

**ĐẠI HỌC QUỐC GIA THÀNH PHỐ HỒ CHÍ MINH
TRƯỜNG ĐẠI HỌC CÔNG NGHỆ THÔNG TIN
KHOA KHOA HỌC VÀ KĨ THUẬT THÔNG TIN**

---oOo---



**BÁO CÁO THỰC HÀNH 2:
CUSTOM COMPONENTS, REACT NAVIGATION
MÔN HỌC: CÔNG NGHỆ LẬP TRÌNH ĐA NỀN
TĂNG CHO ỨNG DỤNG DI ĐỘNG (IE307.Q12)**

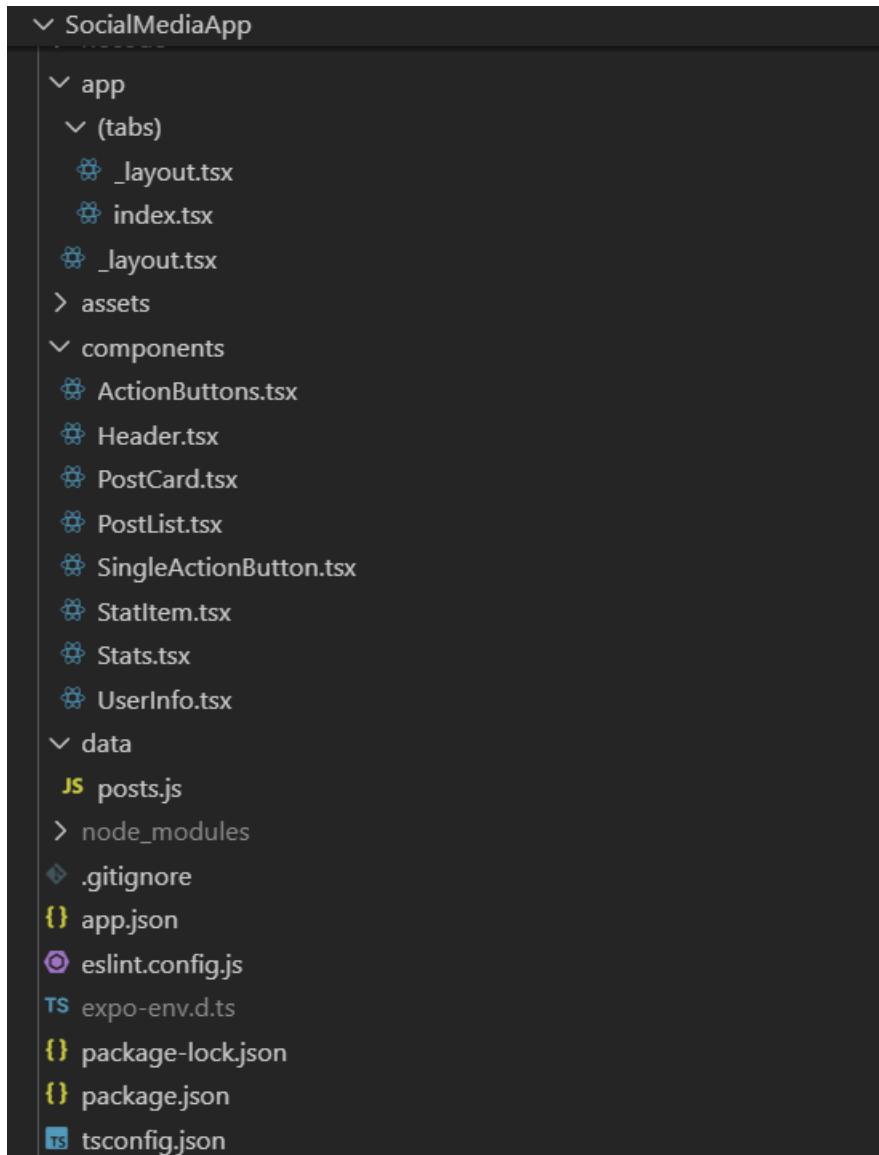
Sinh viên thực hiện: Võ Nhất Phương – 22521172

Giảng viên hướng dẫn: Phạm Nhật Duy

Thành phố Hồ Chí Minh, tháng 11 năm 2025

1. Bài 1: Social Media Feed (cont.)

1.1. Cấu trúc các folders / files của dự án.



1.2. Nội dung file _layout.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương You, 3 days ago • add BTTH2 bai 1 ...
2 import { DefaultTheme, ThemeProvider } from '@react-navigation/native';
3 import { Stack } from 'expo-router';
4 import { StatusBar } from 'expo-status-bar';
5 import 'react-native-reanimated';
6
7 export default function RootLayout() {
8   return (
9     <ThemeProvider value={DefaultTheme}>
10    <Stack>
11      <Stack.Screen name="(tabs)" options={{ headerShown: false }} />
12    </Stack>
13    <StatusBar style="auto" />
14  </ThemeProvider>
15);
16
17
18
```

Review next file >

Output Debug Console Terminal 3 Ports GitLens Spell Checker 3 ... ^ x

PROBLEMS Filter (e.g. text, **/*.ts, !**/node...) ▾

TERMINAL > Press ? | show all commands

powershell 22521172 SocialMediaApp

1.3. Nội dung file index.js trong thư mục (tabs)

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương
2 import React from 'react';
3 import PostList from '../../components/PostList';
4
5 export default function HomeScreen() {
6   return <PostList />;
7 }
8
9
10
```

Review next file >

Output Debug Console Terminal 3 Ports GitLens Spell Checker 3 ... ^ x

PROBLEMS Filter (e.g. text, **/*.ts, !**/node...) ▾

{} app.json BTTH2\Settings 1

TERMINAL PS D:\Desktop\Nam4\IE307.Q12> cd BTTH2
PS D:\Desktop\Nam4\IE307.Q12\BTTH2> cd
cd

powershell
22521172 SocialMediaApp

1.3. Nội dung file _layout.tsx trong thư mục (tabs)

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương      You, 3 days ago • add BTTH2 bai 1 ...
2 import { Stack } from 'expo-router';
3 import React from 'react';
4
5 export default function RootLayout() {
6   return (
7     <Stack
8       screenOptions={{
9         headerShown: false,
10       }}>
11     <Stack.Screen name="index" />
12   </Stack>
13 );
14 }
15
```

Review next file >

Output Debug Console Terminal 3 Ports GitLens Spell Checker 3 ... ^ x

PROBLEMS

TERMINAL

Press ? | show all commands

powershell

22521172 SocialMediaApp

1.4. Nội dung file posts.js trong thư mục data

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor interface with a dark theme. At the top, there's a navigation bar with 'BTTH2 > SocialMediaApp > data > **JS** posts.js > ...'. Below the navigation bar is the code editor area containing the following JavaScript code:

```
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương You, 3 days ago • add BTTH2 bai 1 ...
2 export const postsData = [
3   {
4     id: 1,
5     username: "Traveler",
6     avatar: require("../assets/images/avatar-3.jpg"),
7     content: "Exploring ancient ruins in a distant land. 🛰️🌐",
8     image: require("../assets/images/image-3.jpg"),
9     likes: 1033,
10    comments: 79,
11    shares: 15,
12    isLiked: false
13  },
14  {
15    id: 2,
16    username: "Thalassophile",
17    avatar: require("../assets/images/avatar-4.jpg"),
18    content: "Enjoying a beautiful day at the beach! 🌴☀️",
19    image: require("../assets/images/image-4.jpg"),
20    likes: 211,
21    comments: 18,
22    shares: 10,
23    isLiked: false
24  },
25  // 22521172 - Võ Nhất Phương
26  {
27    }
```

Below the code editor are several tabs: Output, Debug Console, Terminal (highlighted), Ports, GitLens, Spell Checker (with a count of 6). The Terminal tab shows a dropdown menu with 'powershell' and '22521172 SocialMediaApp'. A message 'Logs for your project will appear below' is displayed.

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with the file `posts.js` open. The code defines an array of two objects representing social media posts. Each post includes properties like id, username, avatar, content, image, likes, comments, shares, and isLiked. The code editor interface includes tabs for Output, Debug Console, Terminal (with 6 notifications), Ports, GitLens, Spell Checker (with 6 notifications), and a bottom bar with icons for powershell and logs.

```
BTTH2 > SocialMediaApp > data > JS posts.js > ...
2   export const postsData = [
25  },
26  // 22521172 - Võ Nhất Phương
27  {
28    id: 3,
29    username: "ArtEnthusiast",
30    avatar: require("../assets/images/avatar-1.jpg"),
31    content: "Create a vibrant painting inspired by nature. 🎨🌿",
32    image: require("../assets/images/image-1.jpg"),
33    likes: 4170,
34    comments: 663,
35    shares: 58,
36    isLiked: false
37  },
38  {
39    id: 4,
40    username: "NatureLover",
41    avatar: require("../assets/images/avatar-2.jpg"),
42    content: "Admiring the beauty of the mountains. 🌲🏔️",
43    image: require("../assets/images/image-2.jpg"),
44    likes: 602,
45    comments: 114,
46    shares: 73,
47    isLiked: false
48  }
49];
50
```

Output Debug Console **Terminal 6** Ports GitLens Spell Checker 6 ... ^ x

PROBLEMS TERMINAL

Filter (e.g. text, **/*.ts, !**/node...)

> Press ? | show all commands

powershell

Logs for your project will appear below

22521172 SocialMediaApp

1.5. Nội dung file components/Header.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor interface with a dark theme. The main area displays a file named `Header.tsx` under the `SocialMediaApp` component. The code implements a `Header` component using `React` and `react-native`. It includes a type definition for `HeaderProps` and a styled component using `StyleSheet.create`.

