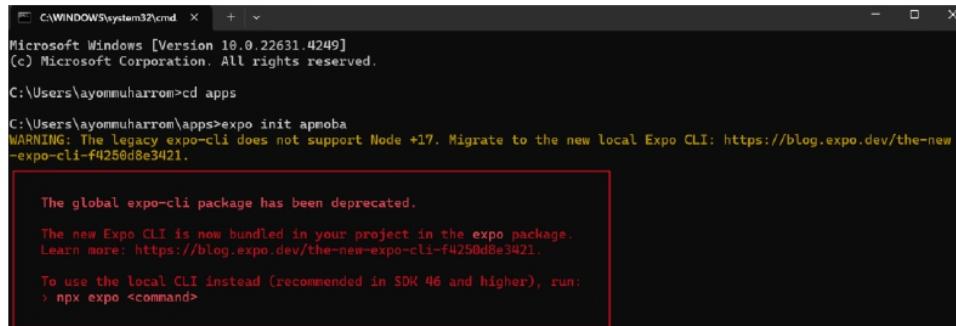


MODUL REACT NATIVE 1 – MOBILE APP

a. Membuat projek baru di react native

- Silakan buka CMD → sesuaikan direktori atau lokasi berkas project yang akan dibuat.
- Ketika **expo init apmoba**.



```
C:\WINDOWS\system32\cmd.exe + - x
Microsoft Windows [Version 10.0.22631.4249]
(c) Microsoft Corporation. All rights reserved.

C:\Users\ayommuharrom>cd apps

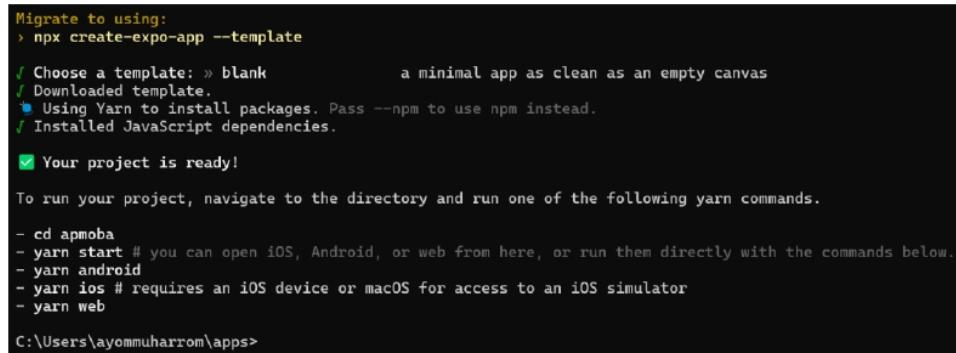
C:\Users\ayommuharrom\apps>expo init apmoba
WARNING: The legacy expo-cli does not support Node v17. Migrate to the new local Expo CLI: https://blog.expo.dev/the-new-expo-cli-f4250d8e3421.

The global expo-cli package has been deprecated.

The new Expo CLI is now bundled in your project in the expo package.
Learn more: https://blog.expo.dev/the-new-expo-cli-f4250d8e3421.

To use the local CLI instead (recommended in SDK 46 and higher), run:
> npx expo <command>
```

- Pilih Blank



```
Migrate to using:
> npx create-expo-app --template

✓ Choose a template: » blank           a minimal app as clean as an empty canvas
✓ Downloaded template.
* Using Yarn to install packages. Pass --npm to use npm instead.
✓ Installed JavaScript dependencies.

✓ Your project is ready!

To run your project, navigate to the directory and run one of the following yarn commands.

- cd apmoba
- yarn start # you can open iOS, Android, or web from here, or run them directly with the commands below.
- yarn android
- yarn ios # requires an iOS device or macOS for access to an iOS simulator
- yarn web

C:\Users\ayommuharrom\apps>
```

b. Membuka projek baru di react native

- Masuk ke direktori projek → ketika **code**.

```
C:\Users\ayommuharrom\apps>cd projectpertama
C:\Users\ayommuharrom\apps\projectpertama>code .
```

c. Menjalankan projek baru di react native

- Pada direktori project, ketika **yarn android**. Otomatis akan terbuka emulator yang sudah terhubung dan membuka project react-native kita.

```
C:\Users\ayommuharrom\apps>cd apmoba
C:\Users\ayommuharrom\apps\apmoba>yarn android
yarn run v1.22.22
$ expo start --android
Starting project at C:\Users\ayommuharrom\apps\apmoba
Starting Metro Bundler
The following packages should be updated for best compatibility with the installed expo version:
  expo@51.0.34 - expected version: ~51.0.35
Your project may not work correctly until you install the expected versions of the packages.
> Opening emulator Pixel_7_Pro_API_35
> Opening exp://10.157.157.15:8081 on Pixel_7_Pro_API_35
```

d. Membuat Hello World

- Hapus semua isi file App.tsx
- Ketik code snippet **imrc** untuk menghasilkan kode **import React, { Component } from 'react'**
- Ketika code snippet **ccsc** untuk menghasilkan kode berikut.

```
App.tsx 3, M
App.tsx > [o] default
1 import React, { Component } from 'react'
2
3 class App extends Component {
4   constructor(props) {
5     super(props);
6     this.state = { };
7   }
8   render() {
9     return (
10
11   );
12 }
13
14
15 export default App;
```

- Selanjutnya lakukan import view dan text dengan kode **import {View, Text} from 'react-native'**
- Pada return, tambah View dan Text seperti kode berikut.

