

BÁO CÁO THỰC HÀNH LAB2

Trần Đình Khánh - 21520984

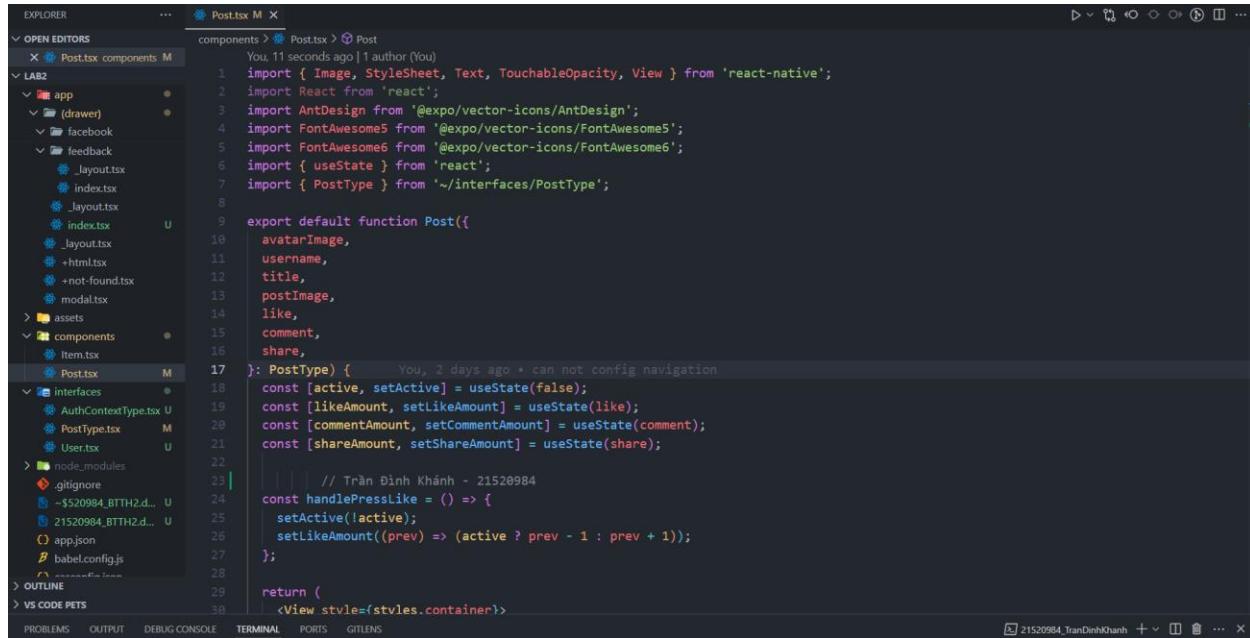
Cấu trúc dự án:



Hình 1: Cấu trúc dự án

Bài 1: Social Media Feed

+ Component: Post



The screenshot shows the VS Code interface with the file `Post.tsx` open in the editor. The code implements a `Post` component that displays user information and interaction counts. It uses React and AntDesign libraries. The code includes state management for active status, like amount, comment amount, and share amount, and a handlePressLike function to update these values.

```
import { Image, StyleSheet, Text, TouchableOpacity, View } from 'react-native';
import React from 'react';
import AntDesign from '@expo/vector-icons/AntDesign';
import FontAwesome5 from '@expo/vector-icons/FontAwesome5';
import FontAwesome6 from '@expo/vector-icons/FontAwesome6';
import { useState } from 'react';
import { PostType } from '~/interfaces/PostType';

export default function Post({
  You,
  11 seconds ago | 1 author (You)
  You, 2 days ago * can not config navigation
  const [active, setActive] = useState(false);
  const [likeAmount, setLikeAmount] = useState(like);
  const [commentAmount, setCommentAmount] = useState(comment);
  const [shareAmount, setShareAmount] = useState(share);

  // Trần Đình Khánh - 21520984
  const handlePressLike = () => {
    setActive(!active);
    setLikeAmount((prev) => (active ? prev - 1 : prev + 1));
  };

  return (
    <View style={styles.container}>
```

Hình 2: Component Post



The screenshot shows the VS Code interface with the file `Post.tsx` open in the editor. The code is identical to the one in Figure 2, implementing the `Post` component with its state management and interaction logic.

```
export default function Post({
  You,
  11 seconds ago | 1 author (You)
  You, 2 days ago * can not config navigation
  const handlePressLike = () => {
    setActive(!active);
    setLikeAmount((prev) => (active ? prev - 1 : prev + 1));
  };

  return (
    <View style={styles.container}>
      <TouchableOpacity style={styles.header}>
        <Image style={styles.avatar} source={{ uri: avatarImage }} />
        <Text style={styles.username}>{username}</Text>
      </TouchableOpacity>
      <Text style={styles.content}>{title}</Text>

      <View>
        <Image style={styles.picture} source={{ uri: postImage }} />
      </View>

      <View style={styles.reaction}>
        <Text style={styles.reactionText}>{likeAmount} Likes</Text>
        <Text style={styles.reactionText}>{commentAmount} Comments</Text>
        <Text style={styles.reactionText}>{shareAmount} Shares</Text>
      </View>

      <View style={styles.line}></View>

      <View style={styles.buttonArea}>
        <TouchableOpacity style={styles.button} onPress={handlePressLike}>
          <AntDesign>
```

Hình 3: Component Post

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure with files like `Post.tsx`, `Item.tsx`, and `AuthContextType.tsx`.
- OPEN EDITORS**: Shows the current file `Post.tsx` open.
- LAB2**: The active workspace.
- Post.tsx**: The currently selected file, showing its code:

```
components > Post.tsx > Post
  export default function Post({
    ...
    <View style={styles.buttonArea}>
      <TouchableOpacity style={styles.button} onPress={handlePressLike}>
        <AntDesign
          name={active ? 'like1' : 'like2'}
          size={24}
          color={active ? 'blue' : 'black'}
        />
        <Text style={[styles.textButton, { color: active ? 'blue' : 'black' }]}>Likes</Text>
      </TouchableOpacity>

      <TouchableOpacity style={styles.button} onPress={() => setCommentAmount(commentAmount + 1)}>
        <FontAwesome6 name="comment" size={24} color="black" />
        <Text style={styles.textButton}>Comments</Text>
      </TouchableOpacity>

      <TouchableOpacity style={styles.button} onPress={() => setShareAmount(shareAmount + 1)}>
        <FontAwesome6 name="share-square" size={24} color="black" />
        <Text style={styles.textButton}>Shares</Text>
      </TouchableOpacity>
    </View>
  );
}

// Trần Đình Khanh - 21520984
You, 1 second ago + Uncommitted changes
```

- OUTLINE**: Shows the outline of the file.
- VS CODE PETS**: Shows the status bar with the path `PS D:\CODE\ReactNative\Lab\lab2>` and a GitHub icon.
- TERMINAL**: Shows the terminal tab.
- OUTPUT**: Shows the output tab.
- DEBUG CONSOLE**: Shows the debug console tab.
- PORTS**: Shows the ports tab.
- GITLENS**: Shows the gitlens tab.

Hình 4: Component Post

```
const styles = StyleSheet.create({
  container: {
    padding: 20,
    minHeight: 200,
    // backgroundColor: 'red',
    borderRadius: 10,
    gap: 10,
  },
  header: {
    flexDirection: 'row',
    alignItems: 'center',
    gap: 18,
  },
  avatarFrame: {
    // objectFit: 'cover',
  },
  avatar: {
    width: 50,
    height: 50,
    borderRadius: 9999,
  },
  username: {
    fontSize: 22,
    fontWeight: 'bold',
  },
  content: {
    fontSize: 18,
  },
  picture: {
    width: '100%',
    aspectRatio: 16 / 9,
    objectFit: 'cover',
    borderRadius: 10,
  },
  reaction: {
    flexDirection: 'row',
    justifyContent: 'space-between',
  },
});
```

Hình 5: Component Post

```

const styles = StyleSheet.create({
  picture: {
    },
    reaction: {
      flexDirection: 'row',
      justifyContent: 'space-between',
      paddingVertical: 6,
      // backgroundColor: "blue",
    },
    reactionText: {
      color: 'rgba(0,0,0,0.6)',
      // color: "red",
    },
    line: {
      borderBottomWidth: 1,
      borderBottomColor: 'rgba(0,0,0,0.2)'
    },
    buttonArea: {
      flexDirection: 'row',
      justifyContent: 'space-between',
      paddingHorizontal: 4,
      alignItems: 'center'
    },
    button: {
      flexDirection: 'row',
      alignItems: 'center',
      gap: 8,
    },
    textButton: {
      fontSize: 15,
      fontWeight: 'bold',
    }
});

```

Hình 6: Component Post

+ page: Facebook

```

import { Link, Slot } from 'expo-router';

const DrawerLayout = () => <Slot />

export default DrawerLayout;

```

Hình 7: File layout trong folder facebook

```
EXPLORER    ...    Post.tsx M    index.tsx M X
OPEN EDITORS
  Post.tsx components M
  index.tsx app(dra.. M
LAB2
  app
  (drawer)
    authen
      login.tsx
      signup.tsx
  facebook
    _layout.tsx
    index.tsx M
  feedback
    _layout.tsx
    index.tsx
    _layout.tsx
    index.tsx U
    _layout.tsx
    +html.tsx
    +not-found.tsx
    modal.tsx
  assets
  components
    Item.tsx
    Post.tsx M
  interfaces
    AuthContextType.tsx U
    PostType.tsx M
    User.tsx U
  node_modules
OUTLINE
VS CODE PETS
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS
PS D:\CODE\ReactNative\Lab\lab2> [ ]
```

```
Post.tsx M    index.tsx M X
app > (drawer) > facebook > index.tsx > index
You, 1 second ago | 1 author (You)
1 import { StyleSheet, Text, View, SafeAreaView, ScrollView } from 'react-native';
2 import React, { useState } from 'react';
3 import { useEffect } from 'react';
4 import Post from '../../../../../components/Post';
5 import { data1 } from '../../../../../data';
6 import { PostType } from '~/interfaces/PostType';
7
8 export default function index() {
9
10   // Fake fetch data
11   const [data, setData] = useState([]);
12
13   useEffect(() => {
14     setData(data1);
15   }, []);
16
17   // Trân Đinh Khanh - 21520984    You, 1 second ago * Uncommitted changes
18   return (
19     <SafeAreaView style={{ flex: 1 }}>
20       <ScrollView style={styles.container}>
21         <View style={styles.wrapper}>
22           <View style={styles.header}>
23             <Text style={styles.headerText}>Social Media Feed</Text>
24           </View>
25
26           {data.map((post, index) => (
27             <Post
28               key={index}
29               avatarImage={post.avatarImage}
30               username={post.username}
31             </Post>
32           ))}
33         </View>
34       </ScrollView>
35     </SafeAreaView>
36   );
37 }
38
39 </View>
40 </SafeAreaView>
41 );
42 }
43
44 const styles = StyleSheet.create({
45   container: {
46     flex: 1,
47     backgroundColor: '#fff',
48   },
49   header: [ You, 2 days ago * can not config navigation
50     justifyContent: 'center',
51     alignItems: 'center',
52     paddingVertical: 20,
53     backgroundColor: '#3598db',
54   ],
55   headerText: {
```

Hình 8: page Facebook

```
EXPLORER    ...    Post.tsx M    index.tsx 1, M X
OPEN EDITORS
  Post.tsx components M
  index.tsx app(dra.. M
LAB2
  app
  (drawer)
    authen
      login.tsx
      signup.tsx
  facebook
    _layout.tsx
    index.tsx 1, M
  feedback
    _layout.tsx
    index.tsx
    _layout.tsx
    index.tsx U
    _layout.tsx
    +html.tsx
    +not-found.tsx
    modal.tsx
  assets
  components
    Item.tsx
    Post.tsx M
  interfaces
    AuthContextType.tsx U
    PostType.tsx M
    User.tsx U
  node_modules
OUTLINE
VS CODE PETS
PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL PORTS GITLENS
PS D:\CODE\ReactNative\Lab\lab2> [ ]
```

```
Post.tsx M    index.tsx 1, M X
app > (drawer) > facebook > index.tsx > styles > header
You, 2 days ago * can not config navigation
1 export default function index() {
2   const [data, setData] = useState([]);
3
4   useEffect(() => {
5     setData(data1);
6   }, []);
7
8   return (
9     <SafeAreaView style={{ flex: 1 }}>
10       <ScrollView style={styles.container}>
11         <View style={styles.wrapper}>
12           <View style={styles.header}>
13             <Text style={styles.headerText}>Social Media Feed</Text>
14           </View>
15
16           {data.map((post, index) => (
17             <Post
18               key={index}
19               avatarImage={post.avatarImage}
20               username={post.username}
21               title={post.title}
22               postImage={post.postImage}
23               like={post.like}
24               comment={post.comment}
25               share={post.share}
26             </Post>
27           ))}
28         </View>
29       </ScrollView>
30     </SafeAreaView>
31   );
32 }
33
34 </View>
35 </SafeAreaView>
36   );
37 }
38
39 const styles = StyleSheet.create({
40   container: {
41     flex: 1,
42     backgroundColor: '#fff',
43   },
44   header: [ You, 2 days ago * can not config navigation
45     justifyContent: 'center',
46     alignItems: 'center',
47     padding: 20,
48     backgroundColor: '#3598db',
49   ],
50   headerText: {
```

Hình 9: page Facebook

```

Post.tsx M index.tsx 1, M
app > (drawer) > facebook > index.tsx > styles > header
8   export default function index() {
9     ...
10    ...
11  }
12}
13
14const styles = StyleSheet.create({
15  container: {
16    flex: 1,
17    backgroundColor: '#fff',
18  },
19  header: {
20    ...
21    justifyContent: 'center',
22    alignItems: 'center',
23    paddingVertical: 20,
24    backgroundColor: '#3598db',
25  },
26  headerText: {
27    ...
28    color: 'white',
29    fontSize: 30,
30    fontWeight: '500',
31  },
32});
33
34
35
36
37
38
39
40
41
42}
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
61

