

# **LAPORAN UTS PEMROGRAMAN MOBILE**



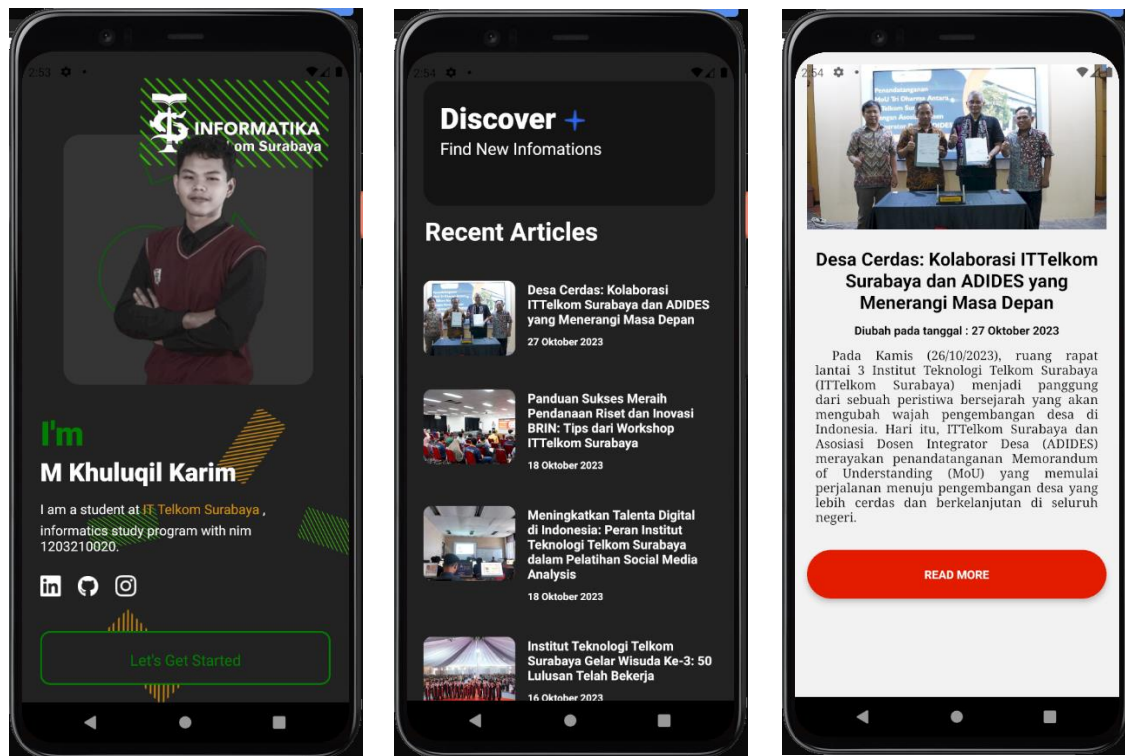
Disusun Oleh:  
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1203210020

**PROGRAM STUDI S1 INFORMATIKA  
FAKULTAS TEKNOLOGI INFORMASI DAN BISNIS  
INSTITUT TEKNOLOGI TELKOM SURABAYA  
2023**

## Sub-CPMK

- Buat Aplikasi Mobile sederhana menggunakan React Native yang menampilkan Daftar Berita ITTelkom Surabaya yang diambil dari endpoint API.

Hasil :