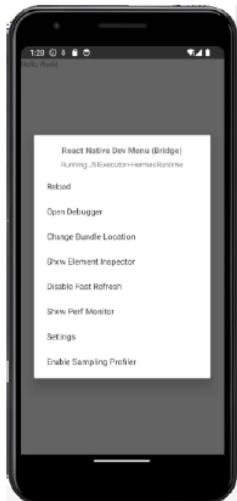
```
App.tsx 8, M X
App.tsx > ...
App.tsx > ...
1 import React, { Component } from 'react'
2 import {View, Text} from 'react-native'
3
4 class App extends Component {
5   constructor(props) {
6     super(props);
7     this.state = { };
8   }
9   render() {
10     return (
11       <View>
12         <Text>Hello World</Text>
13       </View>
14     );
15   }
16
17
18 export default App;
```

- Simpan project tersebut, otomatis pada emulator akan menyesuaikan.



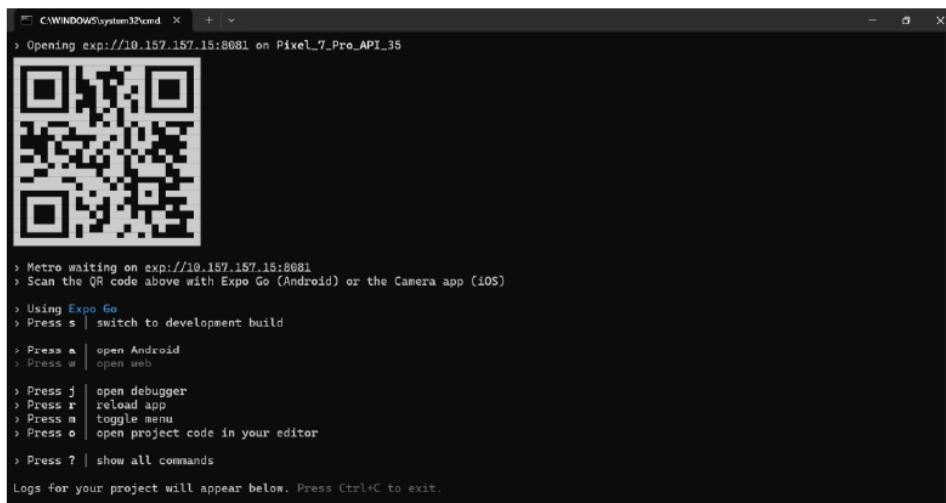
e. Cara Membuka Developer Menu

- Tekan **ctrl+m** pada emulator android dan akan muncul developer menu



f. Cara Reload

- Cara reload dapat melalui developer menu seperti cara sebelumnya atau melalui ketik huruf **R** dua kali di emulator, dapat juga melalui cmd dan ketik **R** sekali



g. Text Component

- Membuat komponen dan style untuk text atau tulisan

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

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View>
        <Text style={{color: 'blue'}}>Hello World1</Text>
        <Text
          style={{
            fontSize: 28,
            fontWeight: 'bold',
            fontStyle: 'italic',
            textAlign: 'center',
          }}>
          Hello World2
        </Text>
        <Text
          style={{
            color: '#DC143C',
            fontSize: 28,
            textDecorationLine: 'line-through',
            textAlign: 'left',
          }}>
          Rp20.000,00
        </Text>
        <Text
          style={{
            color: 'rgb(0, 0, 0)',
            fontSize: 28,
            textDecorationLine: 'underline',
            textAlign: 'right',
          }}>
          Rp10.000,00
        </Text>
      </View>
    );
  }
}

export default App;
```



- Membuat komponen dan style untuk text atau tulisan tahap 2

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

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View>
        <Text
          style={{
            fontWeight: 'bold',
            fontStyle: 'normal',
            textAlign: 'right',
          }}>
          <Text style={{fontSize: 26, color: 'crimson'}}>Hello</Text>
          <Text style={{fontSize: 46, color: 'aqua'}}>World</Text>
        </Text>
      </View>
    );
  }
}

export default App;
```



h. View Component

- Membuat View komponen (membuat **container**)

```

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

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View>
        <Text
          style={{
            fontWeight: 'bold',
            fontStyle: 'normal',
            textAlign: 'right',
          }}>
          <Text style={{fontSize: 26, color: 'crimson'}}>Hello</Text>
          <Text style={{fontSize: 46, color: 'aqua'}}>World</Text>
        </Text>
        <View
          style={{width: 100, height: 100, backgroundColor: 'yellow'}}></View>
      </View>
    );
  }
}

export default App;

```



- Membuat View komponen (membuat *container*) tahap 2

```

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

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <Text
          style={{
            fontWeight: 'bold',
            fontStyle: 'normal',
            textAlign: 'right',
          }}>
          <Text style={{fontSize: 26, color: 'crimson'}}>Hello</Text>
          <Text style={{fontSize: 46, color: 'aqua'}}>World</Text>
        </Text>
        <View
          style={{
            // flex: 1,
            flex: 0.5,
            // width: 100,
          }}>

```

```

    // height: 100,
    // margin : 20,
    // marginVertical: 20,
    // marginHorizontal: 20,
    marginTop: 20,
    marginBottom: 20,
    marginLeft: 20,
    marginRight: 20,
    // padding : 10,
    paddingHorizontal :10,
    paddingHorizontal : 10,
    // justifyContent : 'flex-start',
    // justifyContent : 'flex-end',
    justifyContent : 'center',
    // alignItems : 'flex-start',
    // alignItems : 'flex-end',
    alignItems : 'center',
    backgroundColor: 'yellow',
    borderRadius : 5,
    // flexDirection : 'row',
    // flexDirection : 'column-reverse',
    // flexDirection : 'column',
    flexDirection : 'column-reverse',
  })}
  <Text>Hello1</Text>
  <Text>Hello2</Text>
  <Text>Hello3</Text>
</View>
</View>
);
}
}

export default App;

