

import { View } from "react-native";
<view> ... </view>

ScrollView

import {ScrollView} from "react-native";
<ScrollView>
...
</ScrollView>



SafeAreaView

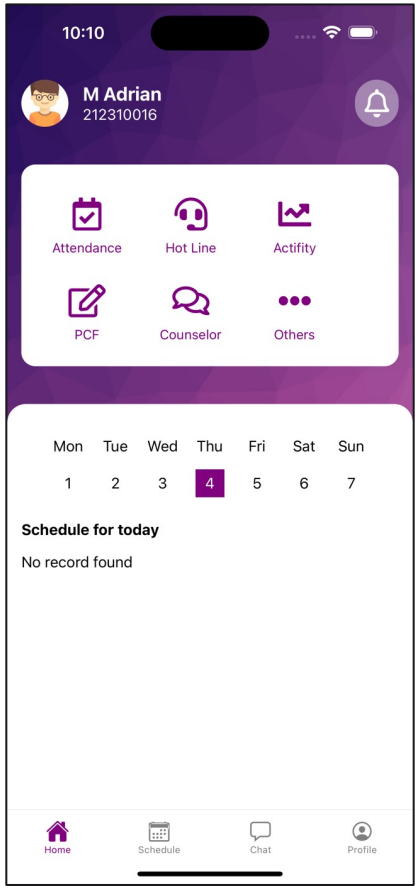
import {SafeAreaView} from "react-native";
<SafeAreaView>
...
</SafeAreaView>

ImageBackground

import {ImageBackground} from "react-native";
<ImageBackground>
...
</ImageBackground>

Container

Tentukan container apa saja yang ada di dalam MOCK UP disamping?



Container

KeyboardAvoidView

```
import { KeyboardAvoidingView } from "react-native";
```

Berpasangan dengan

ScrollView

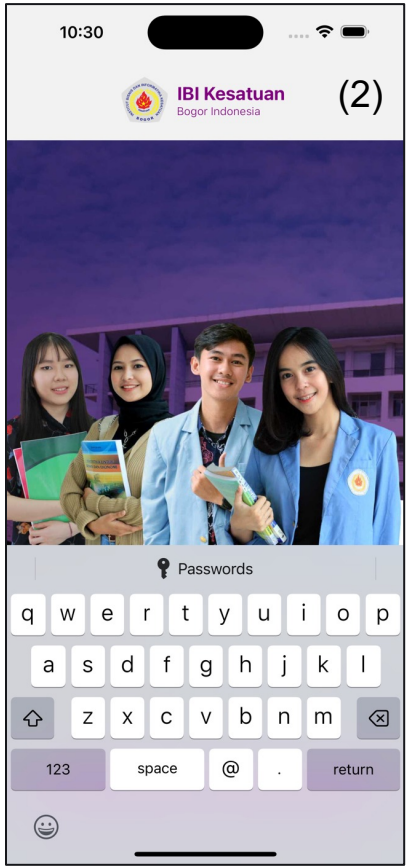
```
import { ScrollView } from "react-native";
```

Container

Contoh tanpa menggunakan container **KeyboardAvoidView:**

Pada gambar 1 memiliki sebuah form input yg terletak di posisi paling bawah layar. Dimana form tersebut memerlukan inputan data dengan keyboard ponsel.

Pada gambar 2, Ketika memfokuskan pada salah satu form input, maka akan menampilkan keyboard ponsel. Namun form isian tersebut menjadi tidak terlihat, tertutup oleh layer keyboard.

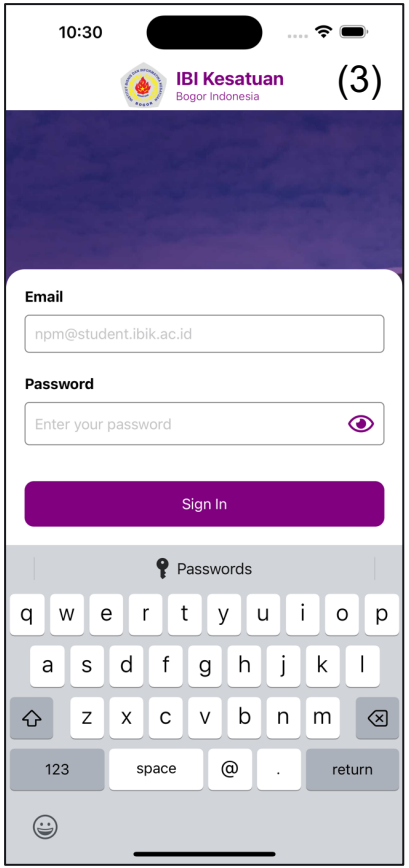


Container

Contoh menggunakan container **KeyboardAvoidView:**

Pada gambar 1 memiliki sebuah form input yg terletak di posisi paling bawah layar. Dimana form tersebut memerlukan inputan data dengan keyboard ponsel.