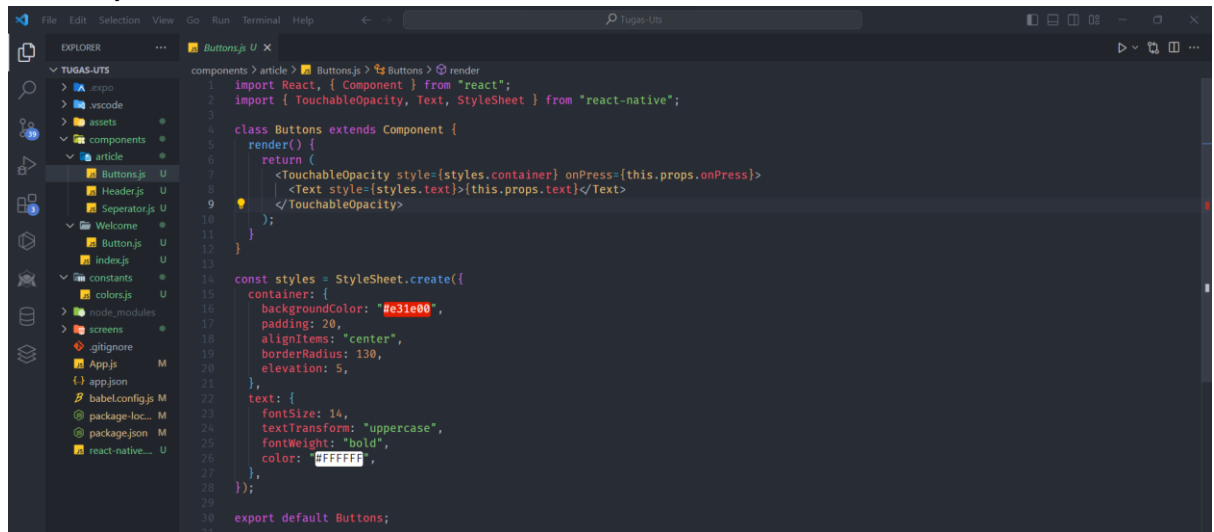


- Buat semua kode program dalam bentuk class component

```
File Edit Selection View Go Run Terminal Help
Article.js U X
screens > Article.js > Article > componentDidMount
1 import {
2   StyleSheet,
3   Text,
4   TouchableOpacity,
5   View,
6   FlatList,
7   Image,
8   Dimensions,
9 } from "react-native";
10 import React, { Component } from "react";
11 import { StatusBar } from "expo-status-bar";
12 import { ActivityIndicator } from "react-native";
13 import Header from "../components/article/Header";
14 import COLORS from "../constants/colors";
15
16 const windowHeight = Dimensions.get("window").height;
17
18 class Article extends Component {
19   constructor(props) {
20     super(props);
21     this.state = {
22       data: [],
23       isLoading: true,
24     };
25   }
26 }
```

- Terapkan bentuk destructuring untuk import komponen.

## Buttons.js



```

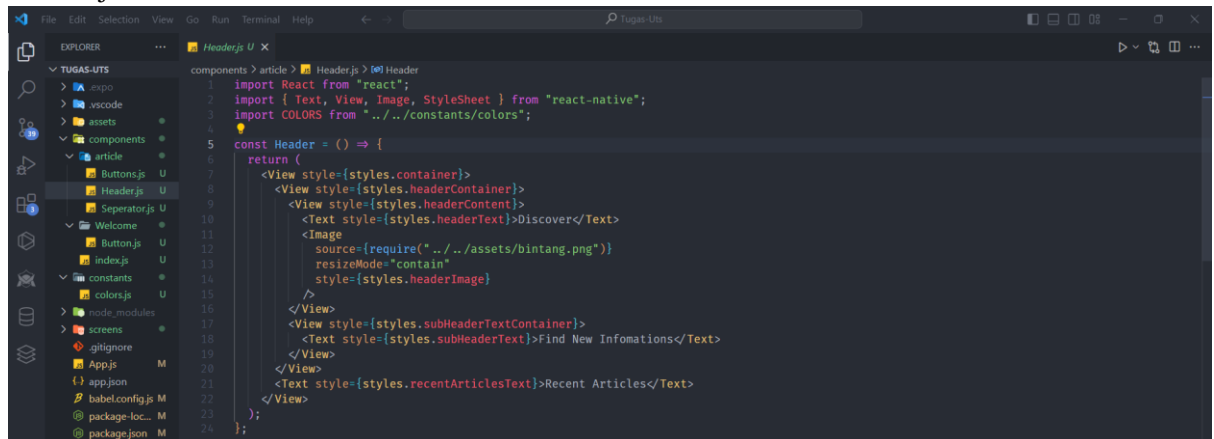
1 import React, { Component } from "react";
2 import { TouchableOpacity, Text, StyleSheet } from "react-native";
3
4 class Button extends Component {
5   render() {
6     return (
7       <TouchableOpacity style={styles.container} onPress={this.props.onPress}>
8         <Text style={styles.text}>{this.props.text}</Text>
9       </TouchableOpacity>
10     );
11   }
12 }
13
14 const styles = StyleSheet.create({
15   container: {
16     backgroundColor: "#e31e00",
17     padding: 20,
18     alignItems: "center",
19     borderRadius: 130,
20     elevation: 5,
21   },
22   text: {
23     fontSize: 14,
24     textTransform: "uppercase",
25     fontWeight: "bold",
26     color: "#ffffff",
27   },
28 });
29
30 export default Button;

```

Penjelasan :