```



i. Cara Membuat Header

- Berikut kode untuk membuat header

```

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

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <View
          style={{
            backgroundColor: 'crimson',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>

```

```

        <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
          Header
        </Text>
      </View>
    </View>
  );
}

export default App;

```



j. Status Bar Component

- Import **StatusBar** terlebih dahulu

```

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

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75"/>
        <View
          style={{
            backgroundColor: '#03fc98',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            Header
          </Text>
        </View>
      </View>
    );
  }
}

export default App;

```



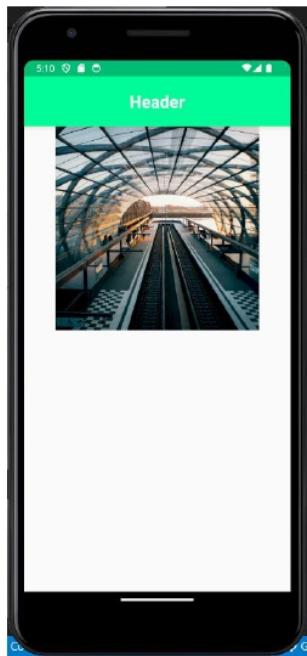
k. Image Component

- Cari sebuah contoh gambar untuk ditampilkan
- Buat **Folder src** dalam direktori project, dalam folder src buat lagi folder **images**.
Masukkan gambar yang akan ditampilkan dalam folder **images**
(project/src/images/contohgambar.jpg)
- Lakukan import Image
- Buat kode di bawah ini untuk menambahkan gambar

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

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View
          style={{
            backgroundColor: '#03fc98',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            Header
          </Text>
        </View>
        <View style={{justifyContent: 'center', alignItems: 'center'}}>
          <Image
            source={require('./src/images/image1.jpg')}
            style={{width: 300, height: 300}}
          />
        </View>
      </View>
    );
  }
}

export default App;
```



I. TouchableOpacity Component

- TouchableOpacity sama halnya kita membuat tombol. Bisa gambar dijadikan tombol atau membuat tombol sendiri
- Lakukan import **TouchableOpacity** > Semula **Image** dibungkus dengan **View**, ubah menjadi **TouchableOpacity** > Tambahkan properti **onPress** pada **TouchableOpacity**

```
import React, {Component} from 'react';
import {View, Text, StatusBar, Image, TouchableOpacity} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View
          style={{
            backgroundColor: '#03fc98',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>
          <Text style={{color: 'FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            Header
          </Text>
        </View>
        <TouchableOpacity
          style={{justifyContent: 'center', alignItems: 'center'}}
          onPress={() => console.log('Halo klik')}>
          <Image
            source={require('./src/images/image1.jpg')}
            style={{width: 300, height: 300}}
          />
        </TouchableOpacity>
      </View>
    );
  }
}

export default App;
```

- Simpan dan coba klik gambarnya, lalu cek cmd yang berjalan akan muncul pesan yang kita atur.

```
32 |      );]
LOG  Halo klik
```

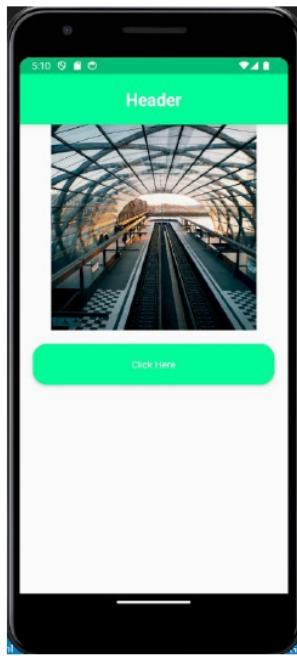
- Kemudian tambahkan kode untuk membuat tombol menggunakan **TouchableOpacity**

```
import React, {Component} from 'react';
import {View, Text, StatusBar, Image, TouchableOpacity} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {};
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View
          style={{
            backgroundColor: '#03fc98',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            Header
          </Text>
        </View>
        <TouchableOpacity
          style={{justifyContent: 'center', alignItems: 'center'}}
          onPress={() => console.log('Halo klik')}>
          <Image
            source={require('./src/images/image1.jpg')}
            style={{width: 300, height: 300}}
          />
        </TouchableOpacity>

        <TouchableOpacity
          style={{
            backgroundColor: '#03fc98',
            paddingVertical: 20,
            justifyContent: 'center',
            alignItems: 'center',
            marginHorizontal: 20,
            border-radius: 20,
            elevation: 3,
          }}>
          <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
            Click Here
          </Text>
        </TouchableOpacity>
      </View>
    );
  }
}

export default App;
```



m. Mengenal State

- State sama seperti halnya variabel dalam bahasa pemrograman
- Contoh seperti di bawah ini, mengambil *value* untuk header

```
import React, {Component} from 'react';
import {View, Text, StatusBar, Image, TouchableOpacity} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header : 'Home',
    };
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View
          style={{
            backgroundColor: '#03fc98',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            {this.state.header}
          </Text>
        </View>
        <TouchableOpacity
          style={{justifyContent: 'center', alignItems: 'center'}}
          onPress={() => console.log('Halo klik')}>
          <Image
            source={require('./src/images/image1.jpg')}
            style={{width: 300, height: 300}}
          />
        </TouchableOpacity>