Pada gambar 3, Ketika memfokuskan pada salah satu form input, maka akan menampilkan layer keyboard ponsel, namun posisi form isian akan avoid keatas.



Container

Implementasi **KeyboardAvoidView**

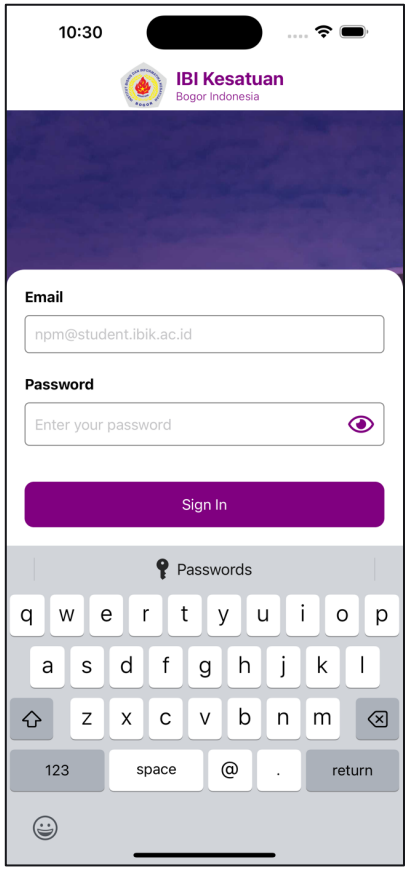
Pada code sebelumnya container awal menggunakan SafeAreaView.

```
export class Auth extends Component {
 render() {
  return (
     <SafeAreaView>
       ……
     </SafeAreaView>
  );
 }
}
```

Memasang KeyboardAvoidView didalam component dengan menambahkan code sebagai berikut:

Container

Implementasi **KeyboardAvoidView**




```
export class Auth extends Component {
 render() {
  return (
   <KeyboardAvoidingView
     style={{ flex: 1 }}
     behavior={Platform.OS === "ios" ? "padding" : "height"}
   >
    <ScrollView contentContainerStyle={{ flex: 1 }}
    bounces={false} >
      <SafeAreaView>
        ......
      </SafeAreaView>
    </ScrollView>
   </KeyboardAvoidingView>
  );
 }
}
```

Routing

Navigator

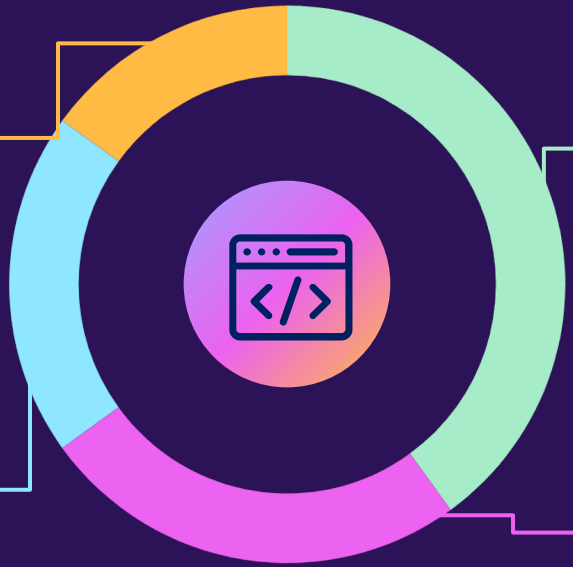
Routing

Stack

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

Drawer

```
import {
createDrawerNavigator
} from '@react-
navigation/drawer';
```



Bottom Tab

```
import {
createBottomTabNavigator
} from '@react-
navigation/bottom-tabs';
```

Tab

```
import {
createBottomTabNavigator
} from '@react-
navigation/bottom-tabs';
```