Component buttons ini dipakai pada bagian DetailArticle,

## Header.js



```

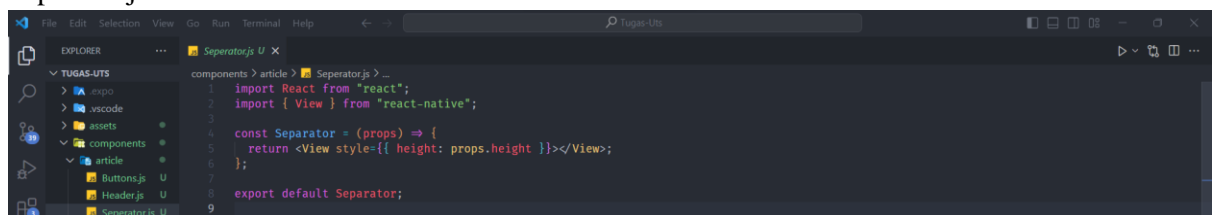
1 import React from "react";
2 import { Text, View, Image, StyleSheet } from "react-native";
3 import COLORS from "../constants/colors";
4
5 const Header = () => {
6   return (
7     <View style={styles.container}>
8       <View style={styles.headerContainer}>
9         <View style={styles.headerContent}>
10           <Text style={styles.headerText}>Discover</Text>
11           <Image
12             source={require("../assets/bintang.png")}
13             resizeMode="contain"
14             style={styles.headerImage}
15           />
16         </View>
17         <View style={styles.subHeaderTextContainer}>
18           <Text style={styles.subHeaderText}>Find New Informations</Text>
19         </View>
20         <Text style={styles.recentArticlesText}>Recent Articles</Text>
21       </View>
22     </View>
23   );
24 }
25
26 export default Header;

```

Penjelasan :

Component header ini dipakai pada bagian article untuk memparcantik tampilannya

## Seperator.js



```

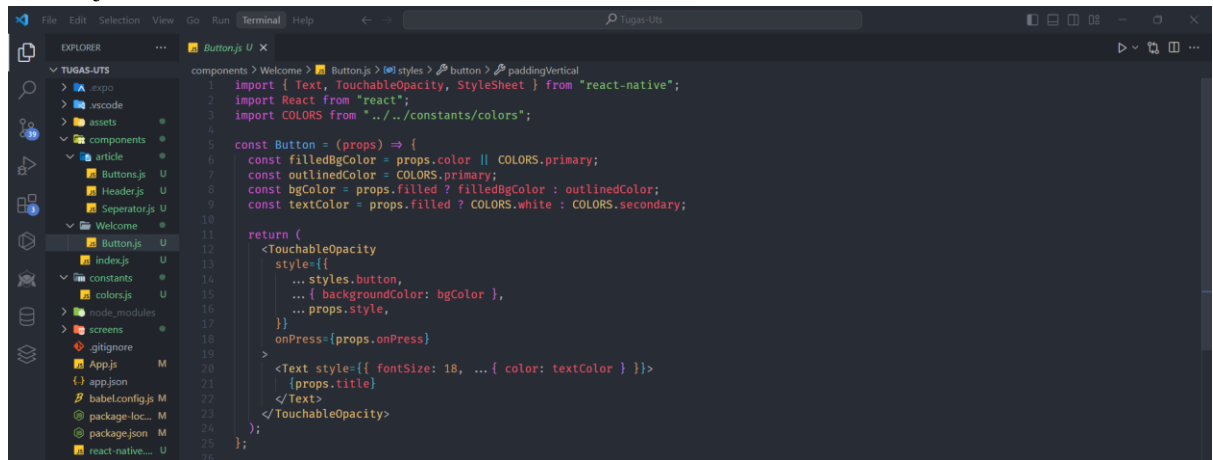
1 import React from "react";
2 import { View } from "react-native";
3
4 const Separator = (props) => {
5   return <View style={{ height: props.height }}></View>;
6 }
7
8 export default Separator;

```

Penejlsan :

componenent ini dipakai ketika ingin memisahkan setiap section view agar memiliki jarak

## Button.js

A screenshot of the Visual Studio Code editor showing a file named Button.js. The Explorer sidebar on the left shows a project structure with folders like .expo, .vscode, assets, components, article, Buttons.js, Header.js, Separator.js, Welcome, index.js, constants, colors.js, node\_modules, screens, .gitignore, App.js, app.json, babel.config.js, package-lock.json, package.json, and react-native. The main editor area shows the code for Button.js, which imports Text, TouchableOpacity, and StyleSheet from 'react-native', and React from 'react'. It also imports COLORS from a relative path. The code defines a Button component as a function that takes props and returns a JSX element. The JSX element consists of a TouchableOpacity component with a style object containing styles.button and a backgroundColor from props, and a Text component with a font size of 18 and a color from props. The TouchableOpacity component has an onPress prop that calls props.onPress. The Text component has a style object with font size 18 and a color from props. The Button component is exported as a default export.