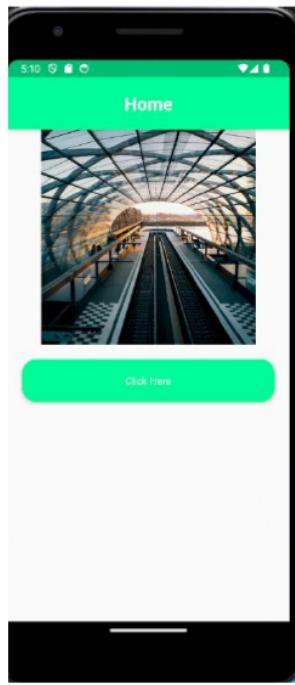
        <TouchableOpacity
          style={{
            backgroundColor: '#03fc98',
            paddingVertical: 20,
            justifyContent: 'center',
            alignItems: 'center',
            marginTop: 20,
            marginHorizontal: 20,
            borderRadius: 20,
            elevation: 3,
          }}>
          <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
```

```

        Click Here
      </Text>
    </TouchableOpacity>
  </View>
);
}
}

export default App;

```



n. Switch Component

- Lakukan import **Switch**
- Buat state **value** dan kode komponen **Switch**

```

import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
    };
  }
  render() {
    return (
      <View style={{flex: 1}}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View
          style={{
            backgroundColor: '#03fc98',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            {this.state.header}
          </Text>
        </View>
      </View>
    );
  }
}

export default App;

```

```

<TouchableOpacity
    style={{
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
    }}
    onPress={() => console.log('Halo klik')}
>
<Image
    source={require('./src/images/image1.jpg')}
    style={{width: 300, height: 300}}
/>
</TouchableOpacity>

<View
    style={{
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
    }}>
<Switch value={this.state.value} onValueChange={() => this.setState({value : !this.state.value})}></switch>
</View>

<TouchableOpacity
    style={{
        backgroundColor: '#03fc98',
        paddingVertical: 20,
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
        marginHorizontal: 20,
        borderRadius: 20,
        elevation: 3,
    }}>
<Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
    Click Here
</Text>
</TouchableOpacity>
</View>
);
}
}

export default App;

```

o. TextInput Component

- Tambahkan import **TextInput**
- Tambahkan state **username** karena kita akan membuat contoh inputan untuk username
- Buat kode komponen **TextInput** seperti petunjuk di bawah ini

```

import React, {Component} from 'react';
import {
    View,
    Text,
    StatusBar,
    Image,
    TouchableOpacity,
    Switch,
    TextInput,
} from 'react-native';

class App extends Component {
    constructor(props) {
        super(props);
        this.state = {
            header: 'Home',
            value: true,
            username: '',
        };
    }
    render() {
        return (
            <View style={{flex: 1}}>
                <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
                <View
                    style={{
                        backgroundColor: '#03fc98',
                        justifyContent: 'center',
                        alignItems: 'center',
                        elevation: 5,
                    }}>

```

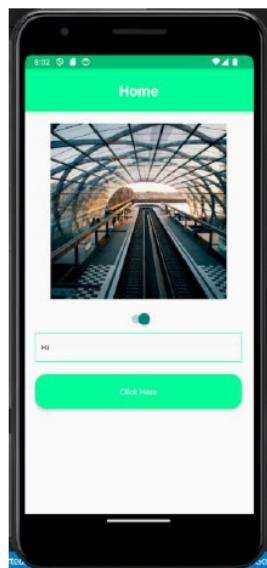
```

        paddingVertical: 20,
    })}
    <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
        {this.state.header}
    </Text>
</View>
<TouchableOpacity
    style={{
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
    }}
    onPress={() => console.log('Halo klik')}
    <Image
        source={require('../src/images/image1.jpg')}
        style={{width: 300, height: 300}}
    />
</TouchableOpacity>

<View
    style={{
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
    }}>
    <Switch
        value={this.state.value}
        onValueChange={() =>
            this.setState({value: !this.state.value})
        }></Switch>
</View>
<TextInput
    value={this.state.username}
    style={{
        borderWidth: 1,
        borderColor: '#03fc98',
        marginHorizontal: 20,
        paddingHorizontal: 10,
        borderRadius: 3,
        marginTop: 10,
        color: 'black',
    }}
    onChangeText={value => this.setState({username: value})}
/>
<TouchableOpacity
    style={{
        backgroundColor: '#03fc98',
        paddingVertical: 20,
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
        marginHorizontal: 20,
        borderRadius: 20,
        elevation: 3,
    }}>
    <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
    </Text>
</TouchableOpacity>
</View>
);
}
}

export default App;

```



p. Scroll View Component

- Lakukan import **ScrollView**
- Duplikat tombol **Click Here** menjadi **4 tombol**, sehingga **tidak semua tombol akan terlihat** dan belum dapat di-scroll.
- Agar dapat melakukan Scroll, ubah komponen **View** utama menjadi **ScrollView**. Simpan dan coba

```
import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
  TextInput,
  ScrollView,
} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
      username: '',
    };
  }
  render() {
    return (
      <ScrollView style={{flex: 1}}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View
          style={{
            backgroundColor: '#03fc98',
            justifyContent: 'center',
            alignItems: 'center',
            elevation: 5,
            paddingVertical: 20,
          }}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            {this.state.header}
          </Text>
        </View>
        <TouchableOpacity
          style={{
            justifyContent: 'center',
            alignItems: 'center',
            marginTop: 20,
          }}
          onPress={() => console.log('Halo klik')}
        <Image
          source={require('./src/images/image1.jpg')}>
```