Navigator

STACK

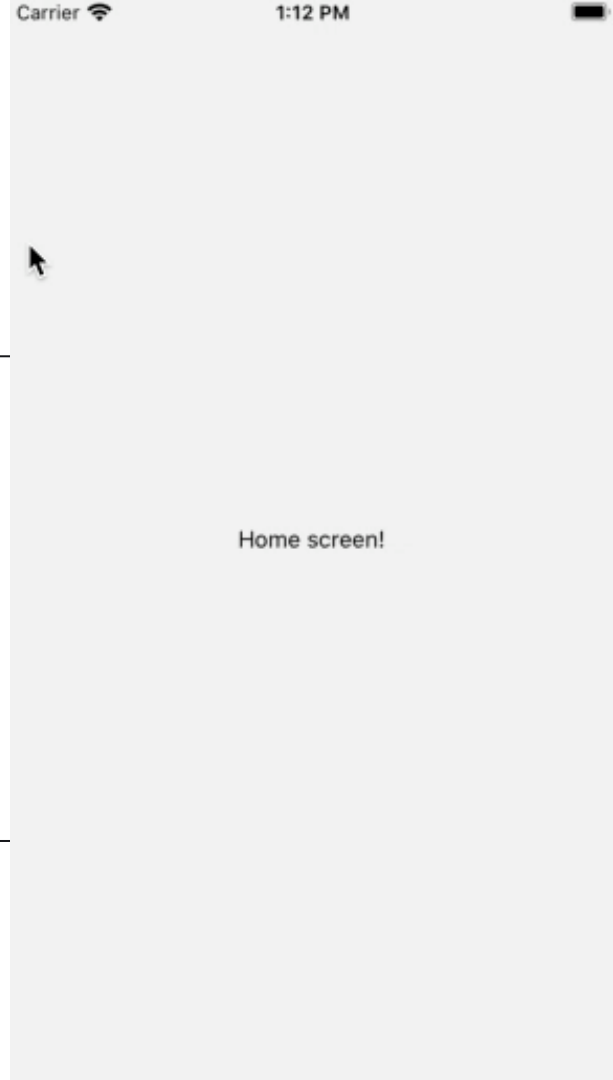
```
import { createStackNavigator } from '@react-navigation/stack';

const Stack = createStackNavigator();

function MyStack() {
   return (
       <Stack.Navigator>
          <Stack.Screen name="Home" component={Home} />
          <Stack.Screen name="Profile" component={Profile} />
          <Stack.Screen name="Settings" component={Settings} />
       </Stack.Navigator>
  );
}
```

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

Navigator

Drawer

```
import { createDrawerNavigator } from '@react-navigation/drawer';

const Drawer = createDrawerNavigator();

function MyDrawer() {
 return (
   <Drawer.Navigator>
    <Drawer.Screen name="Feed" component={Feed} />
    <Drawer.Screen name="Article" component={Article} />
   </Drawer.Navigator>
 );
}
```



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

Navigator

Bottom Tabs

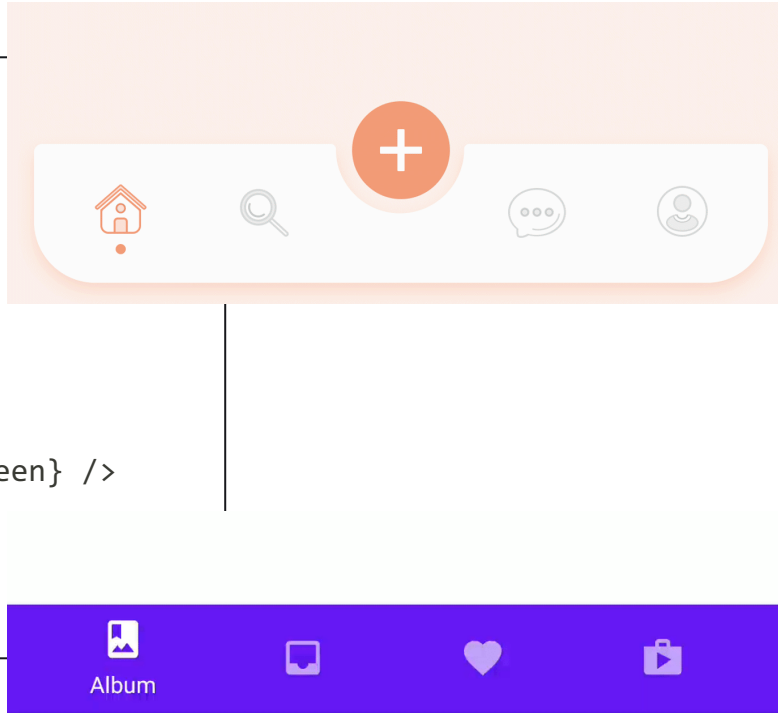
```
import { createBottomTabNavigator }
from '@react-navigation/bottom-tabs';

const Tab = createBottomTabNavigator();

function MyTabs() {
 return (
  <Tab.Navigator>
   <Tab.Screen name="Home" component={HomeScreen} />
   <Tab.Screen name="Settings" component={SettingsScreen} />
  </Tab.Navigator>
 );
}
```