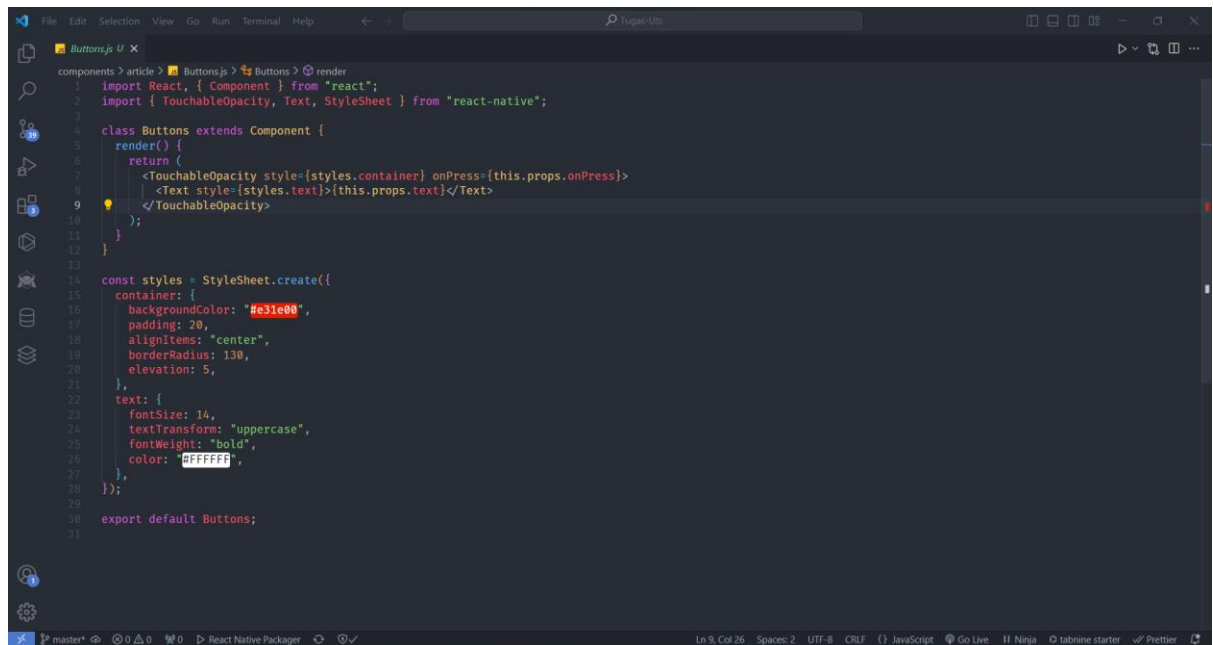
```
1 import { Text, TouchableOpacity, StyleSheet } from "react-native";
2 import React from "react";
3 import COLORS from "../constants/colors";
4
5 const Button = (props) => {
6   const filledBgColor = props.color || COLORS.primary;
7   const outlinedColor = COLORS.primary;
8   const bgColor = props.filled ? filledBgColor : outlinedColor;
9   const textColor = props.filled ? COLORS.white : COLORS.secondary;
10
11   return (
12     <TouchableOpacity
13       style={{
14         ... styles.button,
15         ... { backgroundColor: bgColor },
16         ... props.style,
17       }}
18       onPress={props.onPress}
19     >
20       <Text style={{ fontSize: 18, ... { color: textColor } }}>
21         {props.title}
22       </Text>
23     </TouchableOpacity>
24   );
25 };
26
```

Penjelasan :

Compoenent ini dipakai di bagain welcome section,

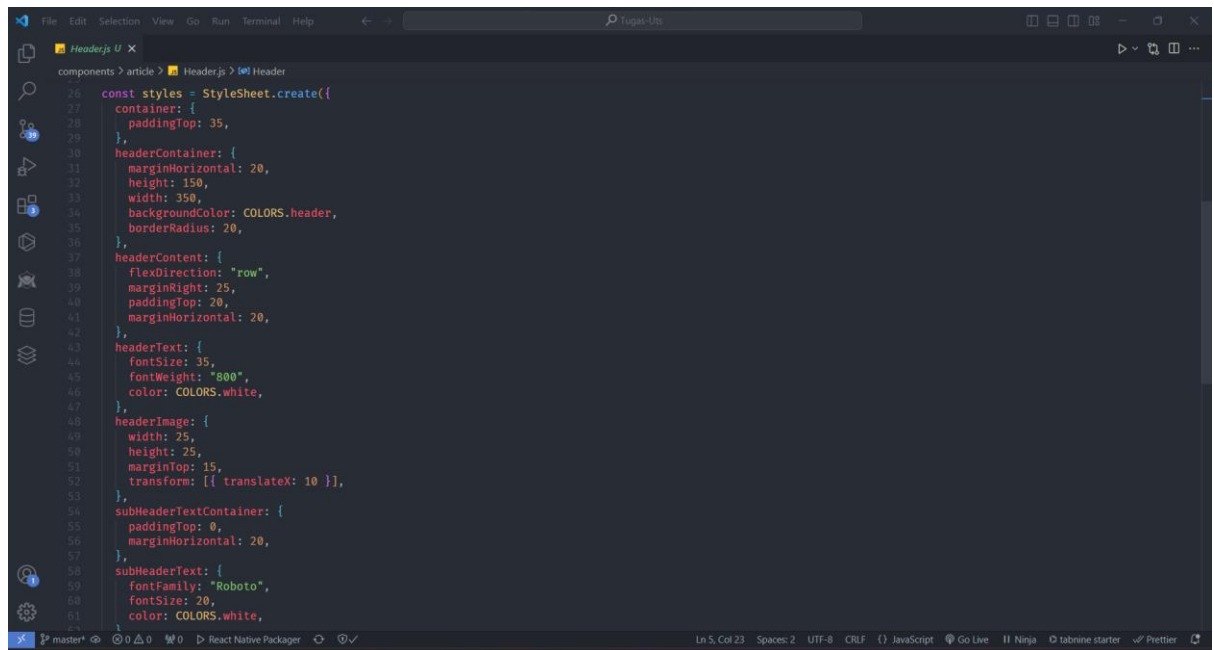
- **Gunakan StyleSheet.create() serta komponen NativeBase atau library lain untuk mendukung styling / desain.**