```
        style={{width: 300, height: 300}}
      />
    </TouchableOpacity>

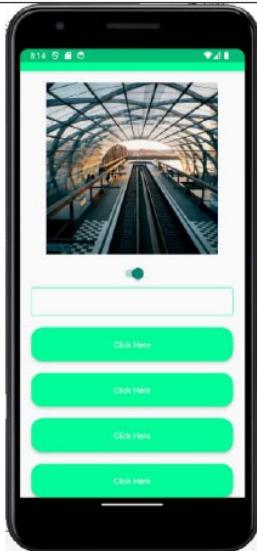
    <View
      style={{
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
      }}>
      <Switch
        value={this.state.value}
        onValueChange={() =>
          this.setState({value: !this.state.value})
      }></Switch>
    </View>
    <TextInput
      value={this.state.username}
      style={{
        borderWidth: 1,
        borderColor: '#03fc98',
        marginHorizontal: 20,
        paddingHorizontal: 10,
        borderRadius: 3,
        marginTop: 10,
        color: 'black',
      }}
      onChangeText={value => this.setState({username: value})}
    />
    <TouchableOpacity
      style={{
        backgroundColor: '#03fc98',
        paddingVertical: 20,
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
        marginHorizontal: 20,
        borderRadius: 20,
        elevation: 3,
      }}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
    <TouchableOpacity
      style={{
        backgroundColor: '#03fc98',
        paddingVertical: 20,
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
        marginHorizontal: 20,
        borderRadius: 20,
        elevation: 3,
      }}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
    <TouchableOpacity
      style={{
        backgroundColor: '#03fc98',
        paddingVertical: 20,
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
        marginHorizontal: 20,
        borderRadius: 20,
        elevation: 3,
      }}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
    <TouchableOpacity
      style={{
        backgroundColor: '#03fc98',
        paddingVertical: 20,
        justifyContent: 'center',
        alignItems: 'center',
        marginTop: 20,
        marginHorizontal: 20,
        borderRadius: 20,
        elevation: 3,
      }}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
  
```

```

        </Text>
        </TouchableOpacity>
    </ScrollView>
);
}
}

export default App;

```



q. StyleSheet Component

- Berguna untuk mengelompokkan style. Dengan StyleSheet membuat kode kita lebih rapih
- Import **StyleSheet**
- Buat **constant**a seperti kode di bawah ini. Seluruh style yang sudah dibuat, kita masukkan ke StyleSheet komponen (tinggal memindah saja)
- Agar dapat melakukan Scroll, ubah komponen **View** utama menjadi **ScrollView**. Simpan dan coba

```

import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
  TextInput,
  ScrollView,
  StyleSheet,
} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
      username: '',
    };
  }
  render() {
    return (
      <ScrollView style={styles.container}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View style={styles.imagecontainer}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            {this.state.header}
          </Text>
        </View>
        <TouchableOpacity
          style={styles.image}
          onPress={() => console.log('Halo klik')}
        <Image

```

```

        source={require('./src/images/image1.jpg')}
        style={{width: 300, height: 300}}
      />
    </TouchableOpacity>

    <View style={styles.switch}>
      <Switch
        value={this.state.value}
        onValueChange={() =>
          this.setState({value: !this.state.value})
        }></Switch>
    </View>
    <TextInput
      value={this.state.username}
      style={styles.textinput}
      onChange={text => this.setState({username: text})}
    />
    <TouchableOpacity style={styles.button}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
    <TouchableOpacity style={styles.button}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
    <TouchableOpacity style={styles.button}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
    <TouchableOpacity style={styles.button}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
    <TouchableOpacity style={styles.button}>
      <Text style={{color: '#FFFFFF', justifyContent: 'center'}}>
        Click Here
      </Text>
    </TouchableOpacity>
  </ScrollView>
);
}

const styles = StyleSheet.create({
  button: {
    backgroundColor: '#03fc98',
    paddingVertical: 20,
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
    marginHorizontal: 20,
    borderRadius: 20,
    elevation: 3,
  },
  textinput: {
    borderWidth: 1,
    borderColor: '#03fc98',
    marginHorizontal: 20,
    paddingHorizontal: 10,
    borderRadius: 3,
    marginTop: 10,
    color: 'black',
  },
  switch: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  image: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  imagecontainer: {
    backgroundColor: '#03fc98',
    justifyContent: 'center',
    alignItems: 'center',
    elevation: 5,
    paddingVertical: 20,
  },
  container: {
    flex: 1,
  },
});
export default App;

```

r. FlatList Component

- **FlatList** adalah komponen yang berguna menampilkan data berbentuk list atau array.
Biasanya Flatlist tidak bekerja ketika menggunakan **ScrollView**, makanya ubah menjadi **View** biasa.
- Import **FlatList**
- Tambahkan data dalam state
- Buat kode FlatListnya

```
import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
  TextInput,
  ScrollView,
  StyleSheet,
  FlatList,
} from 'react-native';