https://reactnavigation.org/docs/bottom-tab-navigator

Navigator

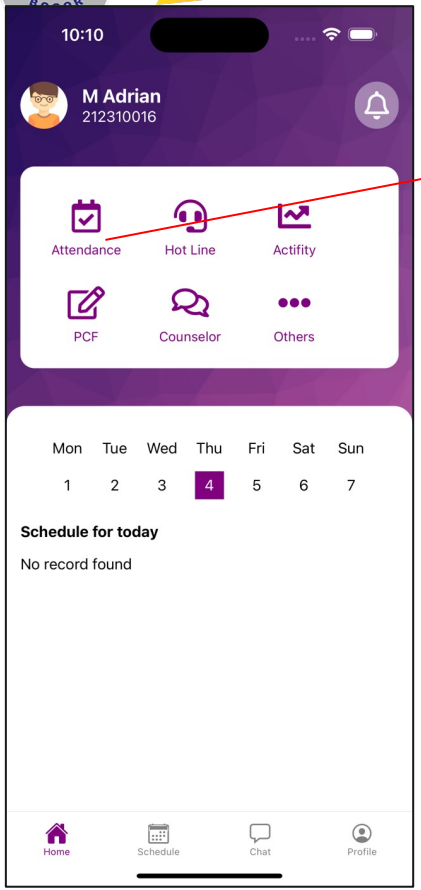
Tabs

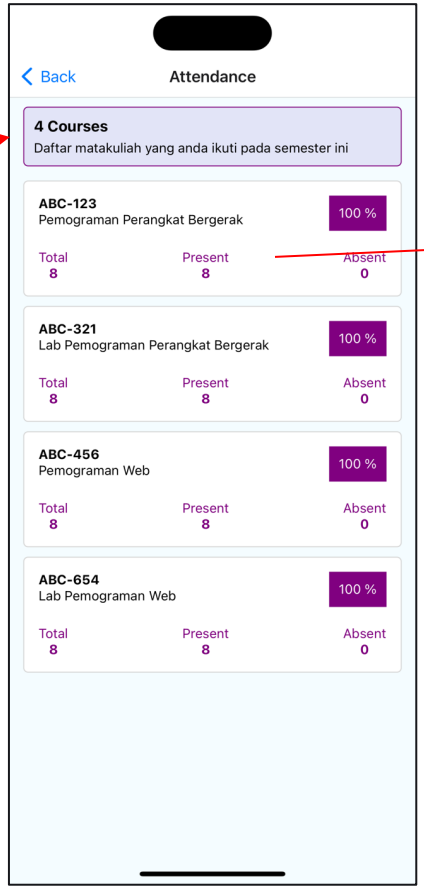
```
import { createBottomTabNavigator }
from '@react-navigation/bottom-tabs';

const Tab = createBottomTabNavigator();

function MyTabs() {
 return (
  <NavigationContainer>
   <Tab.Navigator>
     <Tab.Screen name="Home" component={HomeScreen} />
     <Tab.Screen name="Settings" component={SettingsScreen} />
   </Tab.Navigator>
  </NavigationContainer>
 );
}
```

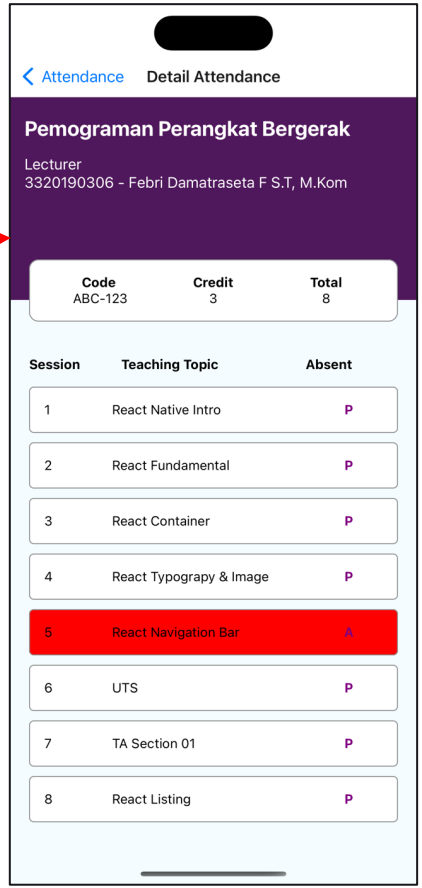


https://reactnavigation.org/docs/tab-based-navigation

Navigator


10:10
M Adrian
212310016
Attendance
Hot Line
Actifity
PCF
Counselor
Others
Mon Tue Wed Thu Fri Sat Sun
1 2 3 4 5 6 7
Schedule for today
No record found
Home
Schedule
Chat
Profile