## Buttons.js

A screenshot of the Visual Studio Code editor showing a file named Buttons.js. The Explorer sidebar on the left shows a project structure with folders like .expo, .vscode, assets, components, article, Buttons.js, Header.js, Separator.js, Welcome, index.js, constants, colors.js, node\_modules, screens, .gitignore, App.js, app.json, babel.config.js, package-lock.json, package.json, and react-native. The main editor area shows the code for Buttons.js, which imports React, Component, TouchableOpacity, Text, and StyleSheet from 'react-native'. It defines a Buttons class that extends Component. The Buttons class has a render method that returns a JSX element. The JSX element consists of a TouchableOpacity component with a style object containing styles.container and an onPress prop that calls this.props.onPress, and a Text component with a style object containing styles.text and a text prop that calls this.props.text. The TouchableOpacity component has an onPress prop that calls this.props.onPress. The Text component has a style object with font size 14, text transform 'uppercase', font weight 'bold', and color 'FFFFFF'. The Buttons class is exported as a default export. The code also defines a styles object using StyleSheet.create() with container and text styles. The container style has a background color of #e31e00, padding of 20, align items of center, border radius of 130, and elevation of 5. The text style has a font size of 14, text transform of uppercase, font weight of bold, and color of FFFFFF.

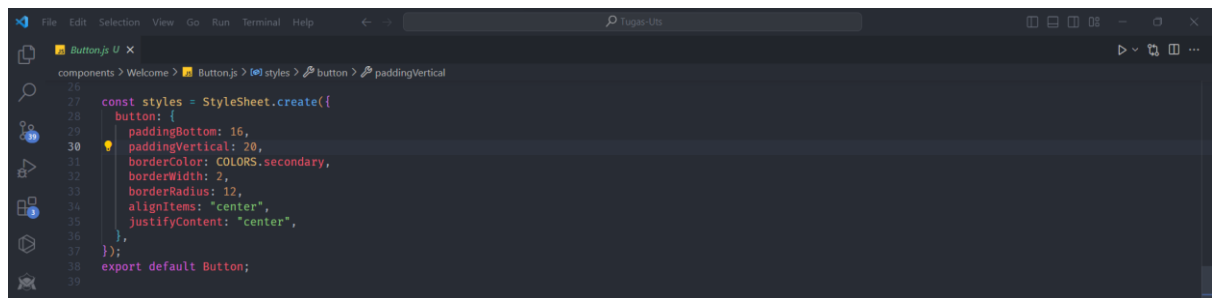
```
1 import React, { Component } from "react";
2 import { TouchableOpacity, Text, StyleSheet } from "react-native";
3
4 class Buttons extends Component {
5   render() {
6     return (
7       <TouchableOpacity style={styles.container} onPress={this.props.onPress}>
8         <Text style={styles.text}>{this.props.text}</Text>
9       </TouchableOpacity>
10     );
11   }
12 }
13
14 const styles = StyleSheet.create({
15   container: {
16     backgroundColor: "#e31e00",
17     padding: 20,
18     alignItems: "center",
19     borderRadius: 130,
20     elevation: 5,
21   },
22   text: {
23     fontSize: 14,
24     textTransform: "uppercase",
25     fontWeight: "bold",
26     color: "FFFFFF",
27   },
28 });
29
30 export default Buttons;
31
```