```
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương
2 import React from 'react';
3 import { View, Text, StyleSheet } from 'react-native';
4
5 You, 3 days ago | 1 author (You)
6 interface HeaderProps {
7   title: string;
8 }
9
10 const Header = ({ title }: HeaderProps) => {
11   return (
12     <View style={styles.header}>
13       <Text style={styles.headerTitle}>{title}</Text>
14     </View>
15 );
16
17 const styles = StyleSheet.create({
18   header: {
19     backgroundColor: '#3598DB',
20     paddingVertical: 20,
21     paddingHorizontal: 20,
22     alignItems: 'center',
23   },
24   // 22521172 - Võ Nhất Phương
25   headerTitle: {
26     fontsize: 20,
```

Below the code editor, there is a navigation bar with tabs: Output, Debug Console, Terminal (10), Ports, GitLens, Spell Checker (10). The Terminal tab is active. To the right of the terminal tab, there are icons for closing and minimizing the window.

The terminal window below the navigation bar shows the command `powershell` selected. The status bar at the bottom indicates the project name `SocialMediaApp`.

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with the following content:

```
BTTH2 > SocialMediaApp > components > Header.tsx > Header
17 const styles = StyleSheet.create({
18   header: {
19     alignItems: 'center',
20   },
21   // 22521172 - Võ Nhất Phương
22   headerTitle: {
23     fontSize: 20,
24     fontWeight: 'bold',
25     color: '#fff',
26     marginTop: 15,
27   },
28 });
29
30 );
31 });
32
33 export default Header;
34
35
```

The code defines a style sheet for a header component. It includes a header style with center alignment and a headerTitle style with bold font, white color, and a margin of 15 pixels. The file ends with an export statement.

Below the code editor, the VS Code interface is visible with the following tabs:

- Output
- Debug Console
- Terminal 10
- Ports
- GitLens
- Spell Checker 10

The Terminal tab is active, showing the following content:

- Filter (e.g. text, **/*.ts, !**/node...)
- Press ? | show all commands
- powershell
- 22521172 SocialMediaApp

A message at the bottom of the terminal says: "Logs for your project will appear below".

1.6. Nội dung file components/UserInfo.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > SocialMediaApp > components > UserInfo.tsx > [ ] UserInfo
You, 2 minutes ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương
2 import React from 'react';
3 import { View, Text, Image, StyleSheet } from 'react-native';
4
5 You, 3 days ago | 1 author (You)
6 interface UserInfoProps {
7   avatar: any;
8   username: string;
9 }
10 const UserInfo = ({ avatar, username }: UserInfoProps) => {
11   return (
12     <View style={styles.container}>
13       <Image source={avatar} style={styles.avatar} resizeMode="cover" /> You, 2 minutes ago
14       <Text style={styles.username}>{username}</Text>
15     </View>
16   );
17 };
18
19 const styles = StyleSheet.create({
20   container: {
21     flexDirection: 'row',
22     alignItems: 'center',
23     marginBottom: 12,
24   },
25   avatar: {
26     width: 50,

```

Output Debug Console Terminal 9 Ports GitLens Spell Checker 9 ... ^ x

PROBLEMS TERMINAL

Filter (e.g. text, **/*.ts, !**/node...)

> Press ? | show all commands

powershell

22521172 SocialMediaApp

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with the following content:

```
BTTH2 > SocialMediaApp > components > ✨ UserInfo.tsx > [!] UserInfo
19 const styles = StyleSheet.create({
20   },
21   avatar: {
22     width: 50,
23     height: 50,
24     borderRadius: 25,
25     marginRight: 12,
26   },
27   // 22521172 - Võ Nhã Phương
28   username: {
29     fontSize: 16,
30     fontWeight: 'bold',
31     color: '#333',
32   },
33 });
34
35 export default UserInfo;
36
37
38
39
40
41
```

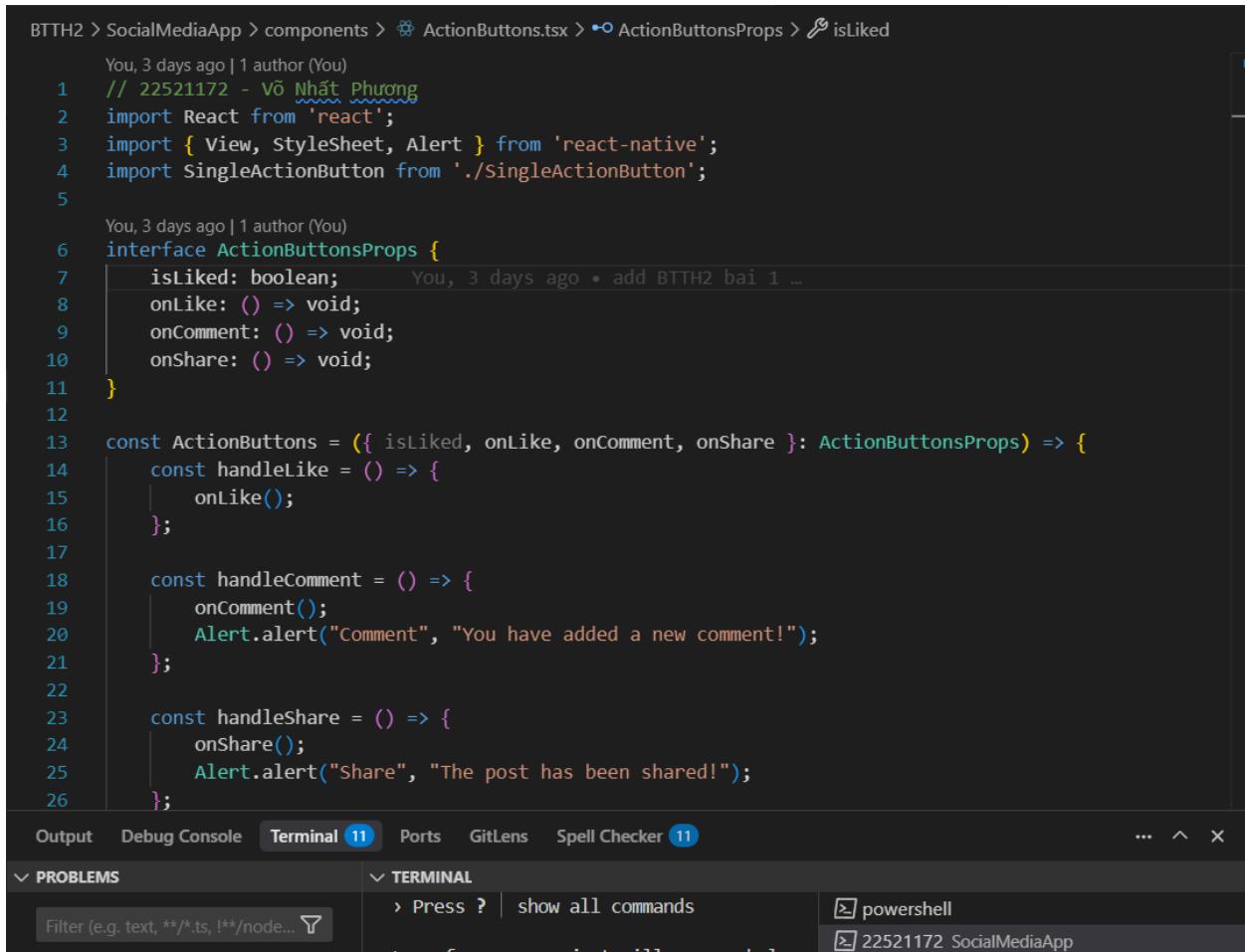
The code defines a StyleSheet named 'styles' with two rules: 'avatar' and 'username'. The 'avatar' rule sets width, height, border-radius, and margin-right. The 'username' rule sets font-size, font-weight, and color. The file ends with an export statement.

Below the code editor, the VS Code interface includes:

- Output, Debug Console, Terminal (9), Ports, GitLens, Spell Checker (9) tabs.
- PROBLEMS panel: Filter (e.g. text, **/*.ts, !**/node...)
- TERMINAL panel: powershell, 22521172 SocialMediaApp

1.7. Nội dung file components/ActionButtons.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



```
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương
2 import React from 'react';
3 import { View, StyleSheet, Alert } from 'react-native';
4 import SingleActionButton from './SingleActionButton';
5
6 You, 3 days ago | 1 author (You)
7 interface ActionButtonsProps {
8   isLiked: boolean;
9   onLike: () => void;
10  onComment: () => void;
11  onShare: () => void;
12 }
13 const ActionButtons = ({ isLiked, onLike, onComment, onShare }: ActionButtonsProps) => {
14   const handleLike = () => {
15     onLike();
16   };
17
18   const handleComment = () => {
19     onComment();
20     Alert.alert("Comment", "You have added a new comment!");
21   };
22
23   const handleShare = () => {
24     onShare();
25     Alert.alert("Share", "The post has been shared!");
26   };
}
Output Debug Console Terminal 11 Ports GitLens Spell Checker 11 ... ^ x
PROBLEMS TERMINAL
Filter (e.g. text, **/*.ts, !**/node... ) > Press ? | show all commands
powershell
22521172 SocialMediaApp
Logs for your project will appear here.
```

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

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

- File:** BTTH2 > SocialMediaApp > components > ActionButtons.tsx
- Code Content:** The code defines a functional component `ActionButtons` that returns a view containing three `SingleActionButton` components. The first two have `isLiked` props set to `true` or `false` respectively, while the third has `isLiked` set to the state variable `isLiked`.
- Terminal:** The terminal shows a commit message: `// 22521172 - Võ Nhất Phương` followed by the date and time: `You, 1 second ago • Uncommitted changes`.
- Bottom Terminal:** The bottom terminal shows the command `powershell` and the project name `22521172 SocialMediaApp`.
- Code Below:** Below the main code block, there is another code snippet for `ActionButton.tsx` which defines a style sheet `styles` with a `container` rule.
- Bottom Terminal:** The bottom terminal shows the command `powershell` and the project name `22521172 SocialMediaApp`.