Back
Attendance
4 Courses
Daftar matakuliah yang anda ikuti pada semester ini
ABC-123
Pemograman Perangkat Bergerak
100 %
Total 8
Present 8
Absent 0
ABC-321
Lab Pemograman Perangkat Bergerak
100 %
Total 8
Present 8
Absent 0
ABC-456
Pemograman Web
100 %
Total 8
Present 8
Absent 0
ABC-654
Lab Pemograman Web
100 %
Total 8
Present 8
Absent 0


Attendance
Detail Attendance
Pemograman Perangkat Bergerak
Lecturer
3320190306 - Febri Damatraseta F S.T, M.Kom
Code ABC-123
Credit 3
Total 8
Session
Teaching Topic
Absent
1 React Native Intro P
2 React Fundamental P
3 React Container P
4 React Typograpy & Image P
5 React Navigation Bar A
6 UTS P
7 TA Section 01 P
8 React Listing P

Life Cycle

Life Cycle

React Class Component

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

export class FormRCC extends Component {
    constructor(props){
      super(props);
      this.state={
        title:"IBI Kesatuan",
        subTitle:"Bogor Indonesia"
      }
    }
  render() {
    return (
          <SafeAreaView>
            <View>
              <Image source={require("../../../../assets/icons/
              <View>
                <Text> {this.state.title} </Text>
                <Text> {this.state.subTitle} </Text>
              </View>
            </View>
            <View>
              <View>
                <Text>Change Logo</Text>
              </View>
              <View>
                <Text>Title</Text>
                <TextInput placeholder="Enter title here"
                           defaultValue={this.state.title}
                           onChangeText={(text)=>this.setState({title:text})} />
              </View>
              <View>
                <Text>Sub Title</Text>
                <TextInput placeholder="Enter sub title here"
                           defaultValue={this.state.subTitle}
                           onChangeText={(text)=>this.setState({subTitle:text})} />
              </View>
            </View>
          </SafeAreaView>
    );
  }
}

export default FormRCC;
```

Inisialisasi key bernama ti

Cara menampilkan state lifecycle pada JSX

Mengambil nilai value pada TextInput dengan menggunakan properties ***onChangeText***, dan untuk mengupdate value pada state gunakan `this.setState({namakey:value})`

Life Cycle

React Class Component

```
            <View>
              <View>
                <Text>Change Logo</Text>
              </View>
              <View>
                <Text>Title</Text>
                <TextInput placeholder="Enter title here"
                           defaultValue={this.state.title}
                           onChangeText={(text)=>this.setState({title:text})} />
              </View>
              <View>
                <Text>Sub Title</Text>
                <TextInput placeholder="Enter sub title here"
                           defaultValue={this.state.subTitle}
                           onChangeText={(text)=>this.setState({subTitle:text})} />
              </View>
            </View>
          </SafeAreaView>
      );
    }
  }
export default FormRCC;
```

Mengambil nilai value pada TextInput dengan menggunakan properties ***onChangeText***, dan untuk mengupdate value pada state gunakan `this.setState({namakey:value})`

Life Cycle

React Function Component

```
import { View, Text, StyleSheet, SafeAreaView, Image, TextInput} from "react-native";
import React, { useState } from "react";

const FormRFC = () => {
  const [title, setTitle] = useState("IBI Kesatuan");
  const [subTitle, setSubTitle] = useState("Bogor Indonesia");
  return (
    <SafeAreaView>
      <View>
        <Image source={require("../../../../assets/icons/icon-ibik.png")} />
        <View>
          <Text>{title}</Text>
          <Text>{subTitle}</Text>
        </View>
      </View>

      <View>
        <View>
          <Text>Change Logo</Text>
        </View>
        <View>
          <Text>Title</Text>
          <TextInput
            placeholder="Enter title here"
            defaultValue={title}
            onChangeText={(text) => setTitle(text)}
          />
        </View>

        <View>
          <Text>Sub Title</Text>
          <TextInput
            placeholder="Enter sub title here"
            defaultValue={subTitle}
            onChangeText={(text) => setSubTitle(text)}
          />
        </View>
      </View>
    </SafeAreaView>
  );
};

export default FormRFC;
```

Format penulisan *useState()*:
`[getter, setter] = useState(value)`

Inisialisasi title dan subtitle dengan menggunakan HOOK useState

Menampilkan nilai getter dari useState

Mengisi nilai baru pada setter title atau subtitle dengan properties onChangeText(…)

Thanks!

Does anyone have any questions?

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