## Header.js



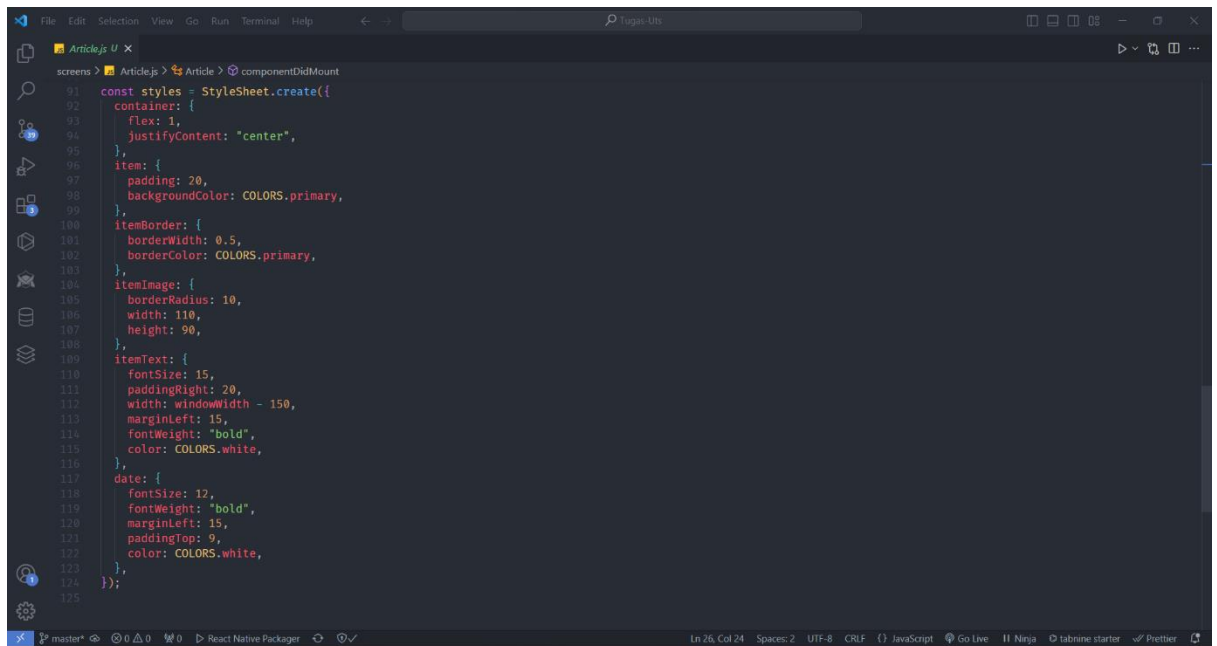
```
components > article > Header.js > Header
26 const styles = StyleSheet.create({
27   container: {
28     paddingTop: 35,
29   },
30   headerContainer: {
31     marginHorizontal: 20,
32     height: 150,
33     width: 350,
34     backgroundColor: COLORS.header,
35     borderRadius: 20,
36   },
37   headerContent: {
38     flexDirection: "row",
39     marginRight: 25,
40     paddingTop: 20,
41     marginHorizontal: 20,
42   },
43   headerText: {
44     fontSize: 35,
45     fontWeight: "800",
46     color: COLORS.white,
47   },
48   headerImage: {
49     width: 25,
50     height: 25,
51     marginTop: 15,
52     transform: [{ translateX: 10 }],
53   },
54   subHeaderTextContainer: {
55     paddingTop: 0,
56     marginHorizontal: 20,
57   },
58   subHeaderText: {
59     fontFamily: "Roboto",
60     fontSize: 20,
61     color: COLORS.white,
62   },
63 });
```