1.8. Nội dung file components/ActionButton.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > SocialMediaApp > components > SingleActionButton.tsx > SingleActionButton
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương
2 import React from 'react';
3 import { Pressable, Text, StyleSheet } from 'react-native';
4 import { FontAwesome } from '@expo/vector-icons';
5
6 You, 3 days ago | 1 author (You)
7 interface SingleActionButtonProps {
8   icon: string;
9   label: string;
10  onPress: () => void;
11  isActive?: boolean;
12}
13
14 const singleActionButton = ({ icon, label, onPress, isActive = false }: SingleActionButtonProps) => {
15  return (
16    <Pressable style={styles.actionButton} onPress={onPress}>
17      <FontAwesome
18        name={icon as any} size={18}
19        style={[styles.icon, isActive ? styles.iconActive : styles.iconDefault]}
20      />
21      <Text style={[styles.actionButtonText, isActive && styles.activeText]}>
22        {label}
23      </Text>
24    </Pressable>
25  );
26};
```

Output Debug Console Terminal 18 Ports GitLens Spell Checker 18 ... ^ x

PROBLEMS

TERMINAL

> Press ? | show all commands

powershell

22521172 SocialMediaApp

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
28 // 22521172 - Võ Nhật Phương
29 const styles = StyleSheet.create({
30   actionBar: {
31     flex: 1,
32     flexDirection: 'row',
33     paddingVertical: 6,
34     paddingHorizontal: 12,
35     alignItems: 'center',
36     justifyContent: 'center',
37     borderRadius: 8,
38     marginHorizontal: 4,
39   },
40   icon: {
41     marginRight: 6,
42   },
43   iconActive: {
44     color: '#1976d2',
45   },
46   iconDefault: {
47     color: '#666',
48   },
49   actionBarText: {
50     fontSize: 13,
51     fontWeight: '600',
52     color: '#666',
53   },
54   activeText: {
55     color: '#1976d2',
56   },
57 });
58
59 export default SingleActionButton;
60
61
```

Output Debug Console Terminal 18 Ports GitLens Spell Checker 18 ... ^ x

PROBLEMS

Filter (e.g. text, **"/.ts, !**/node_modules/***)

TERMINAL

Press ? | show all commands

powershell

22521172 SocialMediaApp

1.9. Nội dung file components/PostCard.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > SocialMediaApp > components > PostCard.tsx > PostCard
You, 6 minutes ago | 1 author (You)
1 // 22521172 - Võ Nhật Phương
2 import React, { useState } from 'react';
3 import { View, Text, Image, StyleSheet } from 'react-native';
4 import UserInfo from './UserInfo';
5 import Stats from './Stats';
6 import ActionButtons from './ActionButtons';
7
8 You, 3 days ago | 1 author (You)
9 interface Post {
10   id: number;
11   username: string;
12   avatar: any;
13   content: string;
14   image: any;
15   likes: number;
16   comments: number;
17   shares: number;
18   isLiked: boolean;
19 }
20
21 interface PostCardProps {
22   post: Post;
23   onUpdatePost: (postId: number, updates: any) => void;
24 }
25
26 const PostCard = ({ post, onUpdatePost }: PostCardProps) => {
27   const [isLiked, setIsLiked] = useState(post.isLiked);
28   const [likeCount, setLikeCount] = useState(post.likes);
29   const [commentCount, setCommentCount] = useState(post.comments);
30   const [shareCount, setShareCount] = useState(post.shares);
31
32   // 22521172 - Võ Nhật Phương
33   const handleLike = () => {
34     if (isLiked) {
35       setIsLiked(false);
36       setLikeCount(likeCount + 1);
37       setCommentCount(commentCount + 1);
38       setShareCount(shareCount + 1);
39       onUpdatePost(post.id, { isLiked: false, likes: likeCount + 1, comments: commentCount + 1, shares: shareCount + 1 });
40     } else {
41       setIsLiked(true);
42       setLikeCount(likeCount - 1);
43       setCommentCount(commentCount - 1);
44       setShareCount(shareCount - 1);
45       onUpdatePost(post.id, { isLiked: true, likes: likeCount - 1, comments: commentCount - 1, shares: shareCount - 1 });
46     }
47   };
48
49   return (
50     <View>
51       <Image source={post.image}>
52       <Text>{post.username}</Text>
53       <Text>{post.content}</Text>
54       <Text>{post.likes}</Text>
55       <Text>{post.comments}</Text>
56       <Text>{post.shares}</Text>
57       <Text>{isLiked ? 'Like' : 'Unlike'}</Text>
58     </View>
59   );
60 }
```

Output Debug Console Terminal 26 Ports GitLens Spell Checker 26 ... ^ x

PROBLEMS TERMINAL

Filter (e.g. text, **/*.ts, !**/node_modules/**)

> Press ? | show all commands

powershell

22521172 SocialMediaApp

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > SocialMediaApp > components > PostCard.tsx > PostCard
25  const PostCard = ({ post, onUpdatePost }: PostCardProps) => {
26
27  // 22521172 - Võ Nhật Phương
28  const handleLike = () => {
29    if (isLiked) {
30      setIsLiked(false);
31      setLikeCount(likeCount - 1);
32      onUpdatePost(post.id, { isliked: false, likes: likeCount - 1 });
33    } else {
34      setIsLiked(true);
35      setLikeCount(likeCount + 1);
36      onUpdatePost(post.id, { isliked: true, likes: likeCount + 1 });
37    }
38  };
39
40  const handleComment = () => {
41    setCommentCount(commentCount + 1);
42    onUpdatePost(post.id, { comments: commentCount + 1 });
43  };
44
45  const handleShare = () => {
46    setShareCount(shareCount + 1);
47    onUpdatePost(post.id, { shares: shareCount + 1 });
48  };
49
50  return (
51    <View style={styles.postContainer}>
52      <UserInfo avatar={post.avatar} username={post.username} />
53
54      <Text style={styles.content}>{post.content}</Text>
55
56      <Image source={post.image} style={styles.postImage} resizeMode="cover" /> You, 6 minutes ago * Uncommitted changes
57
58      {/* 22521172 - Võ Nhật Phương */}
59      <Stats likes={likeCount} comments={commentCount} shares={shareCount} />
60    </View>
61  );
62
63  /* 22521172 - Võ Nhật Phương */
64
```

Output Debug Console Terminal 26 Ports GitLens Spell Checker 26 ... ^ x

PROBLEMS TERMINAL Filter (e.g. text, **/*.ts, !**/node_modules/**) Press ? | show all commands powershell 22521172 SocialMediaApp

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > SocialMediaApp > components > PostCard.tsx > PostCard
```

```
25  const PostCard = ({ post, onUpdatePost }: PostCardProps) => {
62    /* 22521172 - Võ Nhật Phương */
63    <Stats likes={likeCount} comments={commentCount} shares={shareCount} />
64
65    <View style={styles.separator} />
66
67    <ActionButtons
68      isLiked={isLiked}
69      onLike={handleLike}
70      onComment={handleComment}
71      onShare={handleShare}
72    />
73  </View>
74);
75};
76
77 const styles = StyleSheet.create({
78   postContainer: {
79     backgroundColor: '#fff',
80     marginVertical: 8,
81     marginHorizontal: 16,
82     borderRadius: 12,
83     padding: 16,
84     shadowColor: '#000',
85     shadowOffset: {
86       width: 0,
87       height: 2,
88     },
89     shadowOpacity: 0.1,
90     shadowRadius: 3.84,
91     elevation: 5,
92   },
93   content: {
94     fontSize: 14,
95     color: '#333',
96     marginBottom: 12,
97   }
98 });
99
```

Output Debug Console Terminal 26 Ports GitLens Spell Checker 26 ... ^ x

PROBLEMS TERMINAL

Filter (e.g. text, **/*.ts, !**/node_modules/**)

> Press ? | show all commands

powershell

Logs for your project will appear below. Press Ctrl+C to exit.

22521172 SocialMediaApp

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor interface with the following details:

- File Path:** BTTH2 > SocialMediaApp > components > PostCard.tsx
- Code Content:** The code defines a styles object using StyleSheet.create. It includes styles for postContainer, content, postImage, and separator components. A comment in the code indicates it was written by Võ Nhất Phương.
- Code Lines:** Lines 77 to 115 are visible, ending with the export default statement.
- Toolbars:** The bottom toolbar includes tabs for Output, Debug Console, Terminal (26), Ports, GitLens, Spell Checker (26), and other developer tools.
- Terminal:** The terminal section shows a powershell session for user 22521172 in the SocialMediaApp project.

1.10. Nội dung file components/PostList.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
You, 1 second ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương
2 import React, { useState } from 'react';
3 import { View, ScrollView, StyleSheet, SafeAreaView } from 'react-native';
4 import PostCard from './PostCard';
5 import Header from './Header';
6 import { postsData } from '../data/posts';
7
8 const PostList = () => {
9   const [posts, setPosts] = useState(postsData);
10
11   const handleUpdatePost = (postId: number, updates: any) => {
12     setPosts(prevPosts =>
13       prevPosts.map(post =>
14         post.id === postId ? { ...post, ...updates } : post
15       )
16     );
17   };
18
19   return (
20     <SafeAreaView style={styles.container}>
21       <Header title="Social Media Feed" />
22
23       <ScrollView
24         style={styles.scrollView}
25         showsVerticalScrollIndicator={false}
26         contentContainerStyle={styles.scrollContent}
27       >
28         {posts.map(post => (
29           <PostCard
30             key={post.id}
31             post={post}
32             onUpdatePost={handleUpdatePost}
33           />
34         )));
35       </ScrollView>
36     </SafeAreaView>
37   );
38 };

```

Output Debug Console Terminal 30 Ports GitLens Spell Checker 30

PROBLEMS

- app.json BTTH2\Settings 1
- "settingsapp": Unknown cSpell [Ln 8, Col 16]

TERMINAL

powershell

22521172 SocialMediaApp

```
// 22521172 - Võ Nhất Phương
const styles = StyleSheet.create({
  container: {
    flex: 1,
    backgroundColor: '#f5f5f5',
  },
  scrollView: {
    flex: 1,
  },
  scrollContent: {
    paddingBottom: 20,
  },
});
export default PostList;
```

Output Debug Console Terminal 30 Ports GitLens Spell Checker 30

PROBLEMS

- app.json BTTH2\Settings 1
- "settingsapp": Unknown cSpell [Ln 8, Col 16]