```

Hình 10: page Facebook

+ File layout.tsx

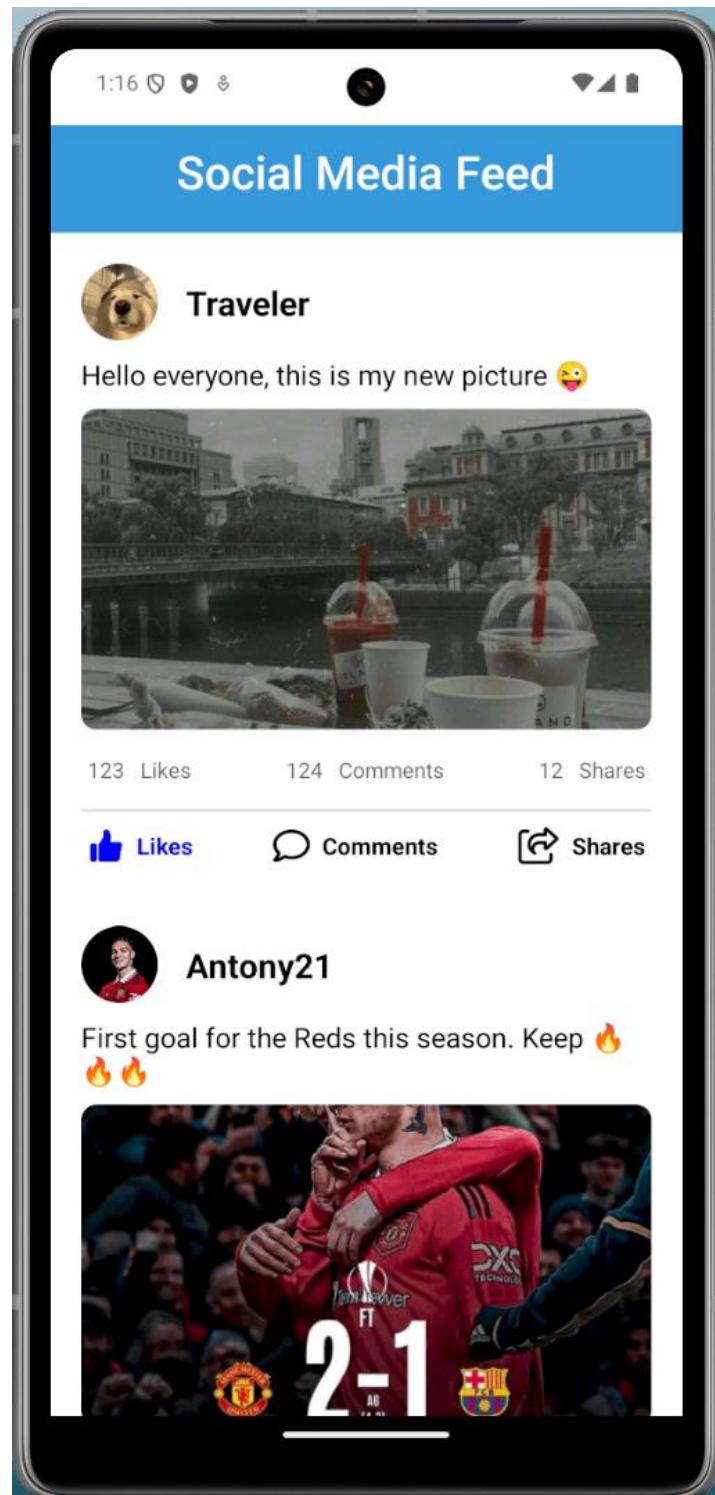
```

Post.tsx M index.tsx 1, M _layout.tsx M +not-found.tsx
app > _layout.tsx ...
You, 2 days ago | 1 author (You)
1 // import '~/global.css'
2 import { Stack } from 'expo-router';
3 import { GestureHandlerRootView } from 'react-native-gesture-handler';
4
5 export const unstable_settings = {
6   initialRouteName: '(drawer)',
7 };
8
9
10
11
12
13
14
15
16
17
18

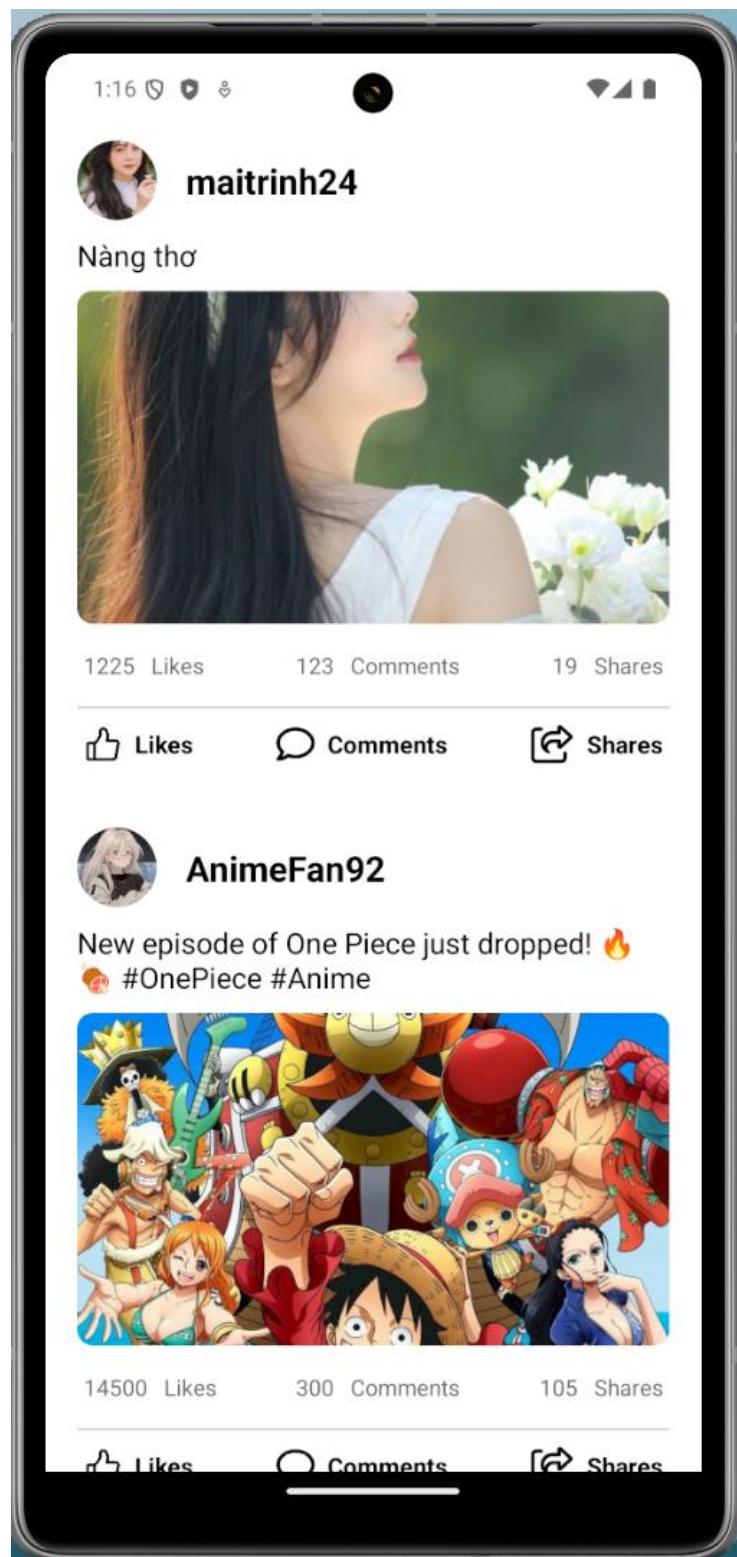
```

Hình 11: file layout của thư mục (drawer)