## Button.js



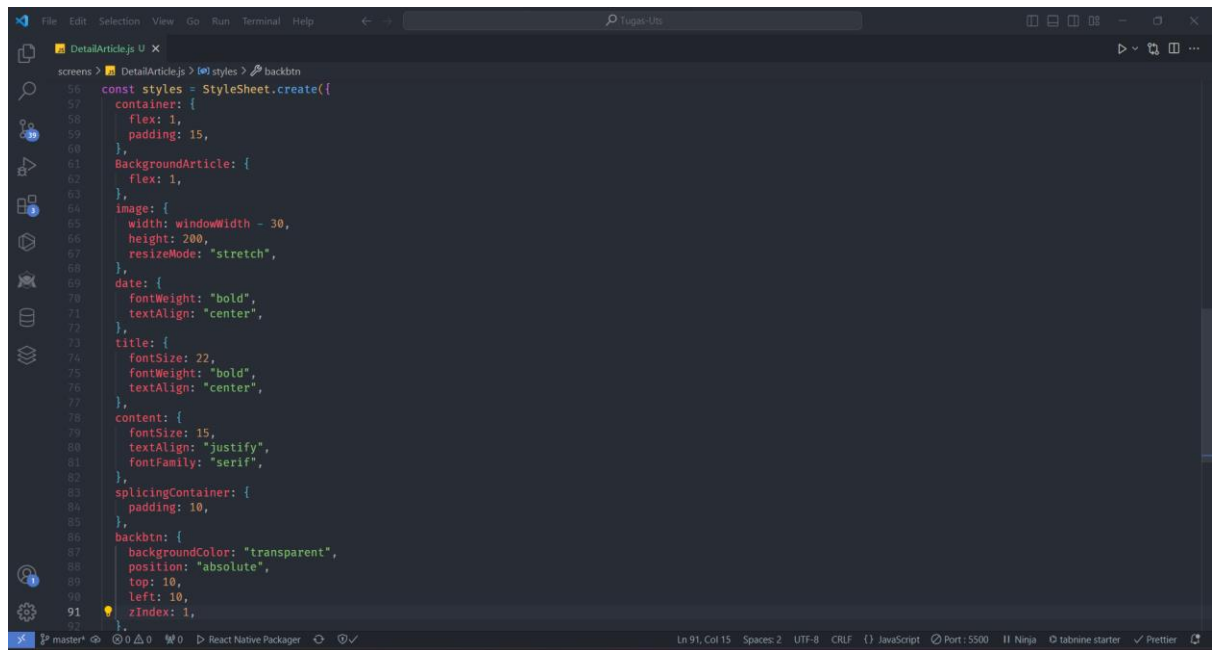
```
components > Welcome > Button.js > styles > button > paddingVertical
26
27
28 const styles = StyleSheet.create({
29   button: {
30     paddingBottom: 16,
31     paddingVertical: 20,
32     borderColor: COLORS.secondary,
33     borderWidth: 2,
34     borderRadius: 12,
35     alignItems: "center",
36     justifyContent: "center",
37   },
38 });
39 export default Button;
```

## Article.js



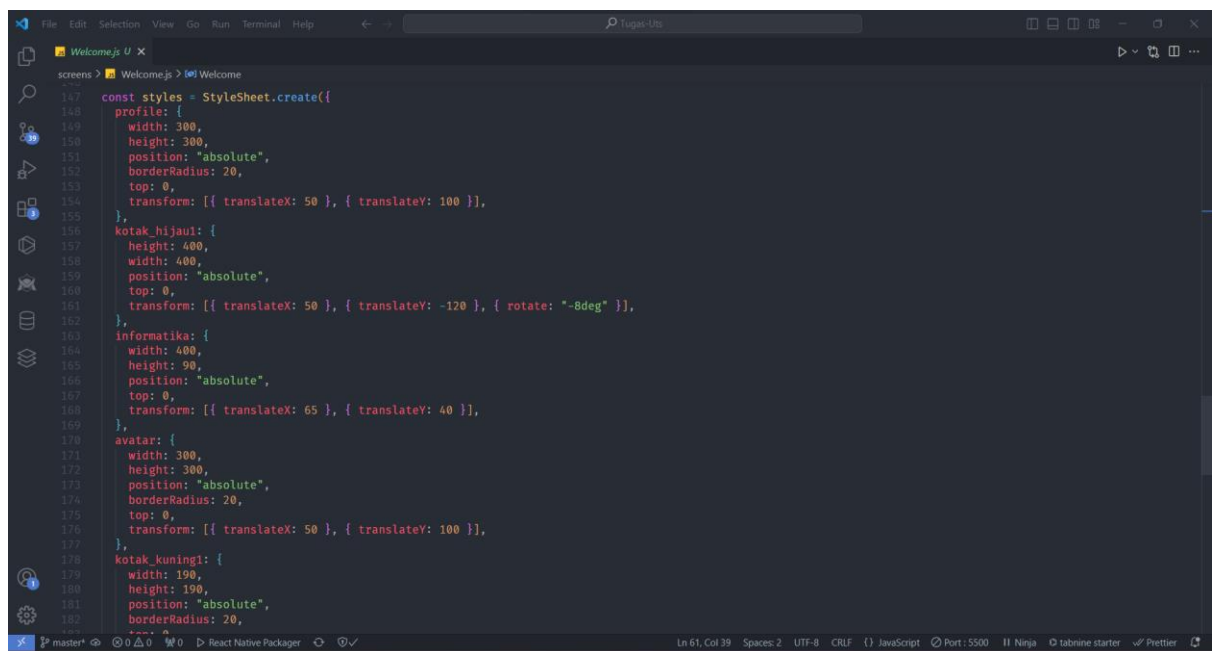
```
screens > Article.js > Article > componentDidMount
91 const styles = StyleSheet.create({
92   container: {
93     flex: 1,
94     justifyContent: "center",
95   },
96   item: {
97     padding: 20,
98     backgroundColor: COLORS.primary,
99   },
100   itemBorder: {
101     borderWidth: 0.5,
102     borderColor: COLORS.primary,
103   },
104   itemImage: {
105     borderRadius: 10,
106     width: 110,
107     height: 90,
108   },
109   itemText: {
110     fontSize: 15,
111     paddingRight: 20,
112     width: windowWidth - 150,
113     marginLeft: 15,
114     fontWeight: "bold",
115     color: COLORS.white,
116   },
117   date: {
118     fontSize: 12,
119     fontWeight: "bold",
120     marginLeft: 15,
121     paddingTop: 9,
122     color: COLORS.white,
123   },
124 });
125
```

## DetailArticle.js



```
1  const styles = StyleSheet.create({
2    container: {
3      flex: 1,
4      padding: 15,
5    },
6    BackgroundArticle: {
7      flex: 1,
8    },
9    image: {
10     width: windowWidth - 30,
11     height: 200,
12     resizeMode: "stretch",
13   },
14   date: {
15     fontWeight: "bold",
16     textAlign: "center",
17   },
18   title: {
19     fontSize: 22,
20     fontWeight: "bold",
21     textAlign: "center",
22   },
23   content: {
24     fontSize: 15,
25     textAlign: "justify",
26     fontFamily: "Serif",
27   },
28   splicingContainer: {
29     padding: 10,
30   },
31   backbtn: {
32     backgroundColor: "transparent",
33     position: "absolute",
34     top: 10,
35     left: 10,
36     zIndex: 1,
37   },
38 })
```

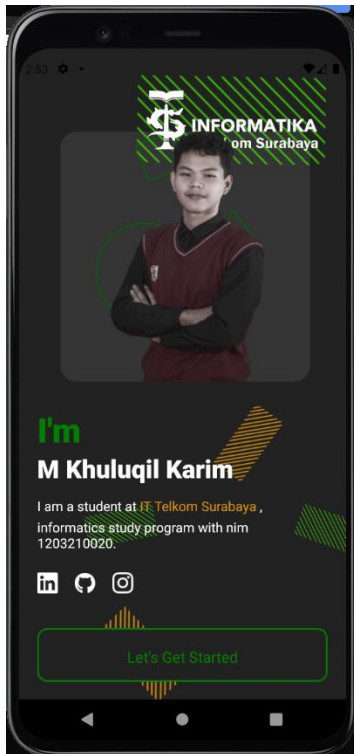
## Welcome.js



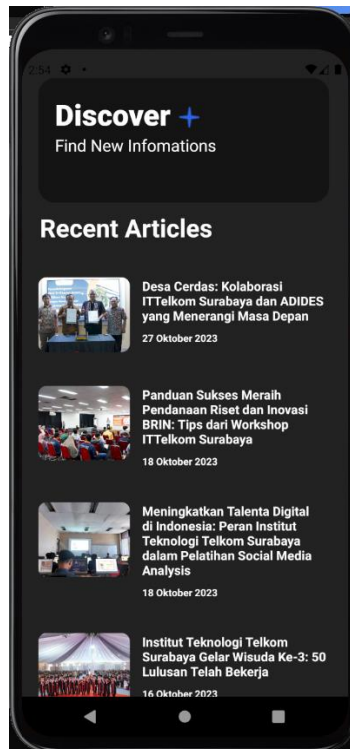
```
1  const styles = StyleSheet.create({
2    profile: {
3      width: 300,
4      height: 300,
5      position: "absolute",
6      borderRadius: 20,
7      top: 0,
8      transform: [{ translateX: 50 }, { translateY: 100 }],
9    },
10   kotak_hijau1: {
11     height: 400,
12     width: 400,
13     position: "absolute",
14     top: 0,
15     transform: [{ translateX: 50 }, { translateY: -120 }, { rotate: "-0deg" }],
16   },
17   informatika: {
18     width: 400,
19     height: 90,
20     position: "absolute",
21     top: 0,
22     transform: [{ translateX: 65 }, { translateY: 40 }],
23   },
24   avatar: {
25     width: 300,
26     height: 300,
27     position: "absolute",
28     borderRadius: 20,
29     top: 0,
30     transform: [{ translateX: 50 }, { translateY: 100 }],
31   },
32   kotak_kuning1: {
33     width: 190,
34     height: 190,
35     position: "absolute",
36     borderRadius: 20,
37   },
38 })
```

- Aplikasi Mobile tersebut memiliki 3 screen:

Screen Home



Screen List Berita



Screen Detail Berita



- **Ambil data untuk daftar berita ataupun detail berita dengan memanfaatkan endpoint API**

Article.js

```
33  getData = () => {  
34    fetch(  
35      "https://raw.githubusercontent.com/dauditts/pm-static-api/main/articles.json"  
36    )  
37      .then((response) => response.json())  
38      .then((json) => {  
39        console.log(json);  
40        this.setState({ data: json.articles, isLoading: false });  
41      })  
42      .catch((error) => {  
43        console.error(error);  
44      });  
45  };  
46
```

**Link Youtube :**

<https://youtu.be/SKVtop4Xzq0>