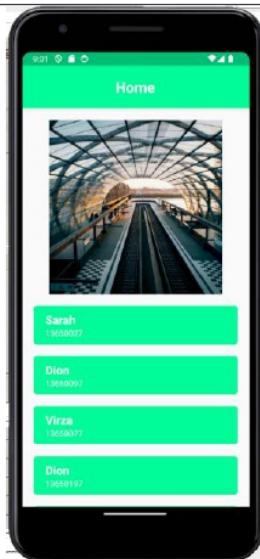
class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
      username: '',
      dataMahasiswa: [
        {
          namaMhs: 'Sarah',
          npmMhs: 13650027,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650097,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650077,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650197,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650277,
        },
      ],
    };
  }
  render() {
    return (
      <View style={styles.container}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View style={styles.imagecontainer}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            {this.state.header}
          </Text>
        </View>
        <TouchableOpacity
          style={styles.image}
          onPress={() => console.log('Halo klik')}
          <Image
            source={require('./src/images/image1.jpg')}
            style={{width: 300, height: 300}}
          />
        </TouchableOpacity>
        <FlatList
          style={{flex: 1, paddingTop: 20}}
          data={this.state.dataMahasiswa}
          renderItem={({item, index}) => (
            <View
              style={styles.flatlistitem}>
              <Text style={{color: 'white', fontSize: 20, fontWeight: 'bold'}}>{item.namaMhs}</Text>
              <Text style={{color: 'white'}}>{item.npmMhs}</Text>
            </View>
          )}
          keyExtractor={item => item.npmMhs}
        </FlatList>
      </View>
    );
  }
}
```

```

    />
  </View>
);
}
}

const styles = StyleSheet.create({
  button: {
    backgroundColor: '#03fc98',
    paddingVertical: 20,
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
    marginHorizontal: 20,
    borderRadius: 20,
    elevation: 3,
  },
  textinput: {
    borderWidth: 1,
    borderColor: '#03fc98',
    marginHorizontal: 20,
    paddingHorizontal: 10,
    borderRadius: 3,
    marginTop: 10,
    color: 'black',
  },
  switch: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  image: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  imagecontainer: {
    backgroundColor: '#03fc98',
    justifyContent: 'center',
    alignItems: 'center',
    elevation: 5,
    paddingVertical: 20,
  },
  container: {
    flex: 1,
  },
  flatlistitem: {
    marginBottom: 20,
    backgroundColor: '#03fc98',
    marginHorizontal: 20,
    borderRadius: 5,
    paddingVertical: 10,
    paddingHorizontal: 20,
  }
});
export default App;

```



s. Alert Component

- Sebuah messege yang muncul ketika ter-trigger sesuatu
- Tambahkan komponen **Alert**
- Kita set **alert** ketika gambar diklik akan muncul pop-up
- Silakan ubah kode **onPress** di bagian gambar/**TouchableOpacity**

```

import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
  TextInput,
  ScrollView,
  StyleSheet,
  FlatList,
  Alert,
} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
      username: '',
      dataMahasiswa: [
        {
          namaMhs: 'Sarah',
          npmMhs: 13650027,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650097,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650077,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650197,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650277,
        },
      ],
    };
  }
  render() {
    return (
      <View style={styles.container}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View style={styles.imagecontainer}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            {this.state.header}
          </Text>
        </View>
        <TouchableOpacity
          style={styles.image}
          onPress={() =>
            Alert.alert('Information', 'Anda akan menghapus gambar ini?', [
              {
                text: 'Cancel',
                onPress: () => console.log('cancel ditekan'),
                style: 'cancel',
              },
              {
                text: 'Ok',
                onPress: () => console.log('ok ditekan'),
              },
            ])
          }
        >
          <Image
            source={require('../src/images/image1.jpg')}
            style={{width: 300, height: 300}}
          />
        </TouchableOpacity>
      <FlatList
        style={{flex: 1, paddingTop: 20}}
        data={this.state.dataMahasiswa}
        renderItem={({item, index}) => (

```

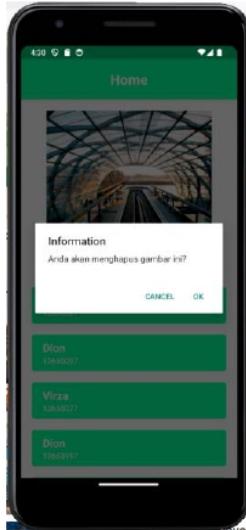
```

        <View style={styles.flatlistitem}>
          <Text style={{color: 'white', fontSize: 20, fontWeight: 'bold'}}>
            {item.namaMhs}
          </Text>
          <Text style={{color: 'white'}}>{item.npmMhs}</Text>
        </View>
      )
      keyExtractor={(item => item.npmMhs)}
    />
  </View>
);
}
}

const styles = StyleSheet.create({
  button: {
    backgroundColor: '#03fc98',
    paddingVertical: 20,
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
    marginHorizontal: 20,
    borderRadius: 20,
    elevation: 3,
  },
  textinput: {
    borderWidth: 1,
    borderColor: '#03fc98',
    marginHorizontal: 20,
    paddingHorizontal: 10,
    borderRadius: 3,
    marginTop: 10,
    color: 'black',
  },
  switch: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  image: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  imagecontainer: {
    backgroundColor: '#03fc98',
    justifyContent: 'center',
    alignItems: 'center',
    elevation: 5,
    paddingVertical: 20,
  },
  container: {
    flex: 1,
  },
  flatlistitem: {
    marginBottom: 20,
    backgroundColor: '#03fc98',
    marginHorizontal: 20,
    borderRadius: 5,
    paddingVertical: 10,
    paddingHorizontal: 20,
  },
});
export default App;

```

- Setelah diklik Cancel atau Ok, pesan muncul di log cmd



t. Toast Component

- Toast merupakan pesan singkat yang muncul setelah melakukan sesuatu
- Import ToastAndroid
- Kita ubah komponen View dalam FlatList menjadi TouchableOpacity > tambahkan kode **Toast**

```
import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
  TextInput,
  ScrollView,
  StyleSheet,
  FlatList,
  Alert,
  ToastAndroid,
} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
      username: '',
      dataMahasiswa: [
        {
          namaMhs: 'Sarah',
          npmMhs: 13650027,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650097,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650077,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650197,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650277,
        },
      ],
    };
  }
  render() {
    return (
      <View style={styles.container}>
```