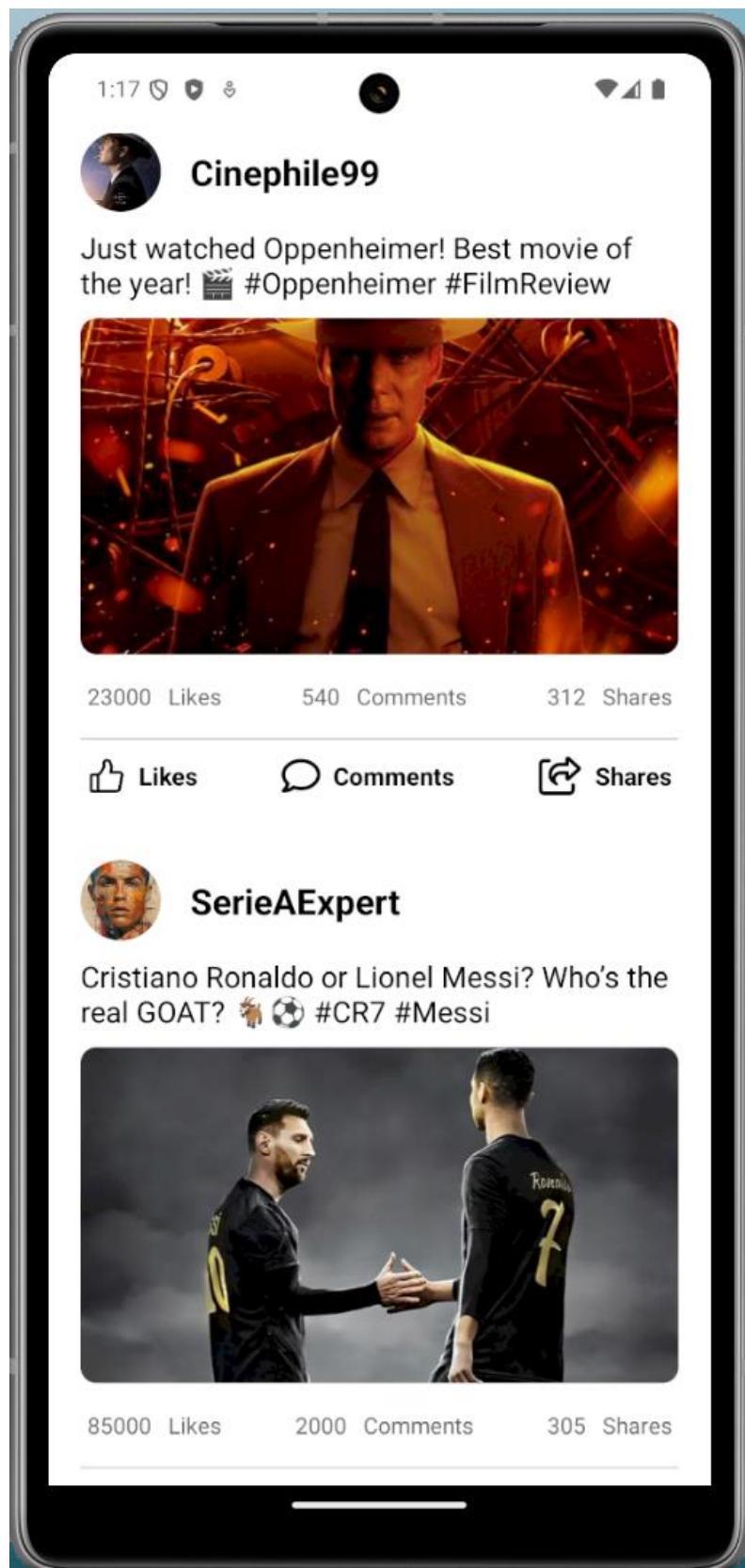
+ Kết quả thực hiện



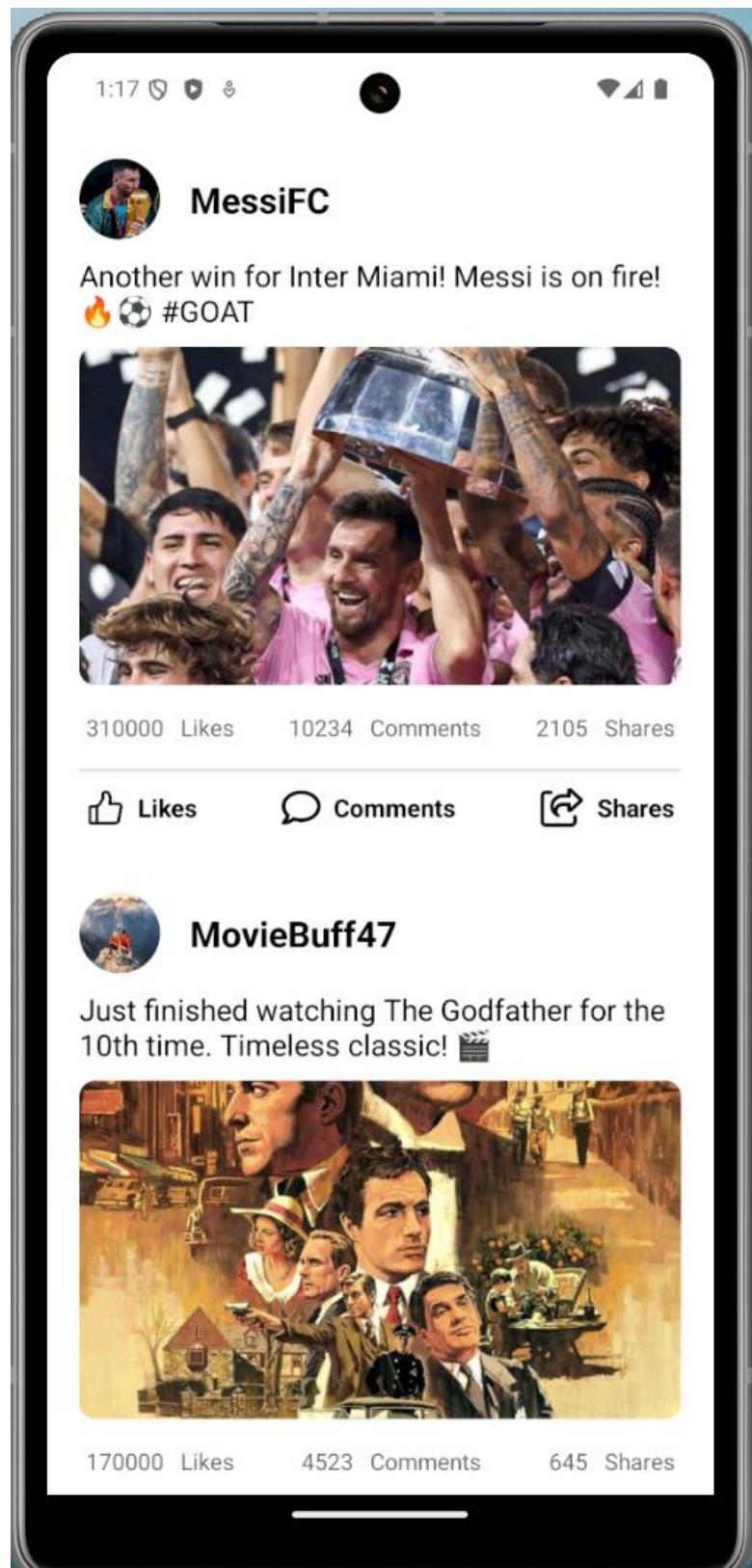
Hình 12: Kết quả thực hiện câu 1



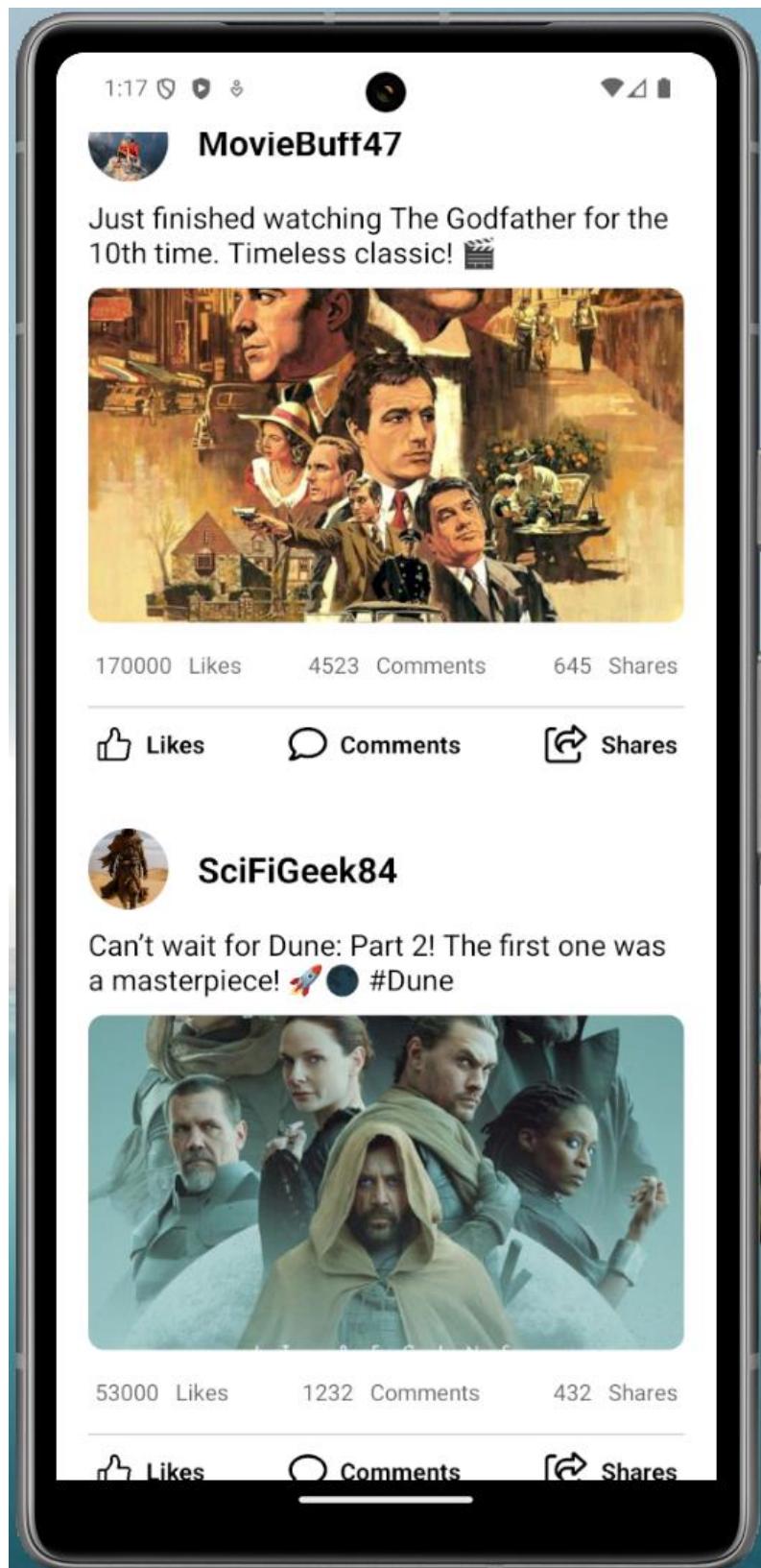
Hình 13: Kết quả thực hiện câu 1



Hình 14: Kết quả thực hiện câu 1



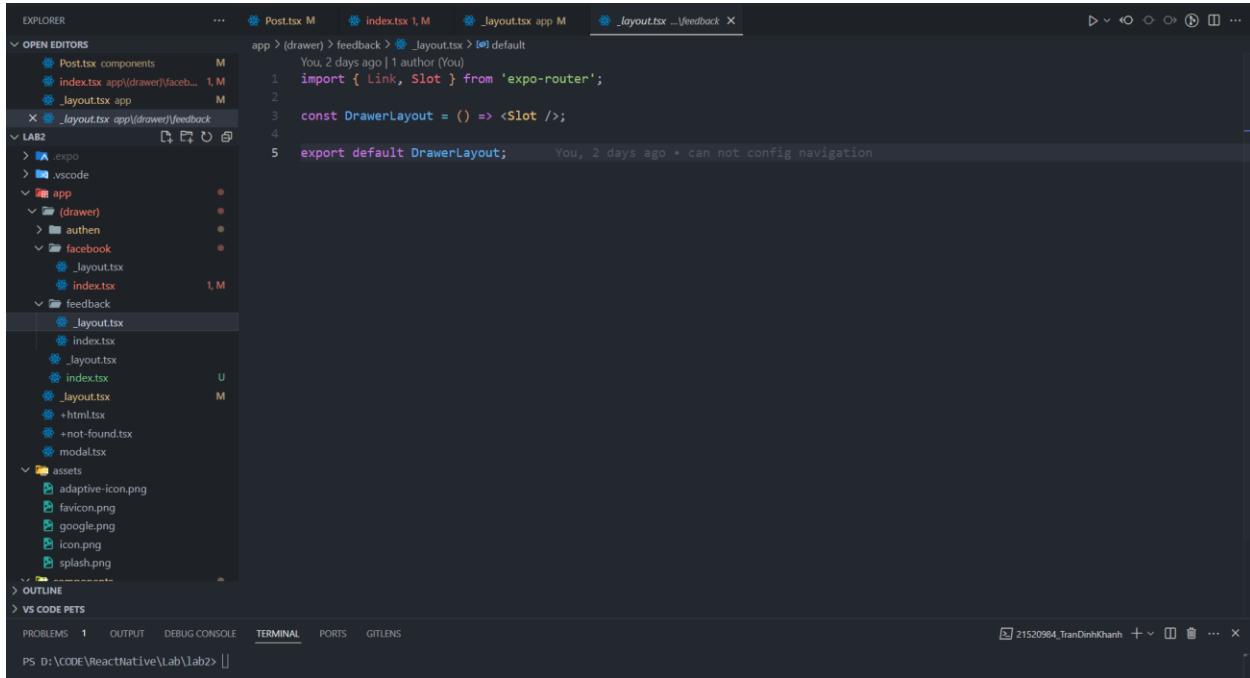
Hình 15: Kết quả thực hiện câu 1



Hình 16: Kết quả thực hiện câu 1

Bài 2: Settings and Feedback

+ File layout



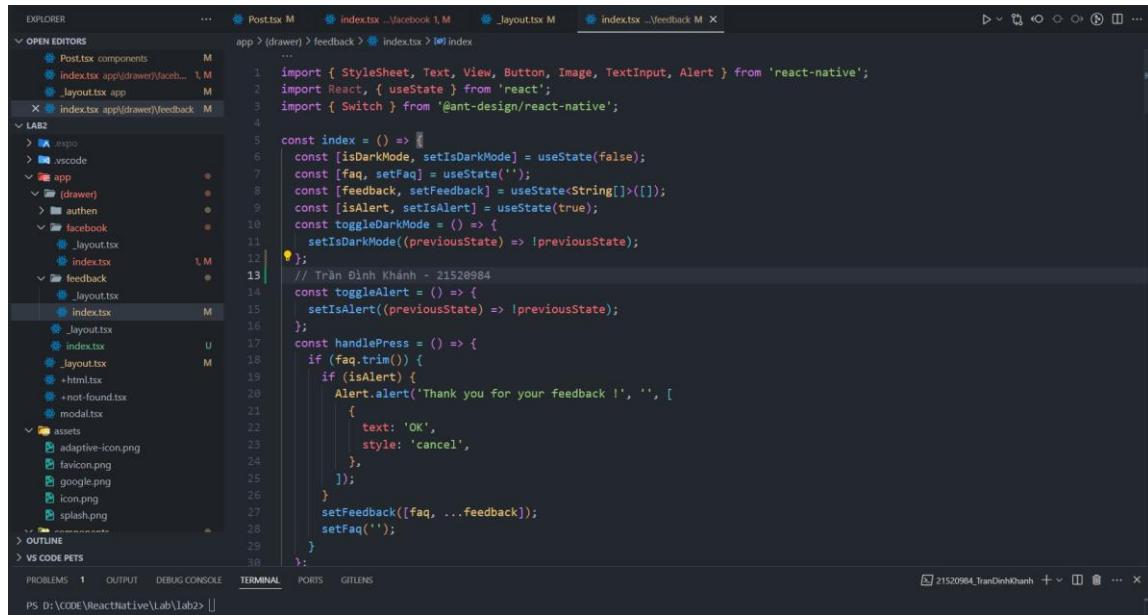
The screenshot shows the VS Code interface with the 'EXPLORER' tab selected. The left sidebar displays a tree view of files and folders. In the center, the code editor shows a file named '_layout.tsx'. The code content is as follows:

```
app > (drawer) > feedback > _layout.tsx > [edit] default
You, 2 days ago | 1 author (You)
1 import { Link, Slot } from 'expo-router';
2
3 const DrawerLayout = () => <Slot />;
4
5 export default DrawerLayout; You, 2 days ago * can not config navigation
```

The 'feedback' folder contains several files: '_layout.tsx', 'index.tsx', '_layout.tsx', 'index.tsx', '_layout.tsx', '+html.tsx', '+not-found.tsx', and 'modal.tsx'. It also includes an 'assets' folder with icons like adaptive-icon.png, favicon.png, google.png, icon.png, and splash.png.

Hình 17: file layout của folder feedback

+ Page feedback



The screenshot shows the VS Code interface with the 'CODE PAGES' tab selected. The left sidebar displays a tree view of files and folders. The code editor shows the 'index.tsx' file in the 'feedback' folder. The code content is as follows:

```
Post.tsx M index.tsx ..._facebook 1, M _layout.tsx M index.tsx ..._feedback M
...
app > (drawer) > feedback > index.tsx > [edit] index
1 import { StyleSheet, Text, View, Button, Image, TextInput, Alert } from 'react-native';
2 import React, { useState } from 'react';
3 import { Switch } from '@ant-design/react-native';
4
5 const index = () => {
6   const [isDarkMode, setIsDarkMode] = useState(false);
7   const [faq, setFaq] = useState('');
8   const [feedback, setFeedback] = useState<String[]>([]);
9   const [isAlert, setIsAlert] = useState(true);
10  const toggleDarkMode = () => {
11    setIsDarkMode((previousState) => !previousState);
12  };
13 // Trần Đình Khanh - 21520984
14  const toggleAlert = () => {
15    setIsAlert((previousState) => !previousState);
16  };
17  const handlePress = () => {
18    if (faq.trim()) {
19      if (isAlert) {
20        Alert.alert('Thank you for your feedback!', '', [
21          {
22            text: 'OK',
23            style: 'cancel',
24          },
25        ]);
26      }
27      setFeedback([faq, ...feedback]);
28      setFaq('');
29    }
30  };

```

The 'feedback' folder contains files: '_layout.tsx', 'index.tsx', '_layout.tsx', 'index.tsx', '_layout.tsx', '+html.tsx', '+not-found.tsx', and 'modal.tsx'. It also includes an 'assets' folder with icons like adaptive-icon.png, favicon.png, google.png, icon.png, and splash.png.

Hình 18: Page feedback

```
const index = () => {
  const handlePress = () => {
  };

  return (
    <View style={[styles.container, isDarkMode ? styles.darkBackground : styles.lightBackground]}>
      <View style={styles.wrapper}>
        {/* Information App */}

        <View style={styles.info}>
          <Image
            style={styles.image}
            source={{
              uri: 'https://i.pinimg.com/564x/01/de/1f/01de1f6348effbf9871b6a39146b89c6.jpg',
              uri: 'https://i.pinimg.com/564x/6a/75/85/6a7585ef5eafe25ab3a4793e743f38ab.jpg',
            }}
          />

          <View>
            <Text style={[styles.name, isDarkMode ? styles.darkText : styles.lightText]}>
              | React Native App
            </Text>
          </View>
        </View>

        {/* Switch Area */}

        <View>
          <Text style={[styles.textNormal, isDarkMode ? styles.darkText : styles.lightText]}>
            Dark mode
          </Text>
        </View>
      </View>
    </View>
  );
}
```

Hình 19: Page feedback

```
const index = () => {
  <View>
    <View style={styles.switchArea}>
      <Text style={[styles.textNormal, isDarkMode ? styles.darkText : styles.lightText]}>
        Dark mode
      </Text>
    <Switch
      defaultChecked={isDarkMode}
      onChange={toggleDarkMode}
      trackColor={{
        false: '#767577',
        true: '#81b0ff',
      }}
      thumbColor={isDarkMode ? '#000' : '#fff'}
    />
  </View>
  // Trần Đình Khánh - 21520984
  <View style={styles.switchArea}>
    <Text style={[styles.textNormal, isDarkMode ? styles.darkText : styles.lightText]}>
      Notification
    </Text>
  <Switch
    You, 2 days ago * can not config navigation
    defaultChecked={isAlert}
    onChange={toggleAlert}
    trackColor={{
      false: '#767577',
      true: '#81b0ff',
    }}
    thumbColor={isDarkMode ? '#000' : '#fff'}
  />

```

Hình 20: Page feedback

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure with files like Post.tsx, index.tsx, and layout.tsx.
- OPEN EDITORS**: Shows Post.tsx, index.tsx, layout.tsx, and index.tsx (Feedback).
- CODE**: Displays the code for the feedback component:

```
const index = () => {
  /* Feedback Area */
  <View style={styles.feedbackArea}>
    <View>
      <Text style={[styles.textExtraNormal, isDarkMode ? styles.darkText : styles.lightText]}>
        Feedback
      </Text>
      <TextInput
        multiline={true}
        value={faq}
        onChangeText={setFAQ}
        placeholder="Your feedback here...">
      </TextInput>
      <Text style={[isDarkMode ? styles.darkText : styles.lightText]}>
        Placeholder: {placeholderTextColor}
      </Text>
    </View>
  </View>
  // Trần Đình Khánh - 21520984 You, 1 second ago * Uncommitted changes
  <View>
    <Button title="SEND FEEDBACK" onPress={handlePress} />
  </View>
</View>
/* FAQ Area */
```

The code handles styling based on isDarkMode and includes a placeholder for feedback and a "SEND FEEDBACK" button.

Hinh 21: Page feedback

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure with files like Post.tsx, index.tsx, layout.tsx, and index.tsx (FAQ).
- OPEN EDITORS**: Shows Post.tsx, index.tsx (FAQ), layout.tsx, and index.tsx (Feedback).
- CODE**: Displays the code for the FAQ component:

```
const index = () => {
  /* FAQ Area */
  <View style={styles.faqArea}>
    <Text style={[styles.boldText, isDarkMode ? styles.darkText : styles.lightText]}>
      Frequently Asked Questions
    </Text>
    <View>
      {feedback.map((item, index) => (
        <Text style={[isDarkMode ? styles.darkText : styles.lightText, styles.textNormal]} key={index}>
          Q: {item}
        </Text>
      ))}
    </View>
  </View>
};

// Trần Đình Khánh - 21520984
```

The code maps through the feedback array to render a list of frequently asked questions (FAQs) with their corresponding answers.

Hinh 22: Page feedback

The screenshot shows the VS Code interface with the following details:

- Explorer (Ctrl+Shift+E):** Shows the file structure of a React Native project named "LAB2". The "feedback" folder contains "index.tsx" and "layout.tsx".
- Editor:** Displays the content of "index.tsx" from the "feedback" folder. The code defines a StyleSheet named "index" with styles for "darkText", "lightText", and "container". It also includes a "wrapper" section with justifyContent and alignItems, and an "image" section with width and height.
- Terminal:** Shows the command "PS D:\CODE\ReactNative\Lab\lab2> |" at the bottom.

Hinh 23: Page feedback

The screenshot shows the VS Code interface with the following details:

- Explorer (Ctrl+Shift+E):** Shows the file structure of a React Native project named "LAB2". The "feedback" folder contains "index.tsx" and "layout.tsx".
- Editor:** Displays the content of "index.tsx" from the "feedback" folder. The code defines a StyleSheet named "index" with styles for "name", "switch", "switchArea", "textNormal", "textExtraNormal", "boldText", and "feedbackArea".
- Terminal:** Shows the command "PS D:\CODE\ReactNative\Lab\lab2> |" at the bottom.

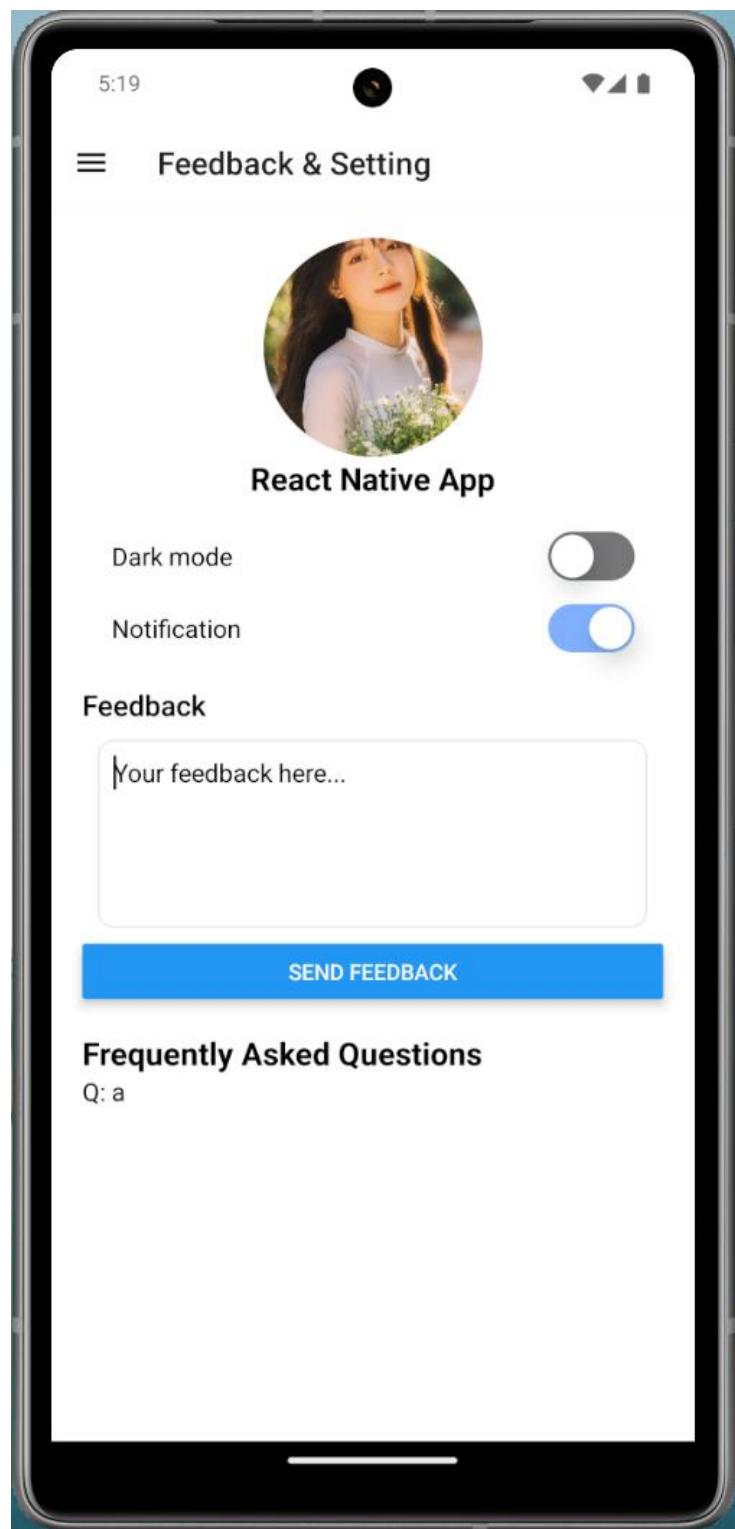
Hinh 24: Page feedback

```
const styles = StyleSheet.create({
  boldText: {
    // ...
  },
  feedbackArea: {
    width: '100%',
    marginTop: 15,
  },
  textInput: {
    height: 120,
    borderWidth: 1,
    borderRadius: 10,
    fontSize: 16,
    padding: 10,
    margin: 10,
    textAlignVertical: 'top',
  },
  faqArea: {
    width: '100%',
    marginTop: 15,
  }
});
```

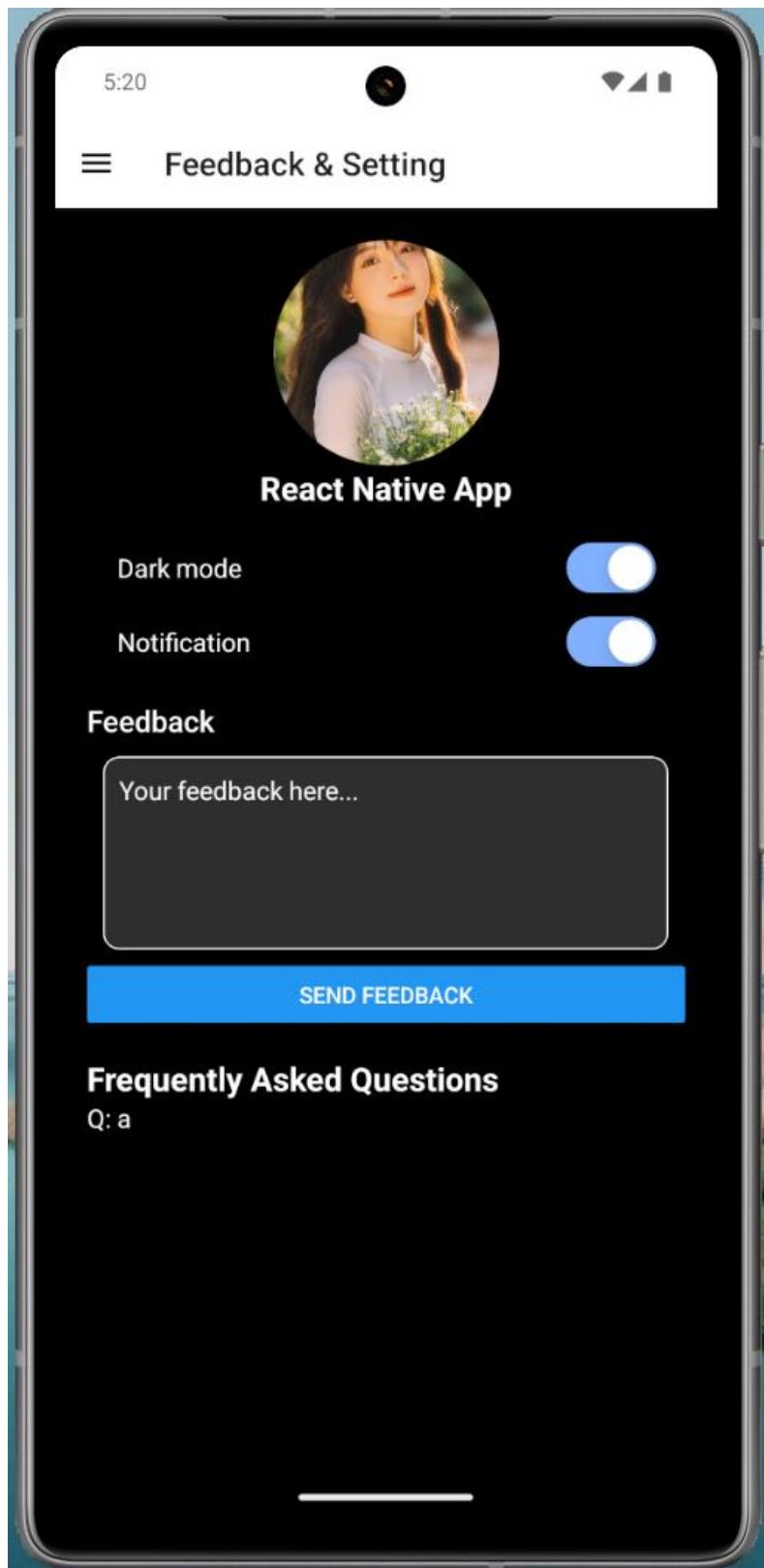
// Trần Đình Khánh - 21520984 You, 1 second ago * Uncommitted changes

Hình 25: Page feedback

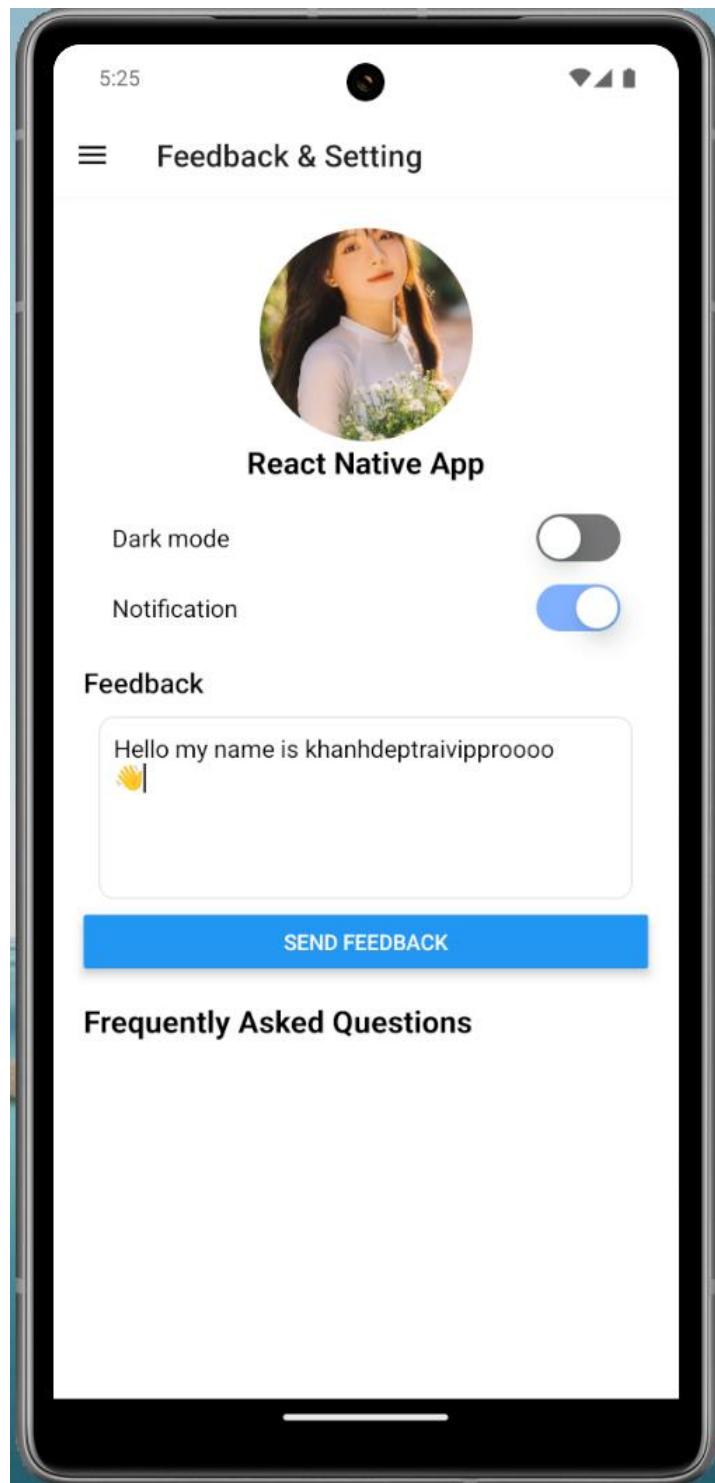
+ Kết quả thực hiện:



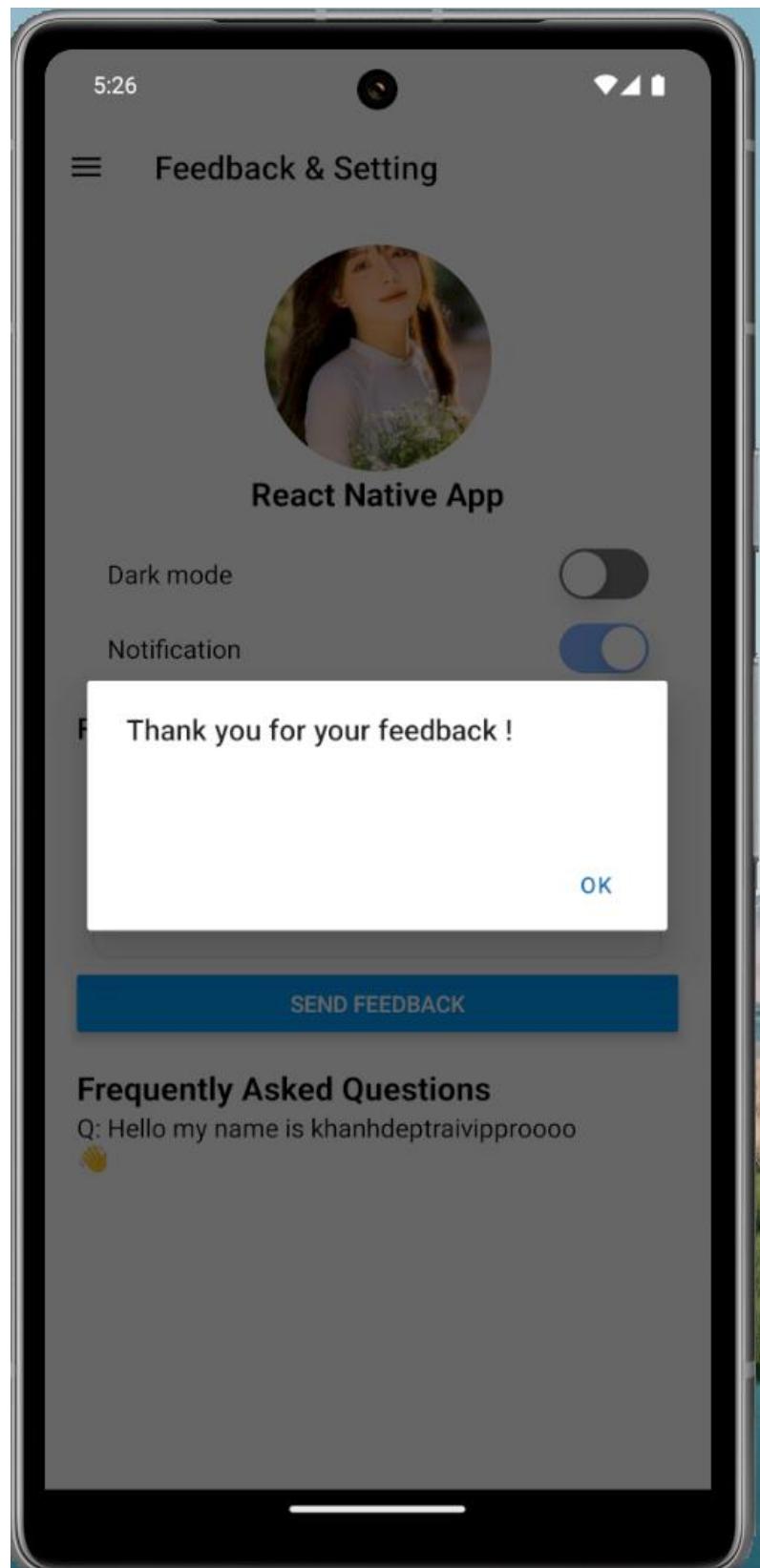
Hình 26: Kết quả thực hiện câu 2



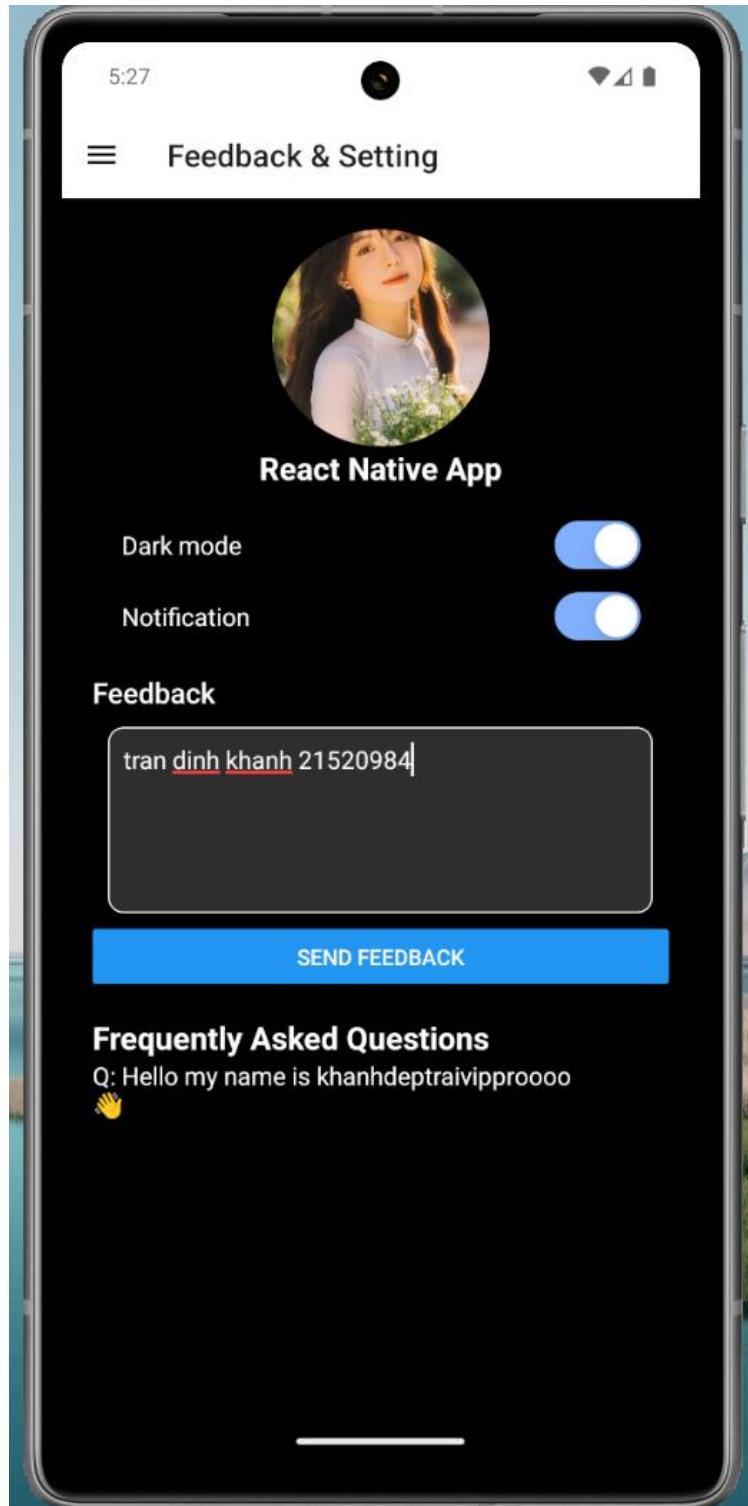
Hình 27: Kết quả thực hiện câu 2



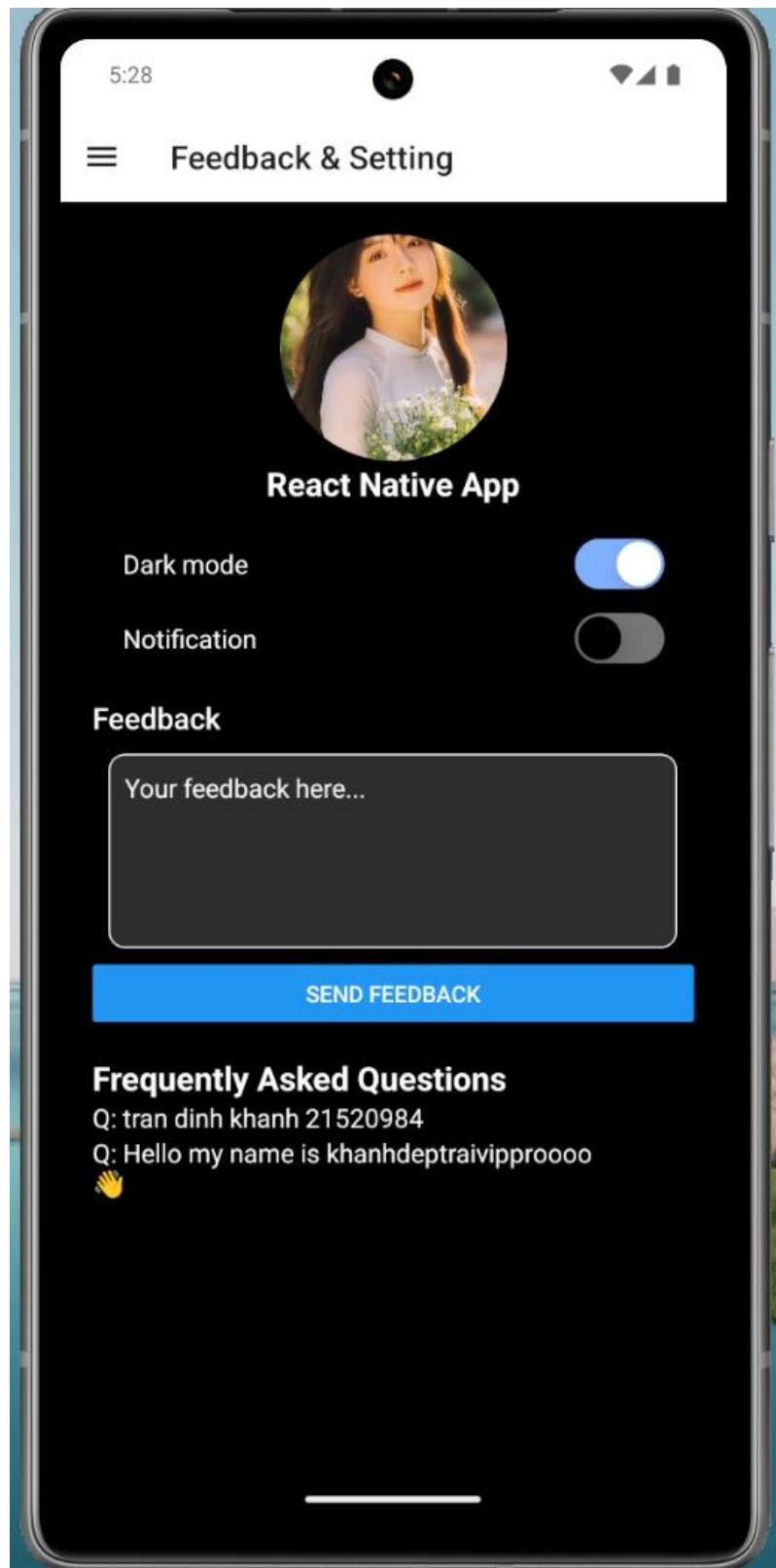
Hình 28: Kết quả thực hiện câu 2



Hình 29: Kết quả thực hiện câu 2



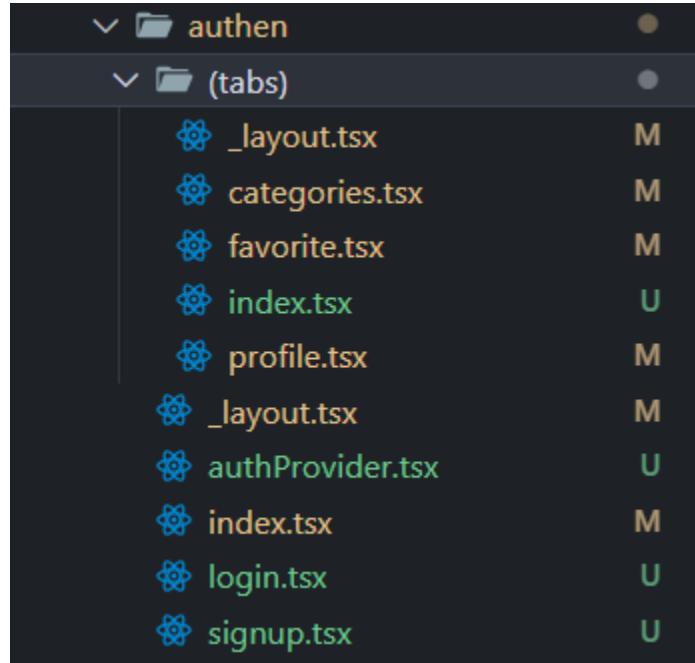
Hình 30: Kết quả thực hiện câu 2



Hình 31: Kết quả thực hiện câu 2

Bài 3: React Navigation

+ Cấu trúc thư mục:



Hình 32: Cấu trúc thư mục bài 3

+ File layout của folder authen:

```
_layout.tsx M X
app > (drawer) > authen > _layout.tsx > (AuthenLayout
You, yesterday | 1 author (You)
1 import { Slot } from 'expo-router';
2 import { AuthProvider } from './authProvider';
3
4 const AuthenLayout = () => [
5   return (
6     <AuthProvider>
7       <Slot />
8     </AuthProvider>
9   );
10   You, yesterday + Uncommitted changes
11
12 export default AuthenLayout;
```

Hình 33: file layout của folder authen

+ File index của folder authen:

The screenshot shows the Visual Studio Code interface with the following details:

- Explorer:** Shows the project structure under "LAB2".
 - "authen" folder contains "index.tsx", "login.tsx", "signup.tsx".
 - "assets" folder contains "adaptive-icon.png", "favicon.png", "google.png", "icon.png", "splash.png".
 - "components" folder contains "Home.tsx".
- Editor:** The file "index.tsx" is open in the main editor area.

```
You, 1 second ago | 1 author: (You)
1 import { router } from 'expo-router';
2 import { useAuth } from './AuthProvider';
3 import { useEffect } from 'react';
4 import { View, Text } from 'react-native';
5
6 const index = () => {
7   const { currentUser } = useAuth();
8
9   useEffect(() => {
10     setTimeout(() => {
11       if (!currentUser) {
12         router.navigate('/(drawer)/authen/login');
13       } else {
14         router.navigate('/(drawer)/authen/(tabs)');
15       }
16     }, 0);
17   }, [currentUser]);
18 }
19
20 export default index;
21
22 // Trần Đình Khánh - 21520984 | You, 1 second ago * Uncommitted changes
```
- Terminal:** The terminal tab is visible at the bottom.
- Bottom Status Bar:** Shows "Android Bundled 3649ms D:\CODE\ReactNative\Lab\lab2\node_modules\expo-router\entry.js (1721 modules)" and a file icon for "21520984_TranDinhKhanh".

Hình 34: file index của folder authen

+ Trang login:

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the file structure of the project. The root folder is 'app'. Inside 'app' are 'authen', 'drawer', and 'tabs' subfolders. 'authen' contains 'index.tsx', 'login.tsx', 'signup.tsx', and 'authProvider.tsx'. 'drawer' contains 'index.tsx', 'login.tsx', 'signup.tsx', and 'facebook', 'feedback', 'layout.tsx', 'index.tsx', 'html.tsx', 'not-found.tsx', and 'modal.tsx'. 'assets' contains 'adaptive-icon.png', 'favicon.png', 'google.png', 'icon.png', and 'splash.png'. There are also 'index.tsx M', 'login.tsx 1, U', and 'index.tsx M' listed under the root 'app' folder.
- EDITOR**: The main editor pane displays the content of 'login.tsx'. The code uses React hooks like useState and useEffect, along with various imported components from 'react-native' and 'expo'.
- TERMINAL**: The terminal pane at the bottom right shows the command: `21520984_TranDinhKhánh +`.

Hình 35: Trang login

The screenshot shows the VS Code interface with the 'login.tsx' file open in the editor. The code is a functional component named 'Login' that renders a form with an image, a text input for 'email', a password input, and a 'LOG IN' button. It also includes social login options for Facebook and Google. The code uses Ant Design components and custom styles defined in 'styles' objects.

```
const Login = () => {
  return (
    <View style={styles.container}>
      <View style={styles.wrapper}>
        <View style={styles.info}>
          <Image
            style={styles.image}
            source={{
              uri: 'https://i.pinimg.com/564x/4c/81/01/4c810110476f79e5d57b76995bab0c5.jpg',
            }}
          />
          <View>
            <Text style={styles.name}>Welcome</Text>
          </View>
        </View>
        <View style={styles.inputSection}>
          <View style={styles.inputField}>
            <Fontisto name="email" size={24} color="black" />
            <TextInput
              placeholder="Email"
              style={styles.textInput}
              value={email}
              onChangeText={setEmail}
              cursorColor="#e67205"
            />
          </View>
          <View style={styles.inputField}>
            <AntDesign name="lock" size={24} color="black" />
            <TextInput
              placeholder="Password"
            />
          </View>
        </View>
      </View>
    </View>
  );
}

// Trần Bình Khánh - 21520984
<TouchableOpacity style={styles.forgotPass}>
  <Text style={styles.forgotPassText}>Forgot password?</Text>
</TouchableOpacity>
<View style={styles.buttonSection}>
  <TouchableOpacity style={styles.button} onPress={handlePress}>
    <Text style={styles.textButton}>LOG IN</Text>
  </TouchableOpacity>
</View>
<View style={styles.thirdPartyAuth}>
  <Text style={styles.boldText}>Or login with:</Text>
  <View style={styles.logoSection}>
    <TouchableOpacity>
      <Image
        style={styles.logo1}
        source={{
          uri: 'https://freepnglogo.com/images/all_img/facebook-circle-logo-png.png',
        }}
      />
    </TouchableOpacity>
  </View>
</View>
```

Hình 36: Trang login

This screenshot is similar to the previous one, showing the 'login.tsx' file in VS Code. A cursor is positioned over a comment at the top of the file: 'Trần Bình Khánh - 21520984'. The rest of the code is identical to the previous screenshot.

Hình 37: Trang login

```
index.tsx M login.tsx 1.U
const Login = () => {
  <TouchableOpacity>
    <Image style={styles.logo} source={googlePicture} />
  </TouchableOpacity>
</View>
<View style={styles.signUpSection}>
  <Text style={styles.normalText}>Don't have an account? </Text>
  <Link href="/(drawer)/authen/signup">Sign up here!</Link>
</View>
<Text style={styles.normalText}>Or log in</Text>
<Form>
  <Text style={styles.normalText}>Email</Text>
  <Input style={styles.normalText}></Input>
  <Text style={styles.normalText}>Password</Text>
  <Input style={styles.normalText}></Input>
  <Text style={styles.normalText}>Forgot password?</Text>
</Form>
<Text style={styles.normalText}>Don't have an account? </Text>
<Link href="/(drawer)/authen/signup">Sign up here!</Link>
</View>
<Text style={styles.normalText}>/* Toast configuration can be placed in the main App component */</Text>
<Toast />
</View>
};

export default Login;

const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    alignItems: 'center',
    backgroundColor: '#fff',
  },
  wrapper: {
```

Hình 38: Trang login

```
index.tsx M login.tsx 1.U
const styles = StyleSheet.create({
  wrapper: {
    width: '100%',
    height: '86%',
    alignItems: 'center',
    flexDirection: 'column',
    gap: 10,
  },
  info: {
    justifyContent: 'center',
    alignItems: 'center',
    flexDirection: 'column',
    gap: 10,
  },
  image: {
    width: 120,
    height: 120,
    borderRadius: 1000,
  },
  name: {
    fontSize: 22,
    fontWeight: 'bold',
  },
  inputSection: {
    flexDirection: 'column',
    gap: 16,
    width: '90%',
  },
  inputField: {
    alignItems: 'center',
  },
  button: {
    width: '100%',
```

Hình 39: Trang login

```
const styles = StyleSheet.create({
  inputField: {
    alignItems: 'center',
    flexDirection: 'row',
    gap: 20,
    paddingVertical: 10,
    paddingHorizontal: 10,
    borderWidth: 2,
    borderRadius: 10,
    borderColor: 'rgba(0,0,0,0.1)'
  },
  forgotPass: {
    width: '90%',
    flexDirection: 'row',
    justifyContent: 'flex-end',
  },
  forgotPassText: {
    color: '#ff1493',
    textAlign: 'right',
  },
  buttonSection: {
    width: '90%',
    marginTop: 15,
  },
  button: {
    backgroundColor: '#e67205',
    paddingVertical: 14,
    alignItems: 'center',
    borderRadius: 14,
  },
});
```

Hình 40: Trang login

```
textButton: {
  color: '#fff',
  fontSize: 20,
},
thirdPartyAuth: {
  alignItems: 'center',
},
boldText: {
  margin: 10,
  fontsize: 20,
  fontWeight: '500',
},
logoSection: {
  margin: 10,
  flexDirection: 'row',
  gap: 30,
  alignItems: 'center',
},
logo: {
  width: 57,
  height: 57,
  borderRadius: 500,
},
logo: {
  width: 60,
  height: 60,
  borderRadius: 500,
},
textInput: {
```

Hình 41: Trang login

```
const styles = StyleSheet.create({
  logo: {
    width: 60,
    height: 60,
    borderRadius: 500,
  },
  textInput: {
    fontSize: 16,
  },
  normalText: {
    fontSize: 18,
  },
  textBlue: {
    color: '#0000cd',
    fontWeight: '500',
  },
  signUpSection: {
    flexDirection: 'row',
  },
});
```

Hình 42: Trang login

+ Trang sign up:

```
const signup = () => {
  const { currentUser, register } = useAuth();
  // Trần Đình Khanh - 21520984
  const handlePress = () => {};

  return (
    <View style={styles.container}>
      <View style={styles.wrapper}>
        <View style={styles.info}>
          <Image
            style={styles.image}
            source={{
              uri: "https://i.giphy.com/MkMRga5Kgssikmwiwo.webp",
            }}
          />
          <View>
            <Text style={styles.name}>Create New Account</Text>
          </View>
        </View>
        <View style={styles.inputSection}>
          <View style={styles.inputField}>
            <FontAwesome name="user" size={20} color="black" />
```

