

# 1. BASIC COMPONENT

## IMPLEMENTATION :

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

const ItemList = ({ items }) => {
  const renderItem = ({ item }) => (
    <View style={{ padding: 10, borderBottomWidth: 1,
borderColor: '#ccc' }}>
      <Text>{item}</Text>
    </View>
  );

  return (
    <FlatList
      data={items}
      keyExtractor={({item, index}) => index.toString()}
      renderItem={renderItem}
    />
  );
};

export default ItemList;

// Usage Example
// <ItemList items={['Item 1', 'Item 2', 'Item 3']} />
```

# 2. STATE MANAGEMENT

## IMPLEMENTATION:

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

const CounterApp = () => {
  const [count, setCount] = useState(0);

  return (
    <View style={{ alignItems: 'center', marginTop: 50 }}>
      <Text style={{ fontSize: 32 }}>{count}</Text>
      <Button title="Increment" onPress={() => setCount(count +
1)} />
      <Button title="Decrement" onPress={() => setCount(count -
1)} />
    </View>
  );
};

export default CounterApp;
```

## 3. NAVIGATION

### IMPLEMENTATION:

```
// Navigation setup
import React from 'react';
import { NavigationContainer } from '@react-navigation/native';
import { createStackNavigator } from '@react-navigation/stack';
import { View, Text, Button, FlatList } from 'react-native';
```

```
const Stack = createStackNavigator();

const ItemListScreen = ({ navigation }) => {
  const items = ['Item 1', 'Item 2', 'Item 3'];

  return (
    <FlatList
      data={items}
      keyExtractor={(item, index) => index.toString()}
      renderItem={({ item }) => (
        <Button
          title={item}
          onPress={() => navigation.navigate('Detail', { item })}
        />
      )}
    />
  );
};

const ItemDetailScreen = ({ route }) => {
  const { item } = route.params;
  return (
    <View style={{ padding: 20 }}>
      <Text style={{ fontSize: 24 }}>{item}</Text>
    </View>
  );
};

export default function App() {
  return (
    <NavigationContainer>
      <Stack.Navigator initialRouteName="List">
```

```

        <Stack.Screen name="List" component={ItemListScreen} />
        <Stack.Screen name="Detail"
component={ItemDetailScreen} />
    </Stack.Navigator>
  </NavigationContainer>
);
}

```

## 4. API CALL

### IMPLEMENTATION:

```

import React, { useState, useEffect } from 'react';
import { View, Text, FlatList, ActivityIndicator, Button } from
'react-native';

```

```

const GitHubUsers = () => {
  const [users, setUsers] = useState([]);
  const [loading, setLoading] = useState(true);
  const [error, setError] = useState(null);

```

```

  useEffect(() => {
    fetch('https://api.github.com/users')
      .then(response => response.json())
      .then(data => {
        setUsers(data);
        setLoading(false);
      })
      .catch(error => {
        setError(error);
        setLoading(false);
      });
  });

```

```

    }, []);

    if (loading) {
      return <ActivityIndicator size="large" />;
    }

    if (error) {
      return (
        <View>
          <Text>Error fetching data: {error.message}</Text>
          <Button title="Retry" onPress={() => fetchUsers()} />
        </View>
      );
    }

    return (
      <FlatList
        data={users}
        keyExtractor={(item) => item.id.toString()}
        renderItem={({ item }) => (
          <View style={{ padding: 10 }}>
            <Text>{item.login}</Text>
          </View>
        )}
      />
    );
  };
};

export default GitHubUsers;

```

## 5. STYLING CHALLENGE:

## IMPLEMENTATION :

```
import React from 'react';
import { View, TextInput, Button, StyleSheet } from 'react-native';

const LoginScreen = () => {
  return (
    <View style={styles.container}>
      <TextInput
        placeholder="Username"
        style={styles.input}
      />
      <TextInput
        placeholder="Password"
        secureTextEntry
        style={styles.input}
      />
      <Button title="Login" onPress={() => alert('Login pressed')}
      />
    </View>
  );
};

const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    padding: 20,
    backgroundColor: '#f0f0f0',
  },
  input: {
    height: 50,
```

```
borderColor: '#ccc',  
borderWidth: 1,  
borderRadius: 5,  
marginBottom: 15,  
paddingHorizontal: 10,  
},  
));  
  
export default LoginScreen;
```

## 6. CUSTOM HOOK :

### IMPLEMENTATION:

```
import { useState, useEffect } from 'react';  
  
const useFetch = (url) => {  
  const [data, setData] = useState(null);  
  const [loading, setLoading] = useState(true);  
  const [error, setError] = useState(null);  
  
  useEffect(() => {  
    const fetchData = async () => {  
      try {  
        const response = await fetch(url);  
        const result = await response.json();  
        setData(result);  
      } catch (err) {  
        setError(err);  
      } finally {  

```

```

        setLoading(false);
    }
};

    fetchData();
    }, [url]));

    return { data, loading, error };
};

export default useFetch;

// Usage Example
import React from 'react';
import { FlatList, Text, View, ActivityIndicator } from 'react-native';
import useFetch from './useFetch';

const UsersList = () => {
    const { data, loading, error } =
    useFetch('https://api.github.com/users');

    if (loading) return <ActivityIndicator size="large" />;
    if (error) return <Text>Error: {error.message}</Text>;

    return (
        <FlatList
            data={data}
            keyExtractor={(item) => item.id.toString()}
            renderItem={({ item }) => (
                <View style={{ padding: 10 }}>
                    <Text>{item.login}</Text>
                </View>
            )}
        />
    );
};

```



```
    }}  
  />  
);  
};
```

```
export default UsersList;
```