TERMINAL

powershell

22521172 SocialMediaApp

1.11. Nội dung file components/StatItem.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > SocialMediaApp > components > StatItem.tsx > ...
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương
2 import React from 'react';
3 import { Text, StyleSheet } from 'react-native';
4
5 You, 3 days ago | 1 author (You)
6 interface StatItemProps {
7   text: string;
8 }
9 const StatItem = ({ text }: StatItemProps) => {
10   return <Text style={styles.statsText}>{text}</Text>;
11 };
12
13 const styles = StyleSheet.create({
14   statsText: {
15     flex: 1,
16     fontSize: 13,
17     color: '#A0A1A0',
18     fontWeight: '500',
19     textAlign: 'center',
20   },
21 });
22
23 export default StatItem;
24
25
```

Output Debug Console Terminal 32 Ports GitLens Spell Checker 32 ... ^ x

PROBLEMS

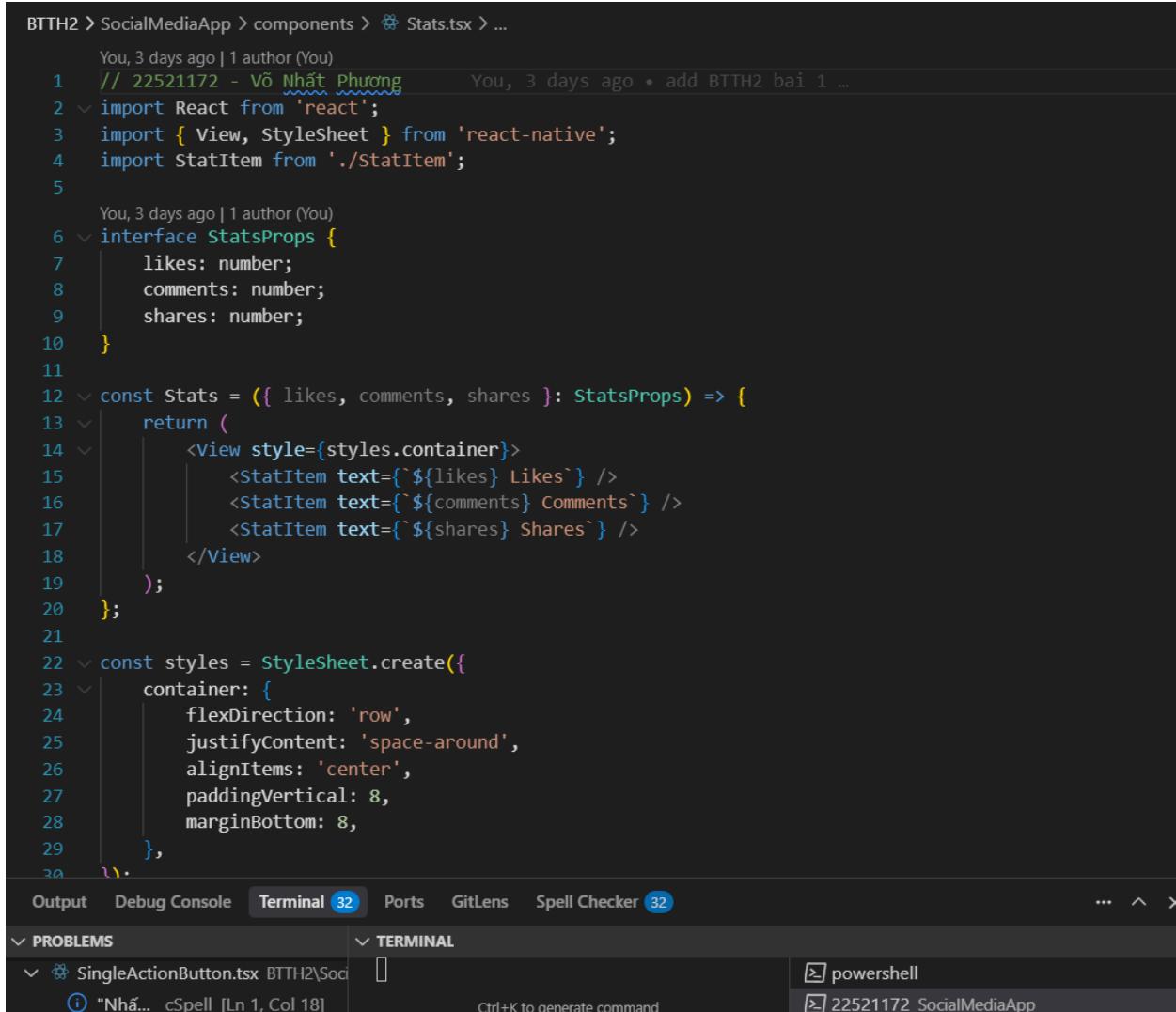
app.json BTTH2\Settings 1
"setti... cSpell [Ln 8, Col 16]

TERMINAL

powershell
22521172 SocialMediaApp

1.12. Nội dung file components/Stats.tsx

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



```
BTTH2 > SocialMediaApp > components > Stats.tsx > ...
You, 3 days ago | 1 author (You)
1 // 22521172 - Võ Nhất Phương You, 3 days ago • add BTTH2 bai 1 ...
2 import React from 'react';
3 import { View, StyleSheet } from 'react-native';
4 import StatItem from './StatItem';
5
6 You, 3 days ago | 1 author (You)
7 interface StatsProps {
8   likes: number;
9   comments: number;
10  shares: number;
11 }
12 const Stats = ({ likes, comments, shares }: StatsProps) => {
13   return (
14     <View style={styles.container}>
15       <StatItem text={`${likes} Likes`} />
16       <StatItem text={`${comments} Comments`} />
17       <StatItem text={`${shares} Shares`} />
18     </View>
19   );
20 };
21
22 const styles = StyleSheet.create({
23   container: {
24     flexDirection: 'row',
25     justifyContent: 'space-around',
26     alignItems: 'center',
27     paddingVertical: 8,
28     marginBottom: 8,
29   },
30 });
Output  Debug Console  Terminal 32  Ports  GitLens  Spell Checker 32  ...  ^  ×
PROBLEMS  TERMINAL
SingleActionButton.tsx BTTH2\Soc  powershell
① "Nhă... cSpell [Ln 1, Col 18]  Ctrl+K to generate command  22521172 SocialMediaApp
```

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor interface with a dark theme. A file named 'SingleActionButton.tsx' is open, displaying the following code:

```
23     container: {
24         justifyContent: 'space-around',
25         alignItems: 'center',
26         paddingVertical: 8,
27         marginBottom: 8,
28     },
29 );
30 );
31 export default Stats;
32
33
34
```

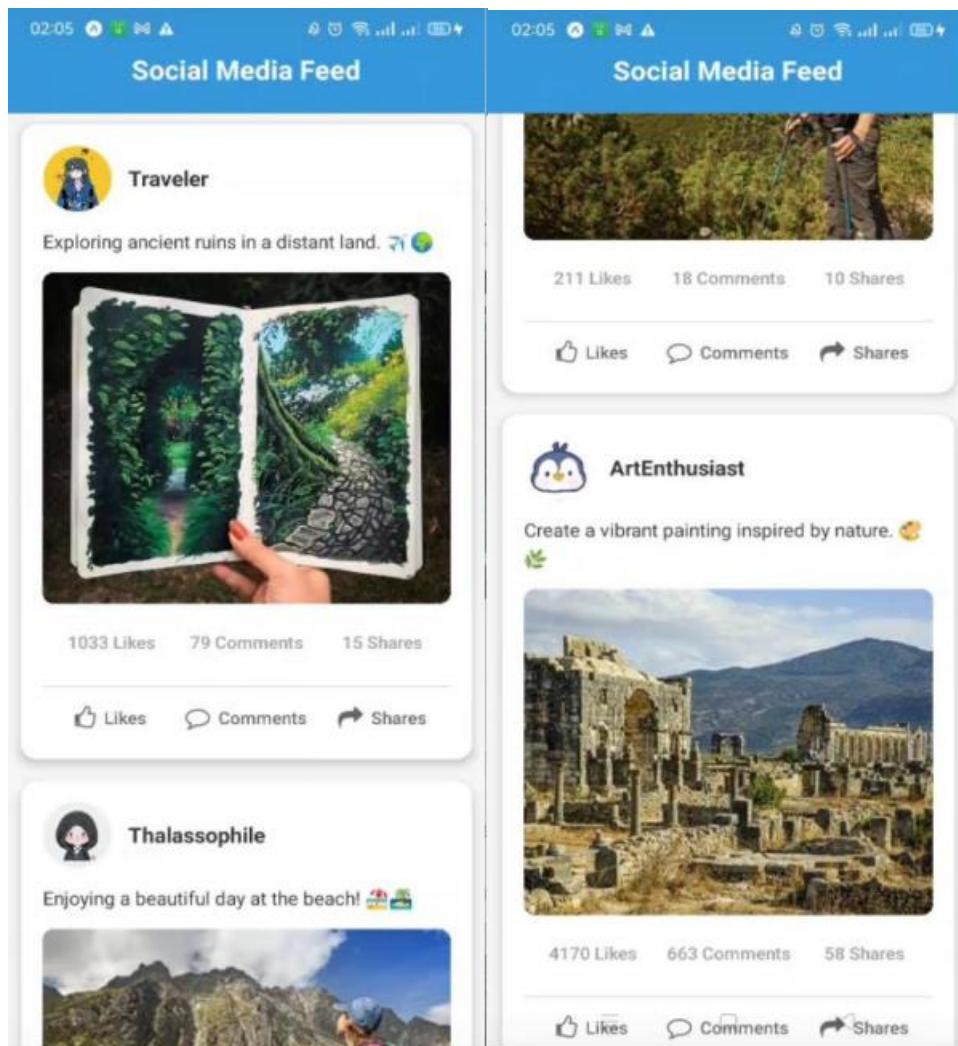
Below the code editor, the VS Code interface includes a navigation bar with tabs for Output, Debug Console, Terminal (32), Ports, GitLens, and Spell Checker (32). The Terminal tab is active, showing a list of recent sessions:

- PROBLEMS
- TERMINAL
- SingleActionButton.tsx BTTH2\SocialMediaApp "Nhá... cSpell [Ln 1, Col 18]
- powershell
- 22521172_SocialMediaApp

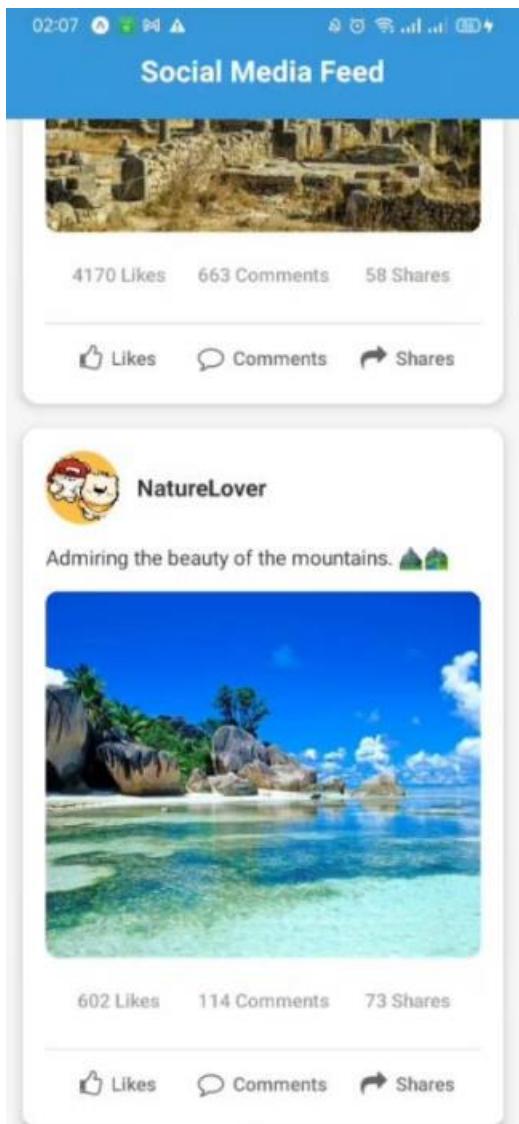
1.13. Màn hình kết quả

- Giao diện chính

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

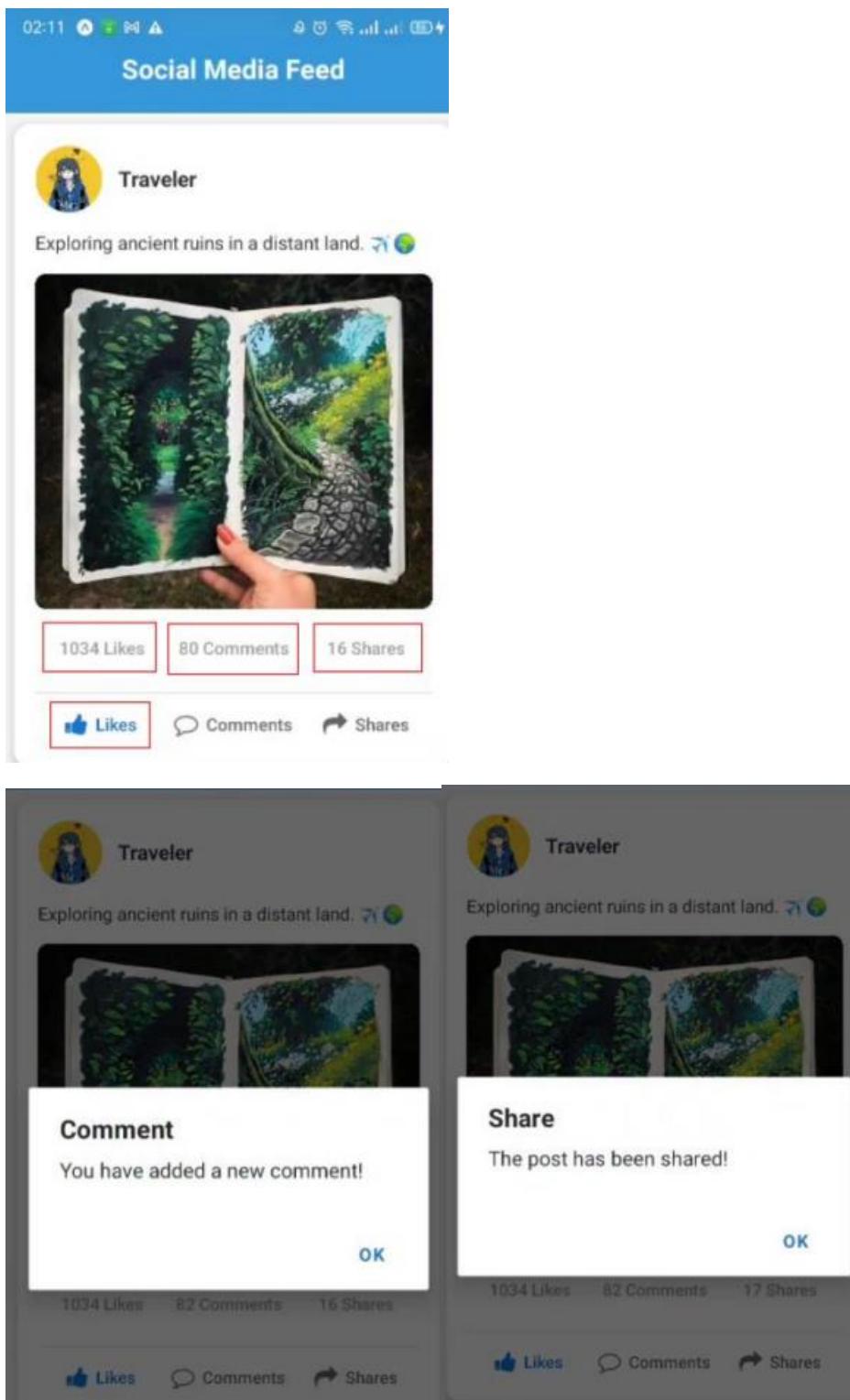


Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



- Các tương tác

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



1.14. Video màn hình kết quả

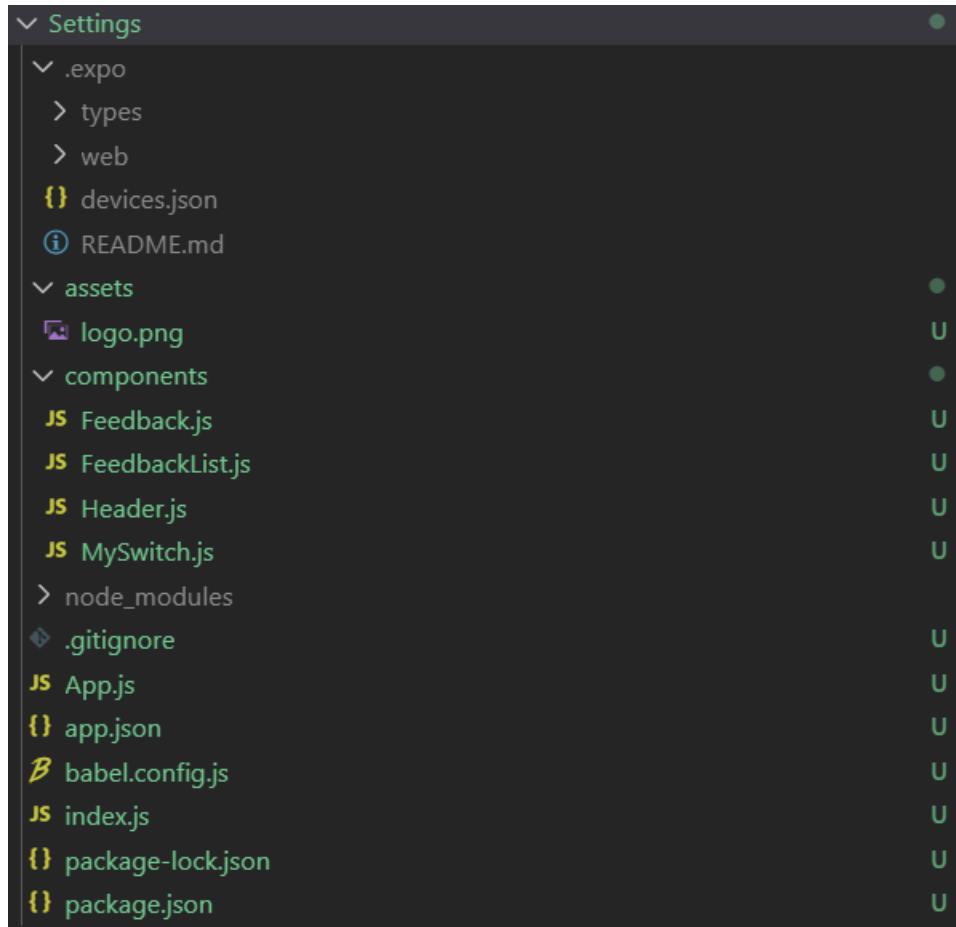
- Link video màn hình kết quả:

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

https://drive.google.com/file/d/1S_Ga6gGjNRV8VeqPg9sOcIx0HOIkGion/view?usp=sharing

2. Bài 2: Settings and Feedback

2.1. Cấu trúc các folders / files của dự án.



2.2. Nội dung file index.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

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

- File:** BTTH2 > Settings > **JS** index.js
- Code Content:**

```
1 // 22521172 - Vo Nhat Phuong
2 import { registerRootComponent } from 'expo';
3 import App from './App';
4
5 registerRootComponent(App);
6
7
```
- Terminal Tab:** Terminal (65) shows the command "on CPH1931" and the message "Press ? | show all commands". It also lists "powershell" and "22521172 Settings".
- Output Tab:** Output, Debug Console, Ports, GitLens, Spell Checker (65) are visible.

2.3. Nội dung file App.js

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

- File:** BTTH2 > Settings > **JS** App.js > ...
- Code Content:**

```
You, 1 second ago | 1 author (You)
1 // 22521172 - Vo Nhat Phuong
2 import React, { useState } from 'react';
3 import { StyleSheet, View, StatusBar, ScrollView } from 'react-native';
4 import MySwitch from './components/MySwitch';
5 import Header from './components/Header';
6 import Feedback from './components/Feedback';
7 import FeedbackList from './components/FeedbackList';
8
9 export default function App() {
10   const [darkMode, setMode] = useState(false);
11   const [Notif, setNotif] = useState(true);
12   const [feedback, setFeedback] = useState([ ]);
13
14   const addFeedback = (value) => {
15     setFeedback(preFb => [value, ...preFb]);
16   };
17
18   const changeMode = () => setMode(previousState => !previousState);
19   const enableNotif = () => setNotif(previousState => !previousState);
20
21   const styles = StyleSheet.create({
22     container: {
23       flex: 1,
24       backgroundColor: darkMode === false ? "#ffff" : "#000000",
25       padding: 30,
26     },
27   });
28 // 22521172 - Vo Nhat Phuong
29   return (
30     <View style={styles.container}>
31       <StatusBar barStyle={darkMode ? "light-content" : "dark-content"} />
32       <ScrollView showsVerticalScrollIndicator={false}>
33         <Header darkMode={darkMode} source={require("./assets/logo.png")}>/>
34         <MySwitch darkMode={darkMode} title='Dark Mode' funct={changeMode} value={darkMode}>/>
35         <MySwitch darkMode={darkMode} title='Notifications' funct={enableNotif} value={Notif}>/>
36         <Feedback darkMode={darkMode} notif={Notif} funct={addFeedback}>/>
37         <FeedbackList darkMode={darkMode} data={feedback}>/>
38       </ScrollView>
39     </View>
40   );
}
```

2.3. Nội dung file components/Header.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows the VS Code interface with two tabs of code. The top tab is `Header.js` containing the following code:

```
// 22521172 - Vo Nhat Phuong
import React from 'react';
import { StyleSheet, Text, View, Image } from 'react-native';

export default function Header({ darkMode, source }) {
  const styles = StyleSheet.create({
    header: {
      height: 180,
      justifyContent: 'center',
      alignItems: 'center',
      marginBottom: 10,
    },
    logo: {
      width: 100,
      height: 100,
      borderRadius: 50,
    },
    title: {
      fontSize: 18,
      fontWeight: 'bold',
      color: darkMode === false ? "#000000" : "#fff",
      marginTop: 12,
      letterSpacing: 0.5,
    }
  });
}

Output Debug Console Terminal 67 Ports GitLens Spell Checker 67 ... ^ x
```

The bottom tab shows the rendered output of the component:

```
// 22521172 - Vo Nhat Phuong
return (
  <View style={styles.header}>
    <Image source={source} style={styles.logo} resizeMode="cover" />
    <Text style={styles.title}>
      | React Native App
      |</Text>
    </View>
)
```

The terminal pane shows a warning message:

[WARN] SafeAreaView has been deprecated and will be removed in a future release. Please use 'react-native-safe-area-context' instead. See [API](#) SafeAreaView has been deprecated and will be removed in a future release.

Output Debug Console Terminal 69 Ports GitLens Spell Checker 69 ... ^ x

PROBLEMS TERMINAL Filter (e.g. text, **/*.ts, !**/node_module...) powershell 22521172 Settings

JS App.js BTTH2\Settings 15

2.4. Nội dung file components/MySwitch.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows the code editor with the file `MySwitch.js` open. The code defines a component `MySwitch` that takes parameters `darkMode`, `title`, `funct`, and `value`. It uses `StyleSheet.create` to define styles for a `View` and a `Switch`. The `View` style includes `flexDirection: 'row'`, `justifyContent: 'space-between'`, `alignItems: 'center'`, `paddingVertical: 6`, and `paddingHorizontal: 5`. The `Switch` style includes `trackColor={[false: "#C8C8C8", true: "#27DC0D"]}`, `thumbColor="#fff"`, `onValueChange={funct}`, and `value={value}`. The `title` prop is passed to a `Text` component inside the `View`.

```
BTTH2 > Settings > components > JS MySwitch.js > MySwitch > switch > paddingVertical
1 // 22521172 - Vo Nhat Phuong
2 import React from 'react';
3 import { StyleSheet, Text, View, Switch } from 'react-native';
4
5 export default function MySwitch({ darkMode, title, funct, value }) {
6   const styles = StyleSheet.create({
7     switch: {
8       flexDirection: 'row',
9       justifyContent: 'space-between',
10      alignItems: 'center',
11      paddingVertical: 6,
12      paddingHorizontal: 5,
13    },
14    switchName: {
15      fontSize: 16,
16      fontWeight: '500',
17      color: darkMode === false ? "#000000" : "#fff",
18    }
19  });
20
21  return (
22    <View style={styles.switch}>
23      <Text style={styles.switchName}>
24        {title}
25      </Text>
26      <Switch
27        trackColor={[ false: "#C8C8C8", true: "#27DC0D" ]}
28        thumbColor="#fff"
29        onValueChange={funct}
30        value={value}
31      />
32    </View>
33  );
34}
35
```

Output Debug Console Terminal 69 Ports GitLens Spell Checker 69 PROBLEMS TERMINAL Filter (e.g. text, **"/ts, !**/node_modules/***) powershell 22521172 Settings

2.5. Nội dung file components/Feedback.js

The screenshot shows the code editor with the file `Feedback.js` open. The code defines a component `Feedback` that takes parameters `darkMode`, `notif`, and `funct`. It uses `useState` to manage the `value` state. The component contains a `View` with a `TextInput`, a `Text` for feedback, and a `Button`. The `TextInput` has a height of 120, a border width of 2, and a radius of 10. The `Text` has a font size of 20, bold weight, and a margin between 12 and 10. The `Button` has a background color of #007AFF, a padding vertical of 12, a border radius of 8, and align items set to center.

```
BTTH2 > Settings > components > JS Feedback.js > Feedback
1 // 22521172 - Vo Nhat Phuong
2 import React, { useState } from 'react';
3 import { StyleSheet, Text, View, TextInput, Keyboard, TouchableOpacity, Alert } from 'react-native';
4
5 export default function Feedback({ darkMode, notif, funct }) {
6   const [value, setValue] = useState("");
7
8   const styles = StyleSheet.create({
9     container: {
10       height: 120,
11       borderColor: "#c4bebe",
12       borderWidth: 2,
13       borderRadius: 10,
14       backgroundColor: darkMode === false ? "#fff" : "#212121",
15       marginBottom: 10,
16     },
17     textInput: {
18       padding: 15,
19       color: darkMode === false ? "#000000" : "#fff",
20       flex: 1,
21     },
22     feedbackText: {
23       fontSize: 20,
24       fontWeight: 'bold',
25       color: darkMode === false ? "#000000" : "#fff",
26       marginBottom: 12,
27       marginTop: 10,
28     },
29     button: {
30       backgroundColor: "#007AFF",
31       paddingVertical: 12,
32       borderRadius: 8,
33       alignItems: 'center',
34       marginTop: 8,
35     },
36   });
37
38   return (
39     <View style={styles.container}>
40       <TextInput style={styles.textInput} value={value} onChangeText={text => setValue(text)} />
41       <Text style={styles.feedbackText}>{notif}</Text>
42       <TouchableOpacity style={styles.button} onPress={funct}>
43         <Text>OK</Text>
44       </TouchableOpacity>
45     </View>
46   );
47 }
48
```

Output Debug Console Terminal 69 Ports GitLens Spell Checker 69 PROBLEMS TERMINAL Filter (e.g. text, **"/ts, !**/node_modules/***) powershell 22521172 Settings

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
36 // 22521172 - Vo Nhât Phuong
37     buttonText: {
38         color: '#fff',
39         fontSize: 16,
40         fontWeight: 'bold',
41     }
42 });
43
44 return (
45     <View>
46         <Text style={styles.feedbackText}>
47             Feedback
48         </Text>
49         <View style={styles.container}>
50             <TextInput
51                 editable
52                 placeholder='Your feedback here...'
53                 placeholderTextColor={darkMode === false ? "#000000" : "#ffffff"}
54                 multiline={true}
55                 numberOfLines={4}
56                 style={styles.textInput}
57                 onChangeText={(text) => setValue(text)}
58                 value={value}
59                 onBlur={() => Keyboard.dismiss}
60             />
61         </View>
62         <TouchableOpacity
63             style={styles.button}
64             onPress={() => {
65                 if (value !== "") {
66                     if (notif === true) Alert.alert('Thank you for your feedback!', '', [
67                         { text: 'OK', onPress: () => console.log('OK Pressed') },
68                     ]);
69                     funct(value);
70                     setValue("");
71                 }
72             }}
73         >
74             <Text style={styles.buttonText}>SEND FEEDBACK</Text>
75         </TouchableOpacity>
76     </View>
77 );
78
79 }
80
81
```

The screenshot shows the VS Code interface with the FeedbackList.js file open. The code is identical to the one above. Below the editor, there is a terminal window showing the command "powershell". The status bar at the bottom indicates the file is 81 lines long.

```
62 /* 22521172 ~ Vo Nhât Phuong */
63 <TouchableOpacity
64     style={styles.button}
65     onPress={() => {
66         if (value !== "") {
67             if (notif === true) Alert.alert('Thank you for your feedback!', '', [
68                 { text: 'OK', onPress: () => console.log('OK Pressed') },
69             ]);
70             funct(value);
71             setValue("");
72         }
73     }}
74 >
75     <Text style={styles.buttonText}>SEND FEEDBACK</Text>
76 </TouchableOpacity>
77 </View>
78 );
79
80
81
```

This screenshot shows the same code as the previous one, but the terminal window now displays an error message: "back.js:81TH2\Settings\components\nhat: Unknown word. cspell [Line 1, Col 18]". The status bar at the bottom indicates the file is 75 lines long.

2.6. Nội dung file components/FeedbackList.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
1 // 22521172 - Vo Nhat Phuong
2 import React from 'react';
3 import { StyleSheet, ScrollView, View, Text } from 'react-native';
4
5 export default function FeedbackList({ darkMode, data }) {
6   const styles = StyleSheet.create({
7     container: {
8       marginTop: 10,
9       height: 250,
10    },
11    textTitle: {
12      marginTop: 15,
13      marginBottom: 10,
14      color: darkMode === false ? "#000000" : "#ffff",
15      fontSize: 20,
16      fontWeight: 'bold'
17    },
18    textScroll: {
19      color: darkMode === false ? "#000000" : "#ffff",
20      fontSize: 14,
21      paddingVertical: 8,
22      paddingHorizontal: 5,
23      lineHeight: 20,
24    }
25  });
26
27  return (
28    <View>
29      <Text style={styles.textTitle}>Frequently Asked Questions</Text>
30
31      <ScrollView style={styles.container}>
32        {data.map((feedback, index) => {
33          return (
34            <Text key={index} style={styles.textScroll}>Q: {feedback}</Text>
35          );
36        })}
37      </ScrollView>
38    </View>
39  );
40}
41
```

Output Debug Console Terminal 75 Ports GitLens Spell Checker 75

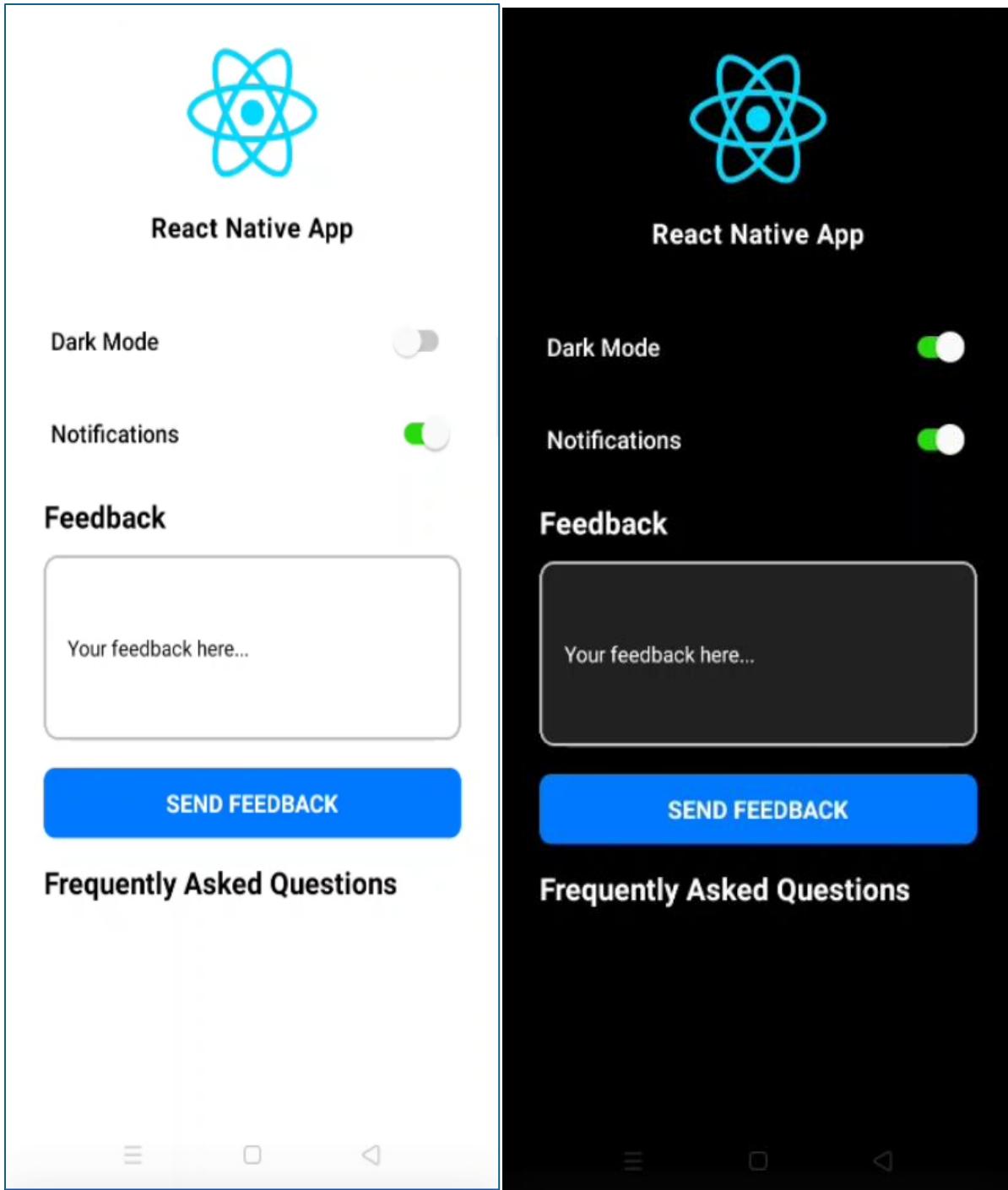
PROBLEMS back.js 8THH2\Settings\components 10 [thub.com/th3rdwave/react-native-safe-area-context](#) Ctrl+K to generate command

tall Now ihat": Unknown word. cSpell [Ln 1, Col 18]

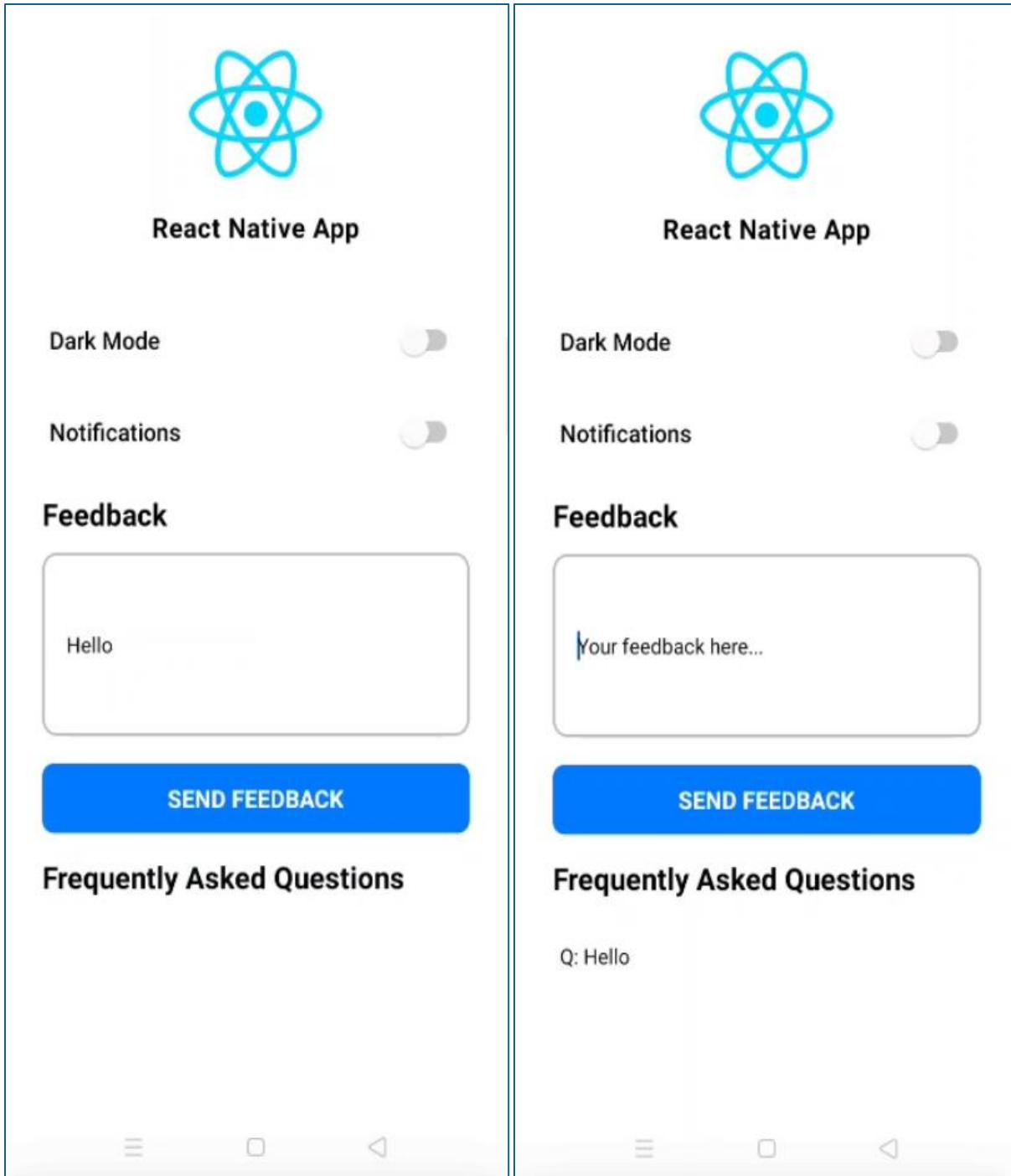
powershell 22521172 Settings

2.8. Màn hình kết quả

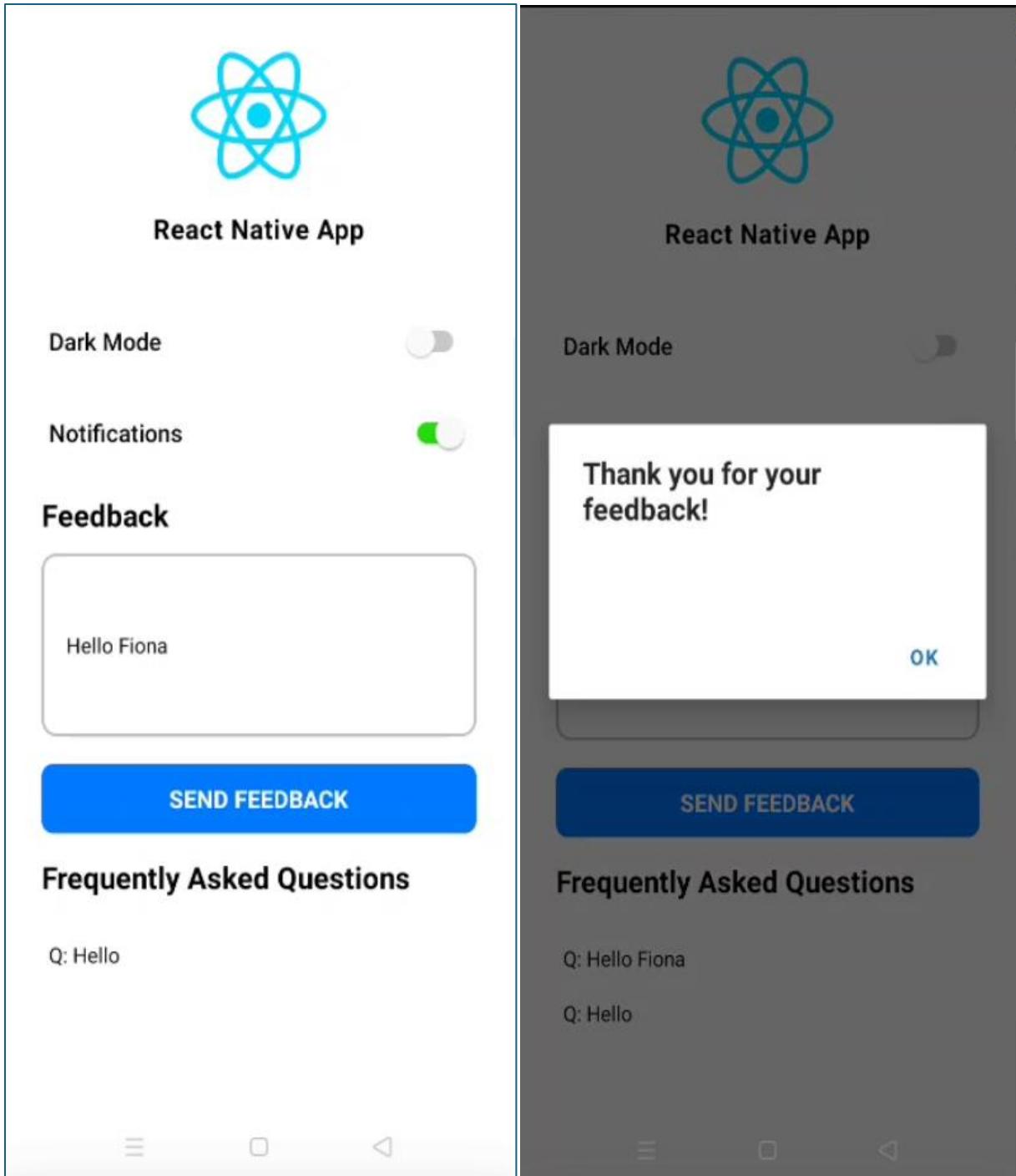
- Tắt / Bật chế độ tối



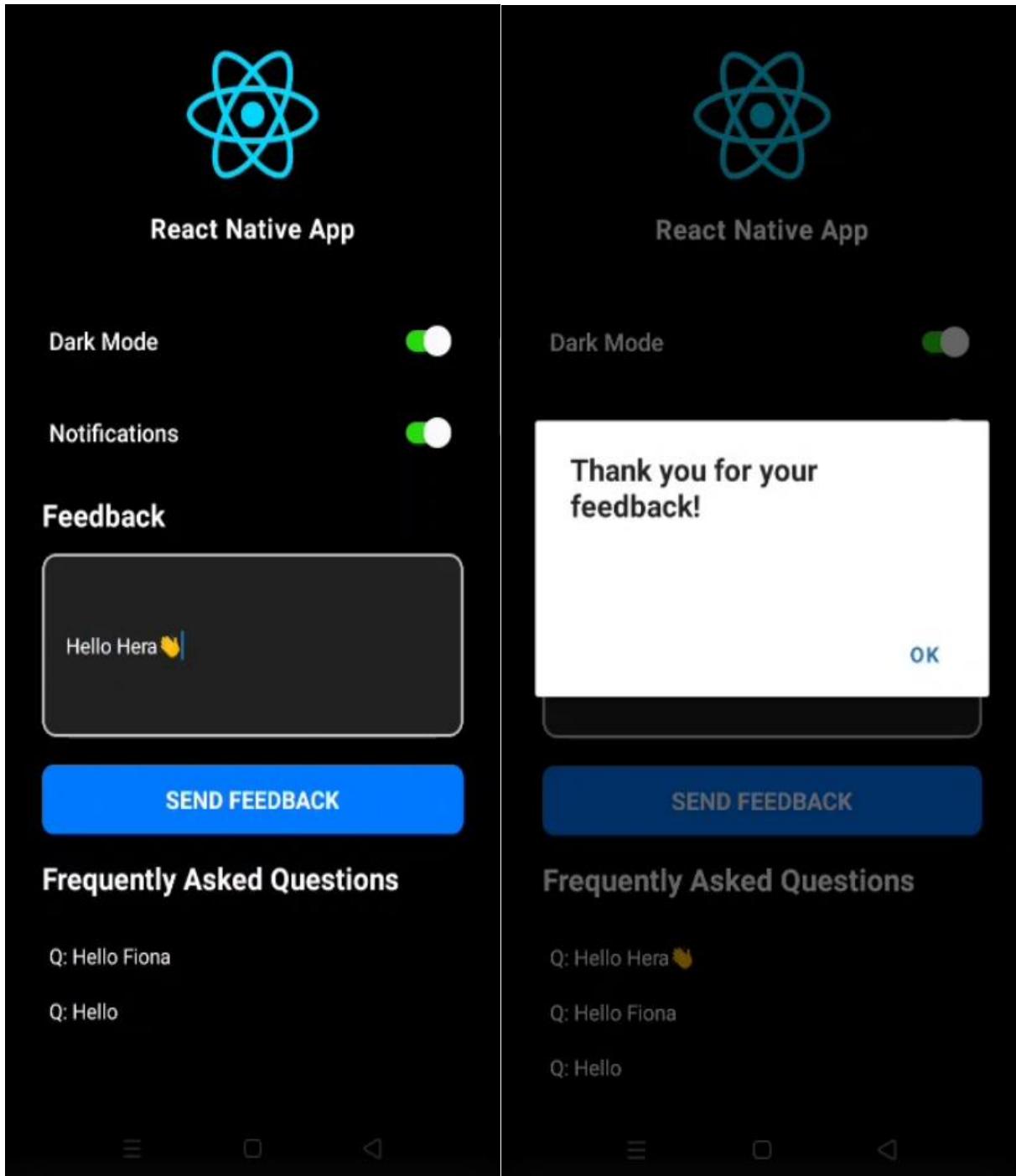
- Người dùng gửi phản hồi với công tắc thông báo đóng



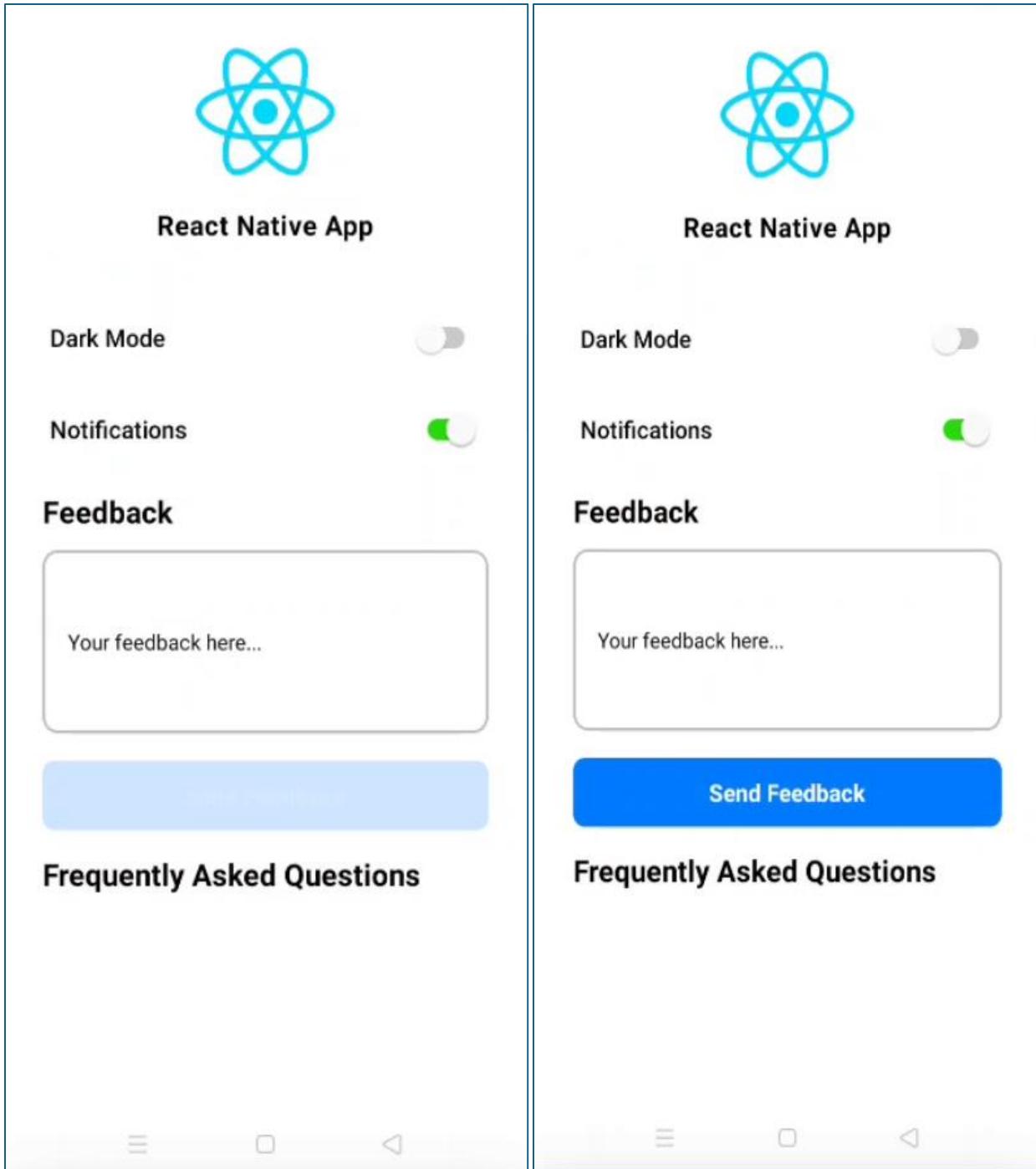
- Người dùng gửi phản hồi với công tắc thông báo bật



- Người dùng gửi phản hồi với công tắc thông báo bật và công tắc chế độ tối bật



- Người dùng không nhập thông tin phản hồi, khi nhấn nút gửi ứng dụng sẽ không thực hiện hành động gì



2.9. Video màn hình kết quả

- Link video màn hình kết quả:

https://drive.google.com/file/d/1uKehIvGyg9UmDOE3on_S2dbtbxl2Gt4q/view?usp=sharing

3. Bài 3: React Navigation

3.1. Cấu trúc các folders / files của dự án.

└─ ReactNavigation	●
└─ .expo	●
└─ assets	●
└─ adaptive-icon.png	U
└─ favicon.png	U
└─ fblcon.png	U
└─ googleicon.png	U
└─ icon.png	U
└─ logo.png	U
└─ splash.png	U
└─ context	●
└─ AuthContext.js	U
└─ navigations	●
└─ screens	●
└─ AuthComponent	●
└─ Footer.js	U
└─ Header.js	U
└─ InputContainer.js	U
└─ LogButton.js	U
└─ CategoryScreen.js	U
└─ FavoriteScreen.js	U
└─ HomeScreen.js	U
└─ LoginScreen.js	U
└─ ProfileScreen.js	U
└─ RegisterScreen.js	U
└─ AuthStack.js	U
└─ MainBottom.js	U
└─ node_modules	
└─ .gitignore	U
└─ App.js	U
└─ app.json	U
└─ babel.config.js	U
└─ index.js	U
└─ package-lock.json	U
└─ package.json	U

3.2. Nội dung file index.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor interface with a dark theme. At the top, there's a breadcrumb navigation bar: BTTH2 > ReactNavigation > **index.js**. Below this is the code editor area containing the following JavaScript code:

```
1 // 22521172 - Vo Nhat Phuong
2 import { registerRootComponent } from 'expo';
3 import App from './App';
4
5 registerRootComponent(App);
6
7
```

Below the code editor is a tab bar with several items: Output, Debug Console, **Terminal**, Ports, GitLens, and Spell Checker. The Terminal tab is selected. To its right is a small terminal window showing the command: `* logo.png`. The status bar at the bottom right of the terminal window displays the text: `22521172 ReactNavigation`.

3.3. Nội dung file context/AuthContext.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with a dark theme. The file being edited is `AuthContext.js`, located at `BTTH2 > ReactNavigation > context > AuthContext.js`. The code defines an `AuthProvider` component that manages authentication state and provides login/logout functions. Below the code editor is a terminal window showing the command `expo start` running in a Docker container.

```
BTTH2 > ReactNavigation > context > JS AuthContext.js
1 // 22521172 - Vo Nhat Phuong
2 import React, { createContext, useState } from 'react';
3
4 export const AuthContext = createContext();
5
6 export function AuthProvider({ children }) {
7   const [isAuthenticated, setIsAuthenticated] = useState(false);
8
9   const login = (userEmail, password) => {
10     if (userEmail === '22521172@gm.uit.edu.vn' && password === 'vonhatphuong') {
11       setIsAuthenticated(true);
12     } else {
13       alert("Thông tin đăng nhập không chính xác!");
14     }
15   };
16
17   const logout = () => {
18     setIsAuthenticated(false);
19   };
20
21   return (
22     <AuthContext.Provider value={{ isAuthenticated, login, logout }}>
23       {children}
24     </AuthContext.Provider>
25   );
26 }
27
```

Output Debug Console **Terminal** Ports GitLens Spell Checker ... ^ x