Hình 43: Trang sign up

```
const signup = () => {
  <View style={styles.buttonSection}>
    <TouchableOpacity style={styles.button} onPress={handlePress}>
      <Text style={styles.textButton}>CREATE</Text>
    </TouchableOpacity>
  </View>
  <View style={styles.loginSection}>
    <Text style={styles.normalText}>Already have an account? </Text>
    <Link href="/(drawer)/authen/login">
      <Text style={[styles.normalText, styles.textBlue]}>Login now!</Text>
    </Link>
  </View>
};

export default signup;

const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    alignItems: 'center',
    backgroundColor: '#fff',
  },
  wrapper: {
    width: '90%',
    height: '86%',
    // borderWidth: 2,
  }
});
```

Hình 44: Trang sign up

```
const signup = () => {
  <View style={styles.buttonSection}>
    <TouchableOpacity style={styles.button} onPress={handlePress}>
      <Text style={styles.textButton}>CREATE</Text>
    </TouchableOpacity>
  </View>
  <View style={styles.loginSection}>
    <Text style={styles.normalText}>Already have an account? </Text>
    <Link href="/(drawer)/authen/login">
      <Text style={[styles.normalText, styles.textBlue]}>Login now!</Text>
    </Link>
  </View>
};

export default signup;

const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    alignItems: 'center',
    backgroundColor: '#fff',
  },
  wrapper: {
    width: '90%',
    height: '86%',
    // borderWidth: 2,
  }
});
```

Hình 45: Trang sign up

The screenshot shows the VS Code interface with the code editor open to a file named `signup.tsx`. The code is a React component using TypeScript and styled-components. It defines a `const styles = StyleSheet.create({})` block containing styles for a `Wrapper` and an `Info` section. The `Wrapper` has `alignItems: 'center'`, `flexDirection: 'column'`, and `gap: 10`. The `Info` section has `justifyContent: 'center'`, `alignItems: 'center'`, `flexDirection: 'column'`, and `gap: 10`. It also includes styling for `Image`, `Name`, `InputSection`, `InputField`, and `Button`. The code editor has tabs for `index.tsx`, `login.tsx`, and `signup.tsx`. The sidebar shows the project structure with files like `index.tsx`, `login.tsx`, `signup.tsx`, `_layout.tsx`, `authProvider.tsx`, `index.tsx`, `login.tsx`, `signup.tsx`, `facebook`, `feedback`, `_layout.tsx`, `+html.tsx`, `+not-found.tsx`, `modal.tsx`, `assets` (containing `adaptive-icon.png`, `favicon.png`, `google.png`, `icon.png`, `placeholder.png`), and `outline`.

Hình 46: Trang sign up

This screenshot is identical to the one above, showing the same code editor and project structure in VS Code. The code editor has tabs for `index.tsx`, `login.tsx`, and `signup.tsx`. The sidebar shows the project structure with files like `index.tsx`, `login.tsx`, `signup.tsx`, `_layout.tsx`, `authProvider.tsx`, `index.tsx`, `login.tsx`, `signup.tsx`, `facebook`, `feedback`, `_layout.tsx`, `+html.tsx`, `+not-found.tsx`, `modal.tsx`, `assets` (containing `adaptive-icon.png`, `favicon.png`, `google.png`, `icon.png`, `placeholder.png`), and `outline`.

Hình 47: Trang sign up

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure with files like index.tsx, login.tsx, and signup.tsx.
- OPEN EDITORS**: Displays the content of the signup.tsx file.
- LAB2**: A folder containing expo, vscode, and app.
- CODE PETS**: A section for VS Code extensions.
- PROBLEMS**: 1 problem found.
- TERMINAL**: Shows the command "in main(RootComponent), js engine: hermes".

```
const styles = StyleSheet.create({
  textButton: {
    color: '#fff',
    fontSize: 20,
  },
  thirdPartyAuth: {
    alignItems: 'center',
  },
  boldText: {
    margin: 10,
    fontSize: 20,
    fontWeight: '500',
  },
  logoSection: {
    margin: 10,
    flexDirection: 'row',
    gap: 30,
    alignItems: 'center',
  },
  logo1: {
    width: 57,
    height: 57,
    borderRadius: 500,
  },
  logo: {
    width: 60,
    height: 60,
    borderRadius: 500,
  },
  textInput: {
```

Hình 48: Trang sign up

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure with files like index.tsx, login.tsx, and signup.tsx.
- OPEN EDITORS**: Displays the content of the signup.tsx file.
- LAB2**: A folder containing expo, vscode, and app.
- CODE PETS**: A section for VS Code extensions.
- PROBLEMS**: 1 problem found.
- TERMINAL**: Shows the command "in main(RootComponent), js engine: hermes".

```
const styles = StyleSheet.create({
  textInput: {
    fontSize: 16,
  },
  normalText: {
    fontSize: 18,
  },
  textBlue: {
    color: '#0000cd',
    fontWeight: '500',
  },
  loginSection: {
    marginTop: 10,
    flexDirection: 'row',
  },
});
```

Hình 49: Trang sign up

+ File AuthProvider:

```

EXPLORER OPEN EDITORS authProvider.tsx U X
app > (drawer) > authen > authProvider.tsx > AuthContext
1 import { createContext, useContext, useState, ReactNode } from 'react';
2 import { User } from '~/interfaces/User';
3 import { AuthContextType } from '~/interfaces/AuthContextType';
4
5 const accounts = [
6   {
7     email: '21520984@gm.uit.edu.vn',
8     password: 'trandinhkhanh',
9     name: 'Khanh',
10   },
11 ];
12
13 const AuthContext = createContext<AuthContextType>({
14   currentUser: null,
15   login: () => Promise.reject(new Error('Not implemented')),
16   register: () => Promise.reject(new Error('Not implemented')),
17   logout: () => {},
18 });
19
20 export const AuthProvider = ({ children }: { children: ReactNode }) => {
21   const [currentUser, setCurrentUser] = useState<User | null>(null);
22
23   const login = async (email: string, password: string): Promise<void> => {
24     const user = accounts.find(
25       (account) => account.email === email && account.password === password
26     );
27     if (user) {
28       setCurrentUser(user);
29       return;
30     }
31     throw new Error('Invalid email or password');
32   };
33
34   const logout = () => {
35     setCurrentUser(null);
36   };
37
38   const register = async (email: string, password: string, name: string): Promise<void> => {
39     const userExists = accounts.some((account) => account.email === email);
40     if (userExists) {
41       throw new Error('User already exists');
42     }
43
44     accounts.push({ email, password, name });
45     setCurrentUser({ email, name });
46   };
47
48   return (
49     <AuthContext.Provider value={{ currentUser, login, logout, register }}>
50       {children}
51     </AuthContext.Provider>
52   );
53 };
54
55 export const useAuth = () => {
56   return useContext(AuthContext);
57 };
58

```

Hinh 50: file AuthProvider

```

EXPLORER OPEN EDITORS authProvider.tsx U X
app > (drawer) > authen > authProvider.tsx > AuthContext
20 export const AuthProvider = ({ children }: { children: ReactNode }) => {
21   const login = async (email: string, password: string): Promise<void> => {
22     throw new Error('Invalid email or password');
23   };
24
25   const logout = () => {
26     setCurrentUser(null);
27   };
28
29   const register = async (email: string, password: string, name: string): Promise<void> => {
30     const userExists = accounts.some((account) => account.email === email);
31     if (userExists) {
32       throw new Error('User already exists');
33     }
34
35     accounts.push({ email, password, name });
36     setCurrentUser({ email, name });
37   };
38
39   return (
40     <AuthContext.Provider value={{ currentUser, login, logout, register }}>
41       {children}
42     </AuthContext.Provider>
43   );
44 };
45
46 export const useAuth = () => {
47   return useContext(AuthContext);
48 };
49
50
51
52
53
54
55
56
57
58

```

Hinh 51: file AuthProvider

+ File layout của folder (tabs):

```
authProvider.tsx U _layout.tsx M
app > (drawer) > authen > (tabs) > _layout.tsx > TabLayout
You, 1 second ago | 1 author (You)
import { Tabs } from 'expo-router';
import FontAwesome from '@expo/vector-icons/FontAwesome';
import AntDesign from '@expo/vector-icons/AntDesign';
import Octicons from '@expo/vector-icons/Octicons';
import Ionicons from '@expo/vector-icons/Ionicons';
// Trần Đình Khánh - 21520984
export default function TabLayout() {
  return (
    <Tabs>
      <Tabs.Screen
        name="index"
        options={{
          title: 'Home',
          tabBarIcon: ({ color, size }) => (
            <FontAwesome name="home" size={size} color={color} />
          ),
        }}
      />
      <Tabs.Screen
        name="favorite"
        options={{
          title: 'Favorites',
          tabBarIcon: ({ color, size }) => (
            <Octicons name="heart-fill" size={size} color={color} />
          ),
        }}
      />
    </Tabs>
  );
}
```

Hình 52: file layout của folder (tabs)

```
authProvider.tsx U _layout.tsx M
app > (drawer) > authen > (tabs) > _layout.tsx > TabLayout
7   export default function TabLayout() {
8     return (
9       <Tabs.Screen
10         name="categories"
11         options={{
12           title: 'Categories',
13           tabBarIcon: ({ color, size }) => (
14             <AntDesign name="appstore1" size={size} color={color} />
15           ),
16         }}
17       />
18       <Tabs.Screen
19         name="profile"
20         options={{
21           title: 'Profile',
22           tabBarIcon: ({ color, size }) => (
23             <Ionicons name="person" size={size} color={color} />
24           ),
25         }}
26       />
27     );
28   }
29 }
```

Hình 53: file layout của folder (tabs)

+ Trang categories:

The screenshot shows the Visual Studio Code interface with the following details:

- Explorer:** Shows the project structure under "LAB2". The "categories.tsx" file is selected in the "authProvider.tsx" tab.
- Editor:** Displays the code for "categories.tsx". The code defines a component named "categories" which returns a view with a text "Categories Screen". It uses a StyleSheet named "styles". A cursor is at line 11, character 15, with the comment "Trần Đình Khánh - 21520984".
- Terminal:** Shows the command "npx react-native run-android".
- Bottom Status Bar:** Includes icons for file operations like Open, Save, Find, and others, along with the status "21520984_TranDinhKhanh".

Hình 54: Trang categories

+ Trang favorite:

Hình 55: Trang favorite

+ Trang home:

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure under `app`, including `authProvider.tsx`, `_layout.tsx`, `categories.tsx`, `favorite.tsx`, and `index.tsx`.
- OPEN EDITORS**: The `index.tsx` file is open in the editor tab.
- CODE**: The code for `index.tsx` is displayed:

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

const home = () => {
  return (
    <View style={styles.container}>
      <Text style={styles.text}>Home Screen</Text>
    </View>
  )
}

export default home

const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: "center",
    alignItems: "center"
  },
  text: {
    fontSize: 18,
    fontWeight: "400"
  }
})
```

- STATUS BAR**: Shows the file name `index.tsx` and the author's name `TranDinhKhanh`.

Hình 56: Trang home

+ Trang profile:

The screenshot shows the VS Code interface with the following details:

- EXPLORER**: Shows the project structure under `app`, including `authProvider.tsx`, `_layout.tsx`, `categories.tsx`, `favorite.tsx`, and `profile.tsx`.
- OPEN EDITORS**: The `profile.tsx` file is open in the editor tab.
- CODE**: The code for `profile.tsx` is displayed:

```
import { Button, StyleSheet, Text, View } from 'react-native'
import React from 'react'
import { useAuth } from '../authProvider';
import { router } from 'expo-router';

const profile = () => {
  const { logout } = useAuth();
  return (
    <View style={styles.container}>
      <Text style={styles.text}>Profile Screen</Text>
      <Button
        title="Sign Out"
        onPress={() => {
          logout();
          router.navigate('/(drawer)/authen/login')
        }}
      />
    </View>
  );
}

// Trần Dinh Khánh - 21520984

export default profile;

const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    alignItems: 'center',
    flexDirection: 'column',
  },
  text: {
    color: 'red',
  }
})
```

- STATUS BAR**: Shows the file name `profile.tsx` and the author's name `TranDinhKhanh`.

Hình 57: Trang profile

The screenshot shows the VS Code interface with the following details:

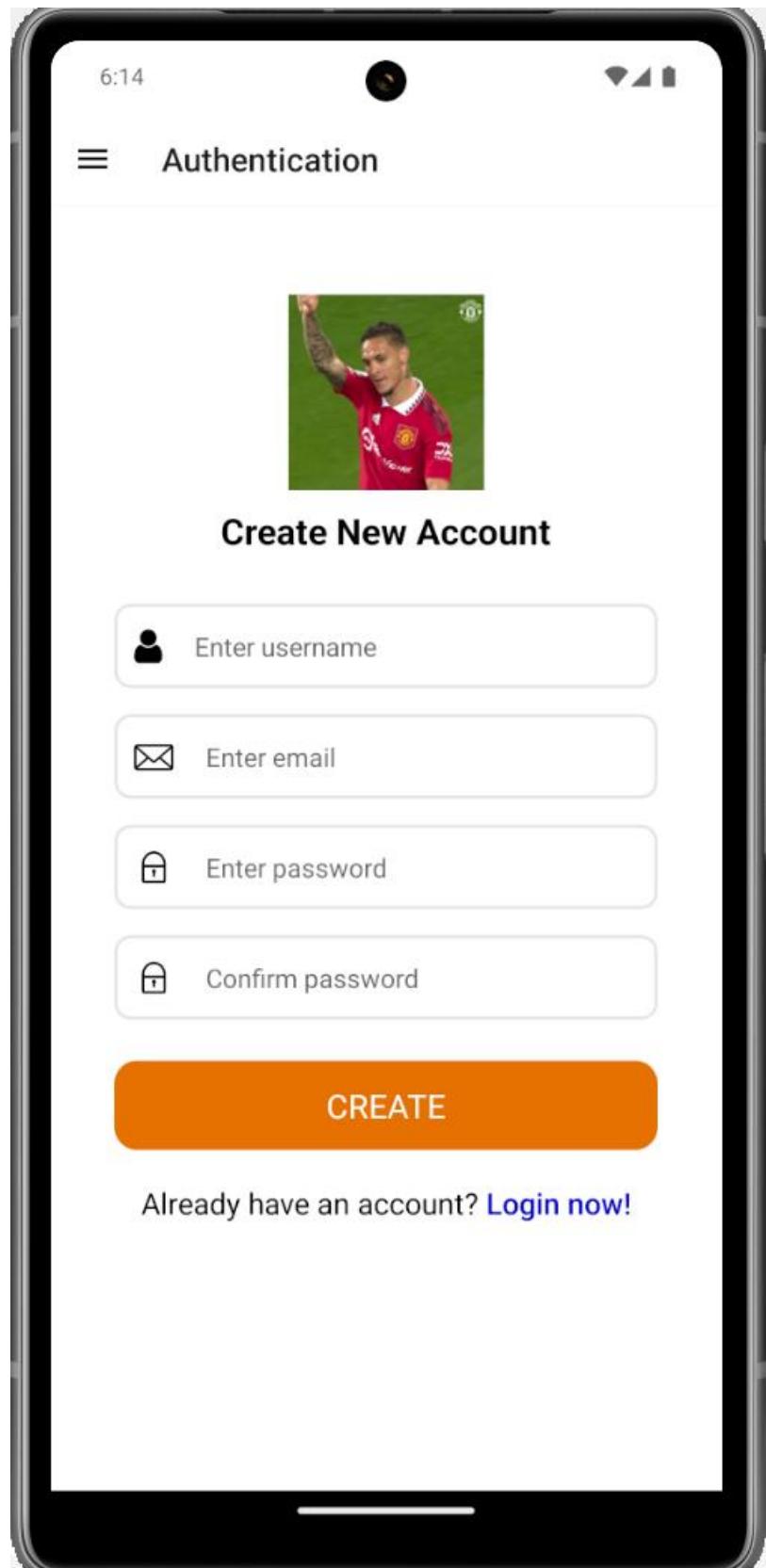
- EXPLORER**: Shows the project structure with files like authProvider.tsx, _layout.tsx, categories.tsx, favorite.tsx, and profile.tsx.
- CODE EDITOR**: Displays the code for `profile.tsx`. The code defines a component named `profile` which contains a button to log out and navigate to the login screen. It also includes a comment about navigation configuration and a StyleSheet definition for container and text styles.
- STATUS BAR**: Shows the file path `21520984_TranDinhKhanh` and other status indicators.

```
const profile = () => {
  onPress={() => {
    logout();
    router.navigate('/(drawer)/authen/login')
  }}
}
// Trần Đình Khanh - 21520984
| You, 2 days ago * can not config navigation
export default profile;

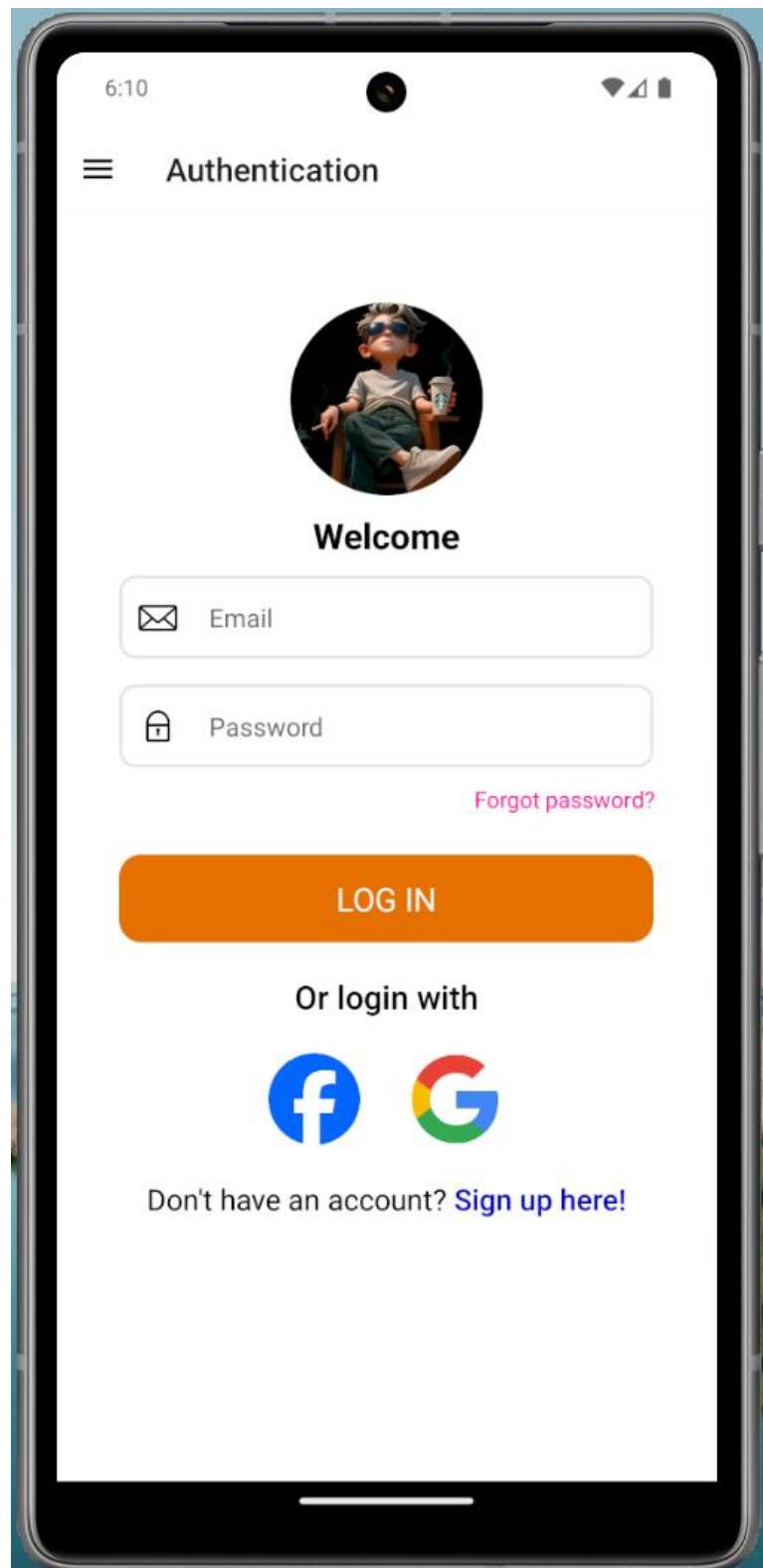
const styles = StyleSheet.create({
  container: {
    flex: 1,
    justifyContent: 'center',
    alignItems: 'center',
    flexDirection: 'column',
    gap: 20,
  },
  text: {
    fontSize: 18,
    fontWeight: '400',
  },
});
```

Hình 58: Trang profile

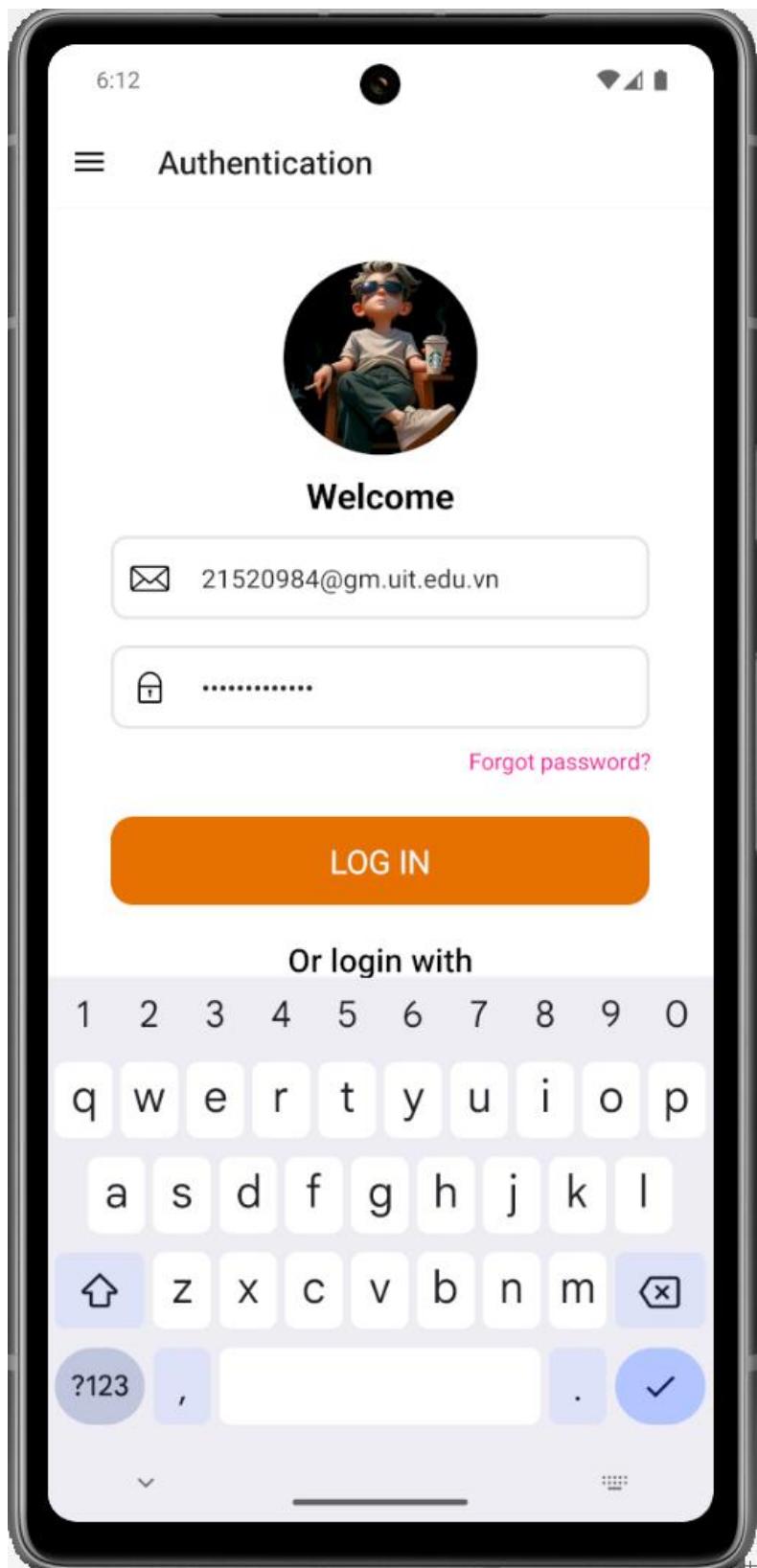
+ Kết quả thực hiện:



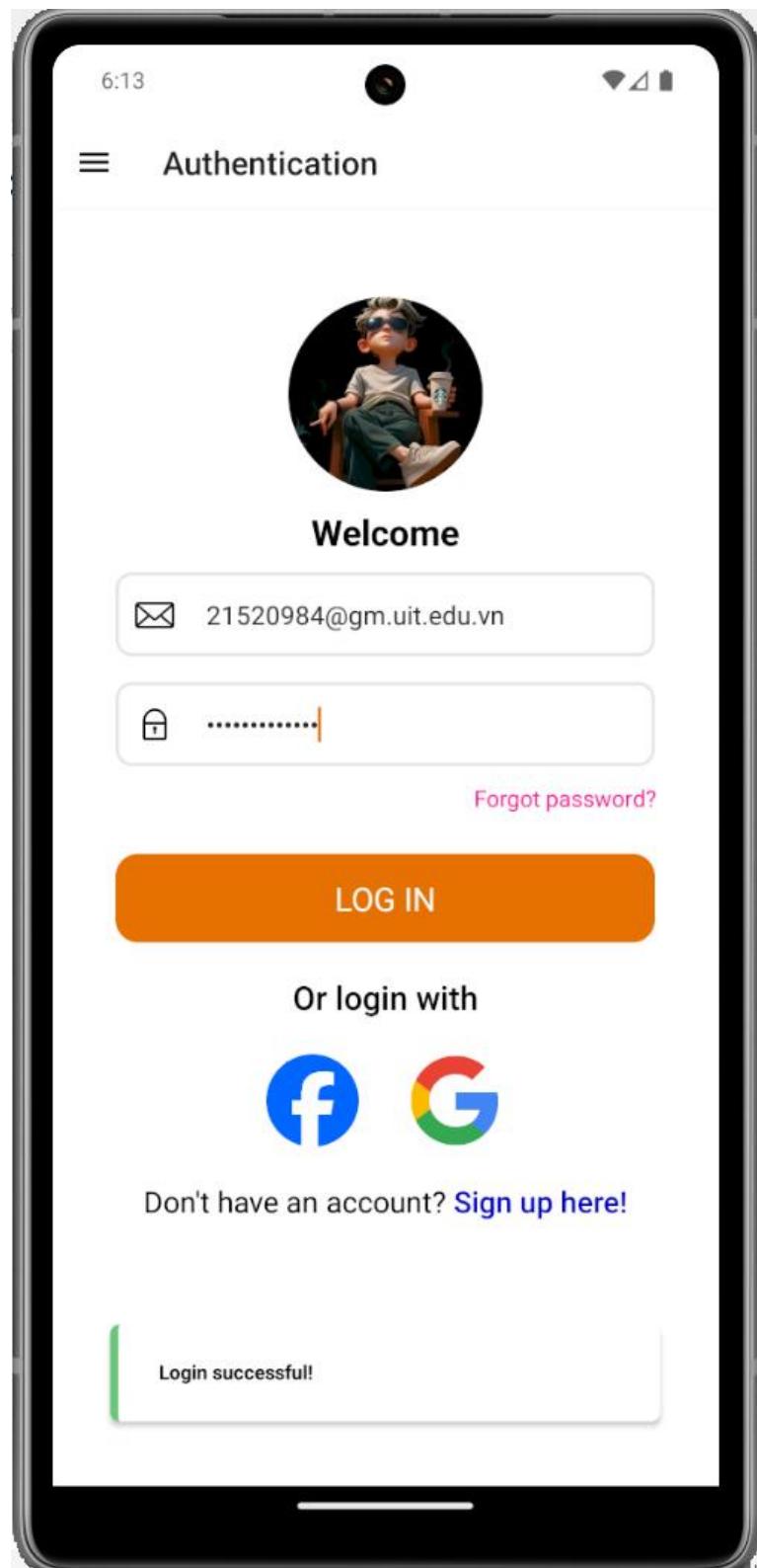
Hình 59: Màn hình đăng ký



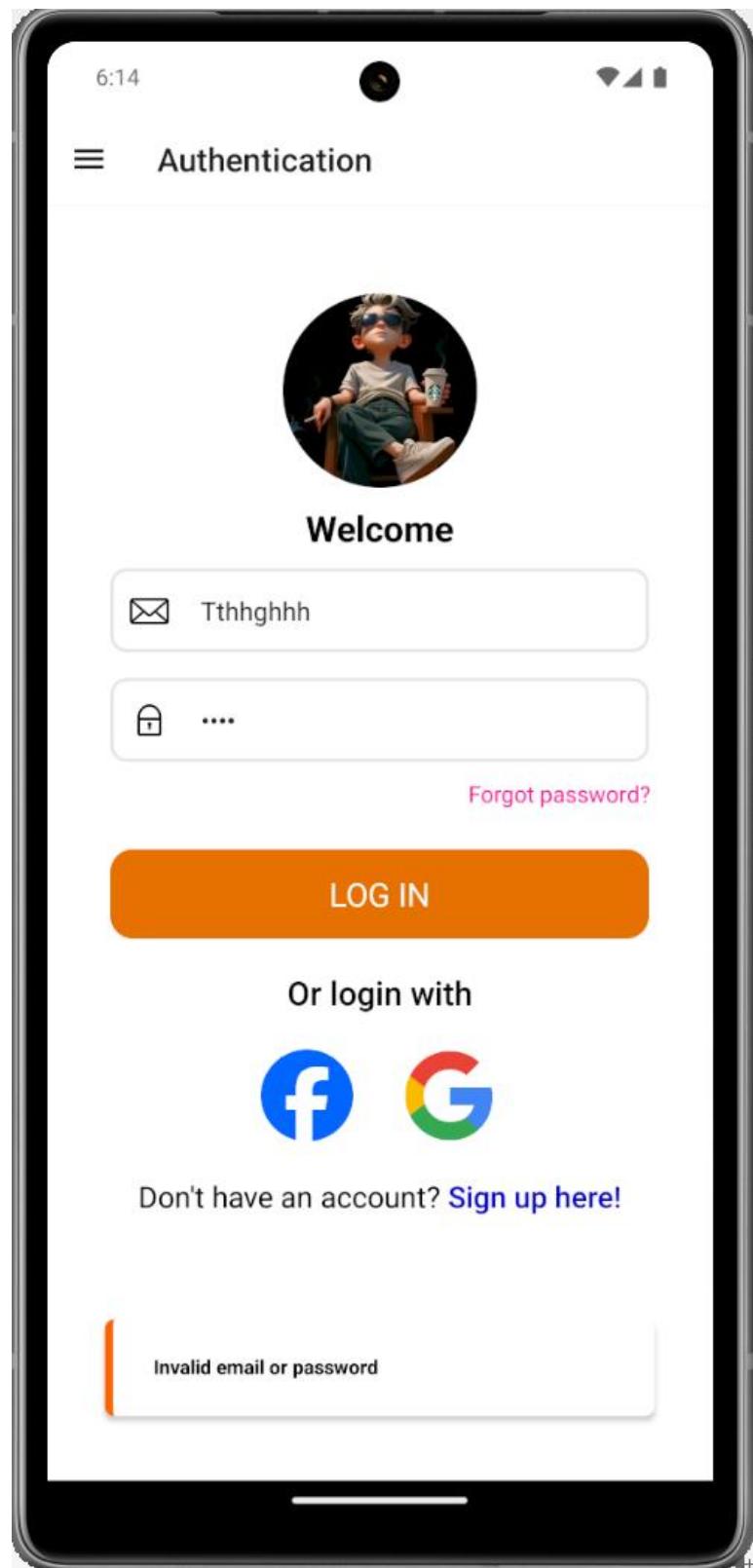
Hình 60: Màn hình đăng nhập



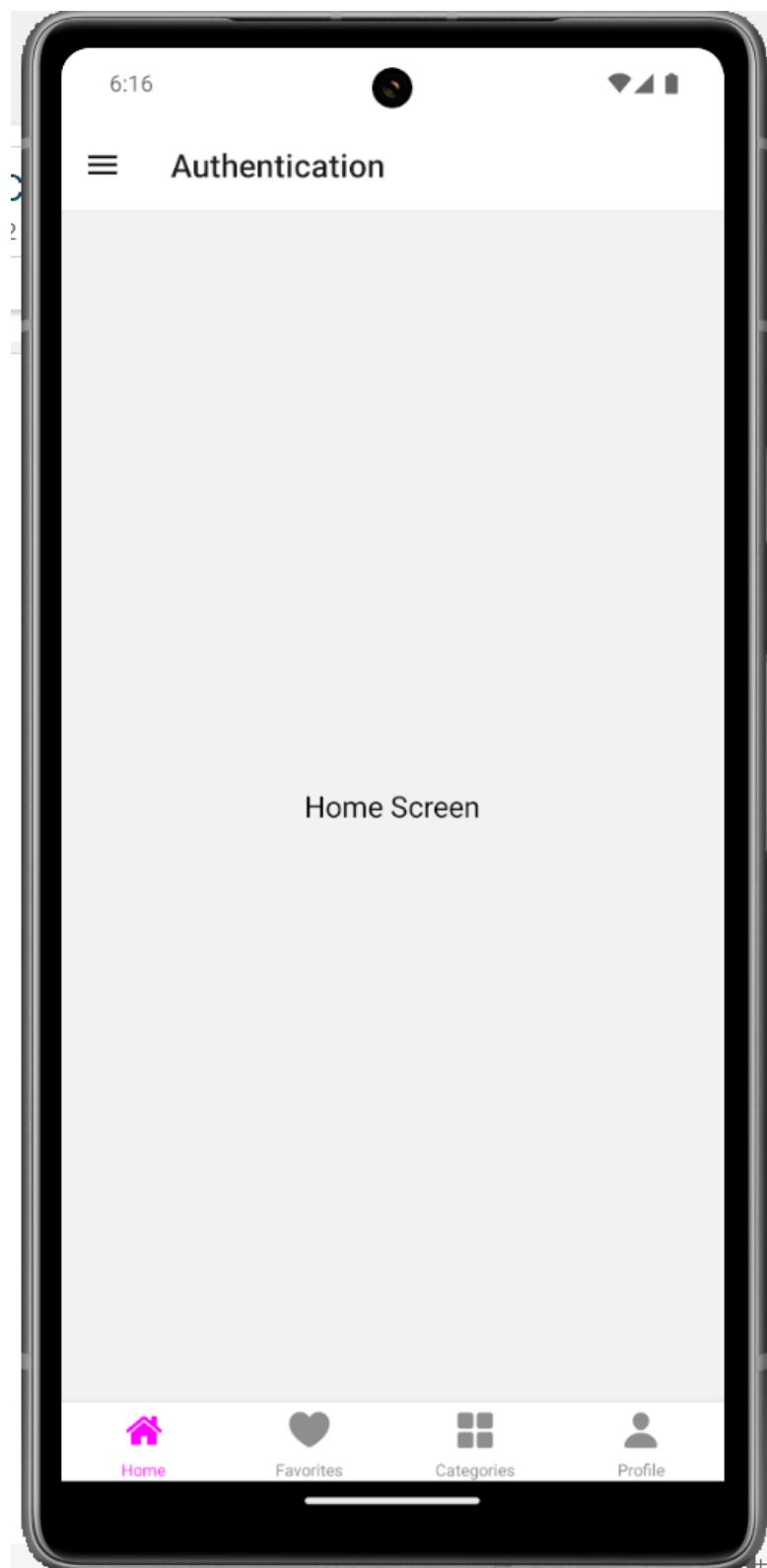
Hình 61: Màn hình đăng nhập



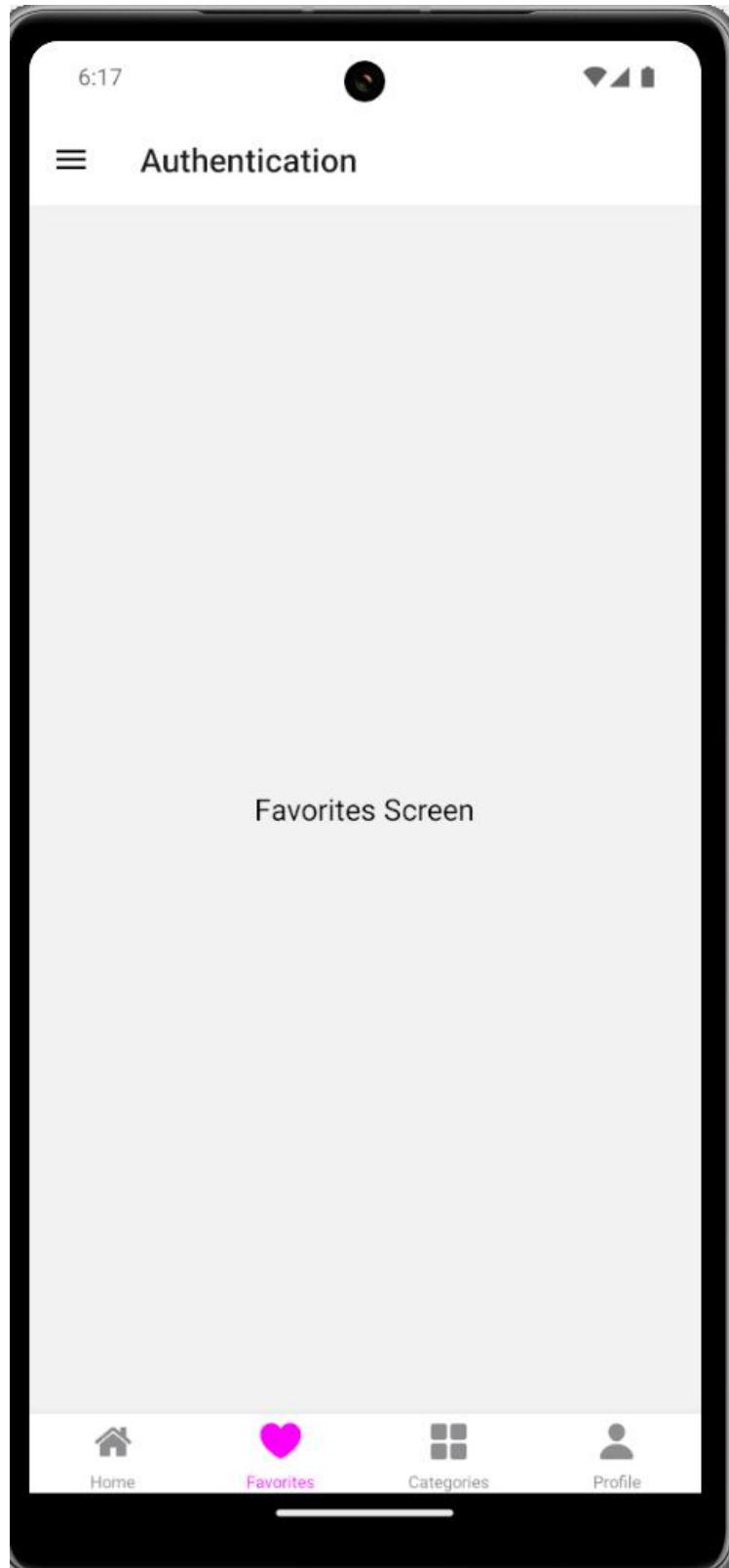
Hình 62: Đăng nhập thành công



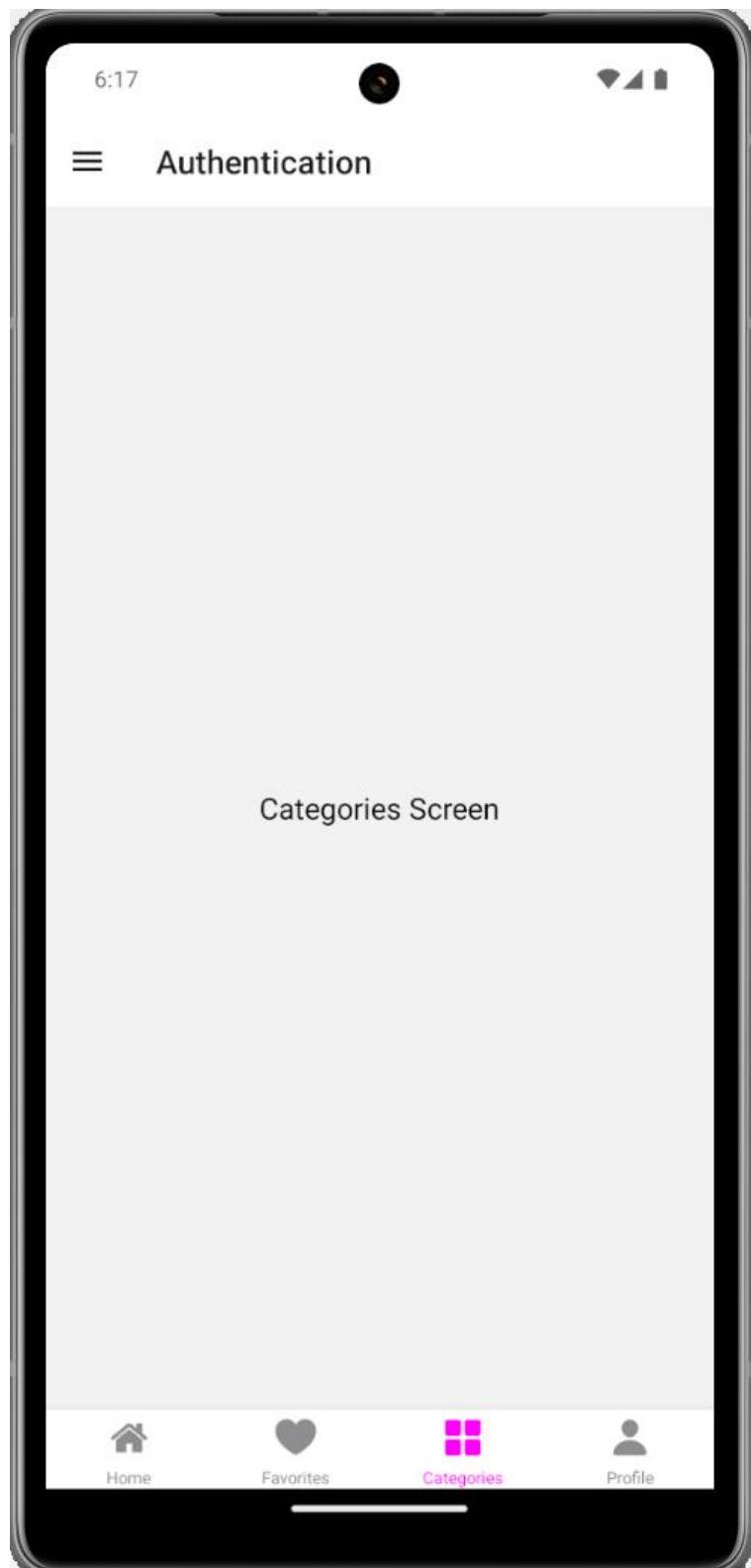
Hình 63: Thông tin đăng nhập không chính xác



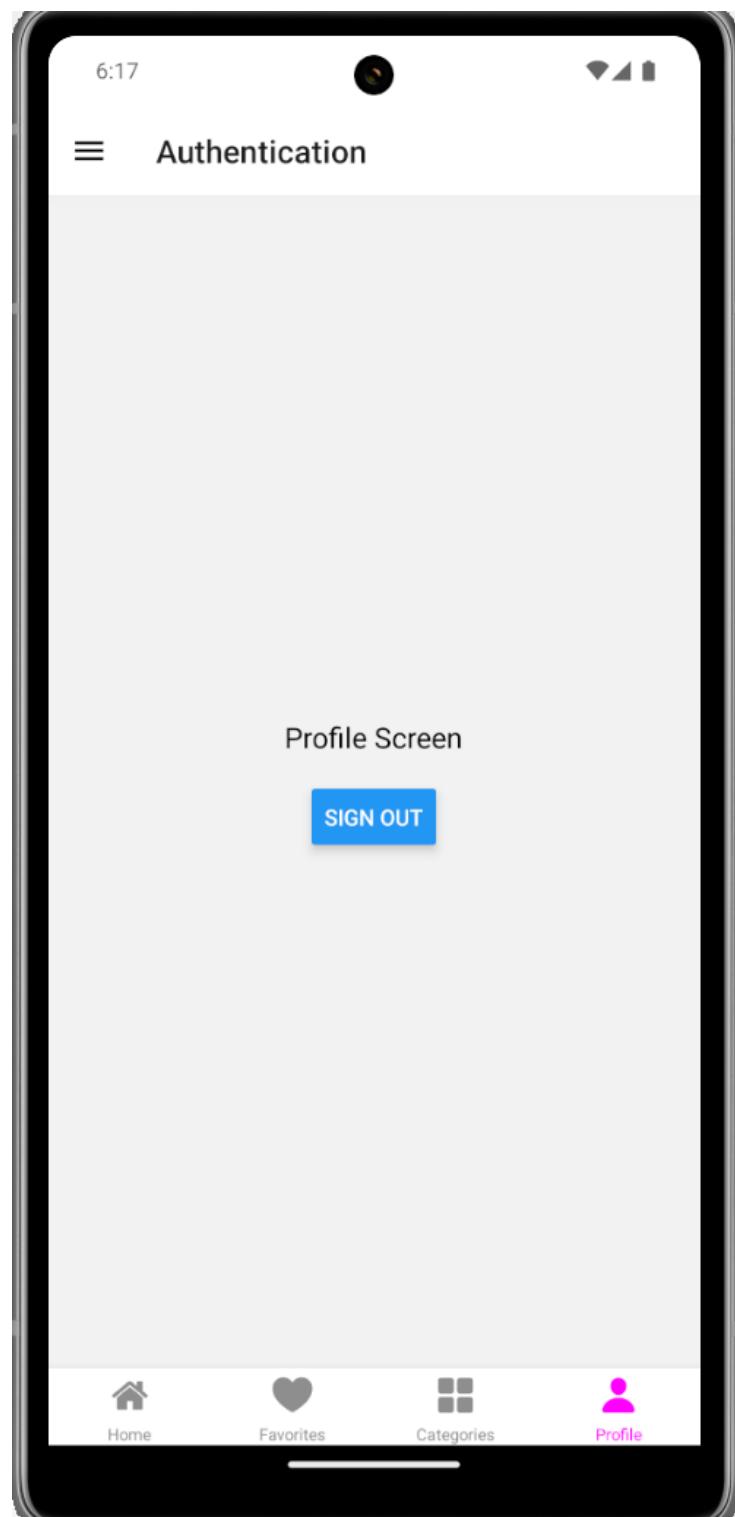
Hình 64: Trang home



Hình 65: Trang favorite



Hình 66: Trang categories



Hình 67: Trang profile

Link drive video demo:

[https://drive.google.com/file/d/1ZsVUkSHTeV1btDUwI5dR5CJvognxDnSn/view?
usp=sharing](https://drive.google.com/file/d/1ZsVUkSHTeV1btDUwI5dR5CJvognxDnSn/view?usp=sharing)