```

<StatusBar barStyle="light-content" backgroundColor="#09bd75" />
<View style={styles.imagecontainer}>
  <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
    {this.state.header}
  </Text>
</View>
<TouchableOpacity
  style={styles.image}
  onPress={() =>
    Alert.alert('Information', 'Anda akan menghapus gambar ini?', [
      {
        text: 'Cancel',
        onPress: () => console.log('cancel ditekan'),
        style: 'cancel',
      },
      {
        text: 'Ok',
        onPress: () => console.log('ok ditekan'),
      },
    ])
  }>
  <Image
    source={require('./src/images/image1.jpg')}
    style={{width: 300, height: 300}}
  />
</TouchableOpacity>
<FlatList
  style={{flex: 1, paddingTop: 20}}
  data={this.state.dataMahasiswa}
  renderItem={({item, index}) => (
    <TouchableOpacity
      style={styles.flatlistitem}
      onPress={() =>
        ToastAndroid.show(item.namaMhs + ' diklik', ToastAndroid.SHORT)
      }>
      <Text style={{color: 'white', fontSize: 20, fontWeight: 'bold'}}>
        {item.namaMhs}
      </Text>
      <Text style={{color: 'white'}}>{item.npmMhs}</Text>
    </TouchableOpacity>
  )}
  keyExtractor={(item => item.npmMhs)}
/>
</View>
);
}
}

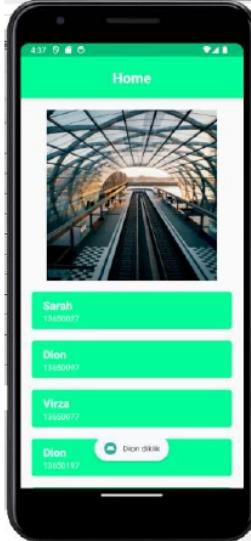
const styles = StyleSheet.create({
  button: {
    backgroundColor: '#03fc98',
    paddingVertical: 20,
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
    marginHorizontal: 20,
    borderRadius: 20,
    elevation: 3,
  },
  textinput: {
    borderWidth: 1,
    borderColor: '#03fc98',
    marginHorizontal: 20,
    paddingHorizontal: 10,
    borderRadius: 3,
    marginTop: 10,
    color: 'black',
  },
  switch: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  image: {
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
  },
  imagecontainer: {
    backgroundColor: '#03fc98',
    justifyContent: 'center',
    alignItems: 'center',
    elevation: 5,
    paddingVertical: 20,
  },
  container: {

```

```

        flex: 1,
      },
      flatlistitem: {
        marginBottom: 20,
        backgroundColor: '#03fc98',
        marginHorizontal: 20,
        borderRadius: 5,
        paddingVertical: 10,
        paddingHorizontal: 20,
      },
    });
  export default App;

```



u. Linking Component

- Membuka atau menghubungkan ke suatu aplikasi atau website
- Import komponen **Linking**
- Tambahkan **TouchableOpacity** baru, misal isi tulisan **Klik Google** dan akan mengarah ke **Google.com**

```

import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
  TextInput,
  ScrollView,
  StyleSheet,
  FlatList,
  Alert,
  ToastAndroid,
  Linking,
} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
      username: '',
      dataMahasiswa: [
        {
          namaMhs: 'Sarah',
          npmMhs: 13650027,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650097,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650077,
        },
      ],
    };
  }
}

```

```

        {
          namaMhs: 'Dion',
          npmMhs: 13650197,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650277,
        },
      ],
    );
}
render() {
  return (
    <View style={styles.container}>
      <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
      <View style={styles.imagecontainer}>
        <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
          {this.state.header}
        </Text>
      </View>
      <TouchableOpacity
        style={styles.image}
        onPress={() =>
          Alert.alert('Information', 'Anda akan menghapus gambar ini?', [
            {
              text: 'Cancel',
              onPress: () => console.log('cancel ditekan'),
              style: 'cancel',
            },
            {
              text: 'Ok',
              onPress: () => console.log('ok ditekan'),
            },
          ])
        }
      >
        <Image
          source={require('./src/images/image1.jpg')}
          style={{width: 300, height: 300}}
        />
      </TouchableOpacity>
      <TouchableOpacity
        style={styles.button}
        onPress={() => Linking.openURL('https://google.com/')}>
        <Text style={{color: 'white'}}>Klik Google</Text>
      </TouchableOpacity>
      <FlatList
        style={{flex: 1, paddingTop: 20}}
        data={this.state.dataMahasiswa}
        renderItem={({item, index}) => (
          <TouchableOpacity
            style={styles.flatlistitem}
            onPress={() =>
              ToastAndroid.show(item.namaMhs + ' diklik', ToastAndroid.SHORT)
            }
          >
            <Text style={{color: 'white', fontSize: 20, fontWeight: 'bold'}}>
              {item.namaMhs}
            </Text>
            <Text style={{color: 'white'}}>{item.npmMhs}</Text>
          </TouchableOpacity>
        )}
        keyExtractor={(item) => item.npmMhs}
      />
    </View>
  );
}
}

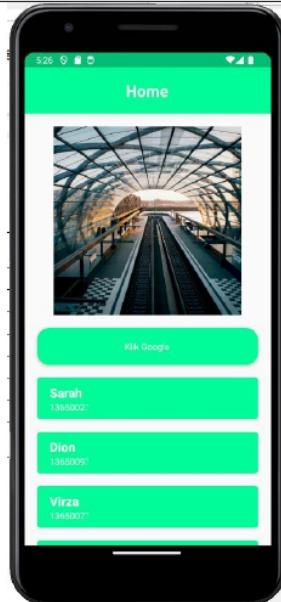
const styles = StyleSheet.create({
  button: {
    backgroundColor: '#03fc98',
    paddingVertical: 20,
    justifyContent: 'center',
    alignItems: 'center',
    marginTop: 20,
    marginHorizontal: 20,
    borderRadius: 20,
    elevation: 3,
  },
  textinput: {
    borderWidth: 1,
    borderColor: '#03fc98',
    marginHorizontal: 20,
    paddingHorizontal: 10,
    borderRadius: 3,
    marginTop: 10,
    color: 'black',
  },
})

```

```

},
switch: {
  justifyContent: 'center',
  alignItems: 'center',
  marginTop: 20,
},
image: {
  justifyContent: 'center',
  alignItems: 'center',
  marginTop: 20,
},
imagecontainer: {
  backgroundColor: '#03fc98',
  justifyContent: 'center',
  alignItems: 'center',
  elevation: 5,
  paddingVertical: 20,
},
container: {
  flex: 1,
},
flatlistitem: {
  marginBottom: 20,
  backgroundColor: '#03fc98',
  marginHorizontal: 20,
  borderRadius: 5,
  paddingVertical: 10,
  paddingHorizontal: 20,
},
);
export default App;

```



v. Image Background Component

- Menjadikan Gambar dapat diisi sesuatu (misal: tulisan)
- Import ImageBackground
- Kita ganti semula komponen **Image** biasa menjadi **ImageBackground**

```

import React, {Component} from 'react';
import {
  View,
  Text,
  StatusBar,
  Image,
  TouchableOpacity,
  Switch,
  TextInput,
  ScrollView,
  StyleSheet,
  FlatList,
  Alert,
  ToastAndroid,
  Linking,
  ImageBackground,
}

```

```

} from 'react-native';

class App extends Component {
  constructor(props) {
    super(props);
    this.state = {
      header: 'Home',
      value: true,
      username: '',
      dataMahasiswa: [
        {
          namaMhs: 'Sarah',
          npmMhs: 13650027,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650097,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650077,
        },
        {
          namaMhs: 'Dion',
          npmMhs: 13650197,
        },
        {
          namaMhs: 'Virza',
          npmMhs: 13650277,
        },
      ],
    };
  }
  render() {
    return (
      <View style={styles.container}>
        <StatusBar barStyle="light-content" backgroundColor="#09bd75" />
        <View style={styles.imagecontainer}>
          <Text style={{color: '#FFFFFF', fontWeight: 'bold', fontSize: 25}}>
            {this.state.header}
          </Text>
        </View>
        <TouchableOpacity
          style={styles.image}
          onPress={() =>
            Alert.alert('Information', 'Anda akan menghapus gambar ini?', [
              {
                text: 'Cancel',
                onPress: () => console.log('cancel ditekan'),
                style: 'cancel',
              },
              {
                text: 'Ok',
                onPress: () => console.log('ok ditekan'),
              },
            ])
          }
        <ImageBackground
          source={require('../src/images/image1.jpg')}
          style={{
            width: 300,
            height: 300,
            justifyContent: 'flex-end',
            alignItems: 'center',
            padding: 20,
          }}>
          <Text style={{color: 'white', fontSize: 15}}>React-Native</Text>
        </ImageBackground>
      </TouchableOpacity>
      <TouchableOpacity
        style={styles.button}
        onPress={() => Linking.openURL('https://google.com/')}>
        <Text style={{color: 'white'}}>Klik Google</Text>
      </TouchableOpacity>

      <FlatList
        style={{flex: 1, paddingTop: 20}}
        data={this.state.dataMahasiswa}
        renderItem={({item, index}) =>
          <TouchableOpacity
            style={styles.flatlistitem}
            onPress={() =>
              ToastAndroid.show(item.namaMhs + ' diklik', ToastAndroid.SHORT)
            }>
            <Text style={{color: 'white', fontSize: 20, fontWeight: 'bold'}}>
              {item.namaMhs}
            </Text>
        }
      }
    );
  }
}

```

```
        <Text style={{color: 'white'}}>{item.npmMhs}</Text>
        </TouchableOpacity>
    )
    keyExtractor={item => item.npmMhs}
  />
</View>
);
}
}

const styles = StyleSheet.create({
button: {
  backgroundColor: '#03fc98',
  paddingVertical: 20,
  justifyContent: 'center',
  alignItems: 'center',
  marginTop: 20,
  marginHorizontal: 20,
  borderRadius: 20,
  elevation: 3,
},
textInput: {
  borderWidth: 1,
  borderColor: '#03fc98',
  marginHorizontal: 20,
  paddingHorizontal: 10,
  borderRadius: 3,
  marginTop: 10,
  color: 'black',
},
switch: {
  justifyContent: 'center',
  alignItems: 'center',
  marginTop: 20,
},
image: {
  justifyContent: 'center',
  alignItems: 'center',
  marginTop: 20,
},
imagecontainer: {
  backgroundColor: '#03fc98',
  justifyContent: 'center',
  alignItems: 'center',
  elevation: 5,
  paddingVertical: 20,
},
container: {
  flex: 1,
},
flatlistitem: {
  marginBottom: 20,
  backgroundColor: '#03fc98',
  marginHorizontal: 20,
  borderRadius: 5,
  paddingVertical: 10,
  paddingHorizontal: 20,
},
});
export default App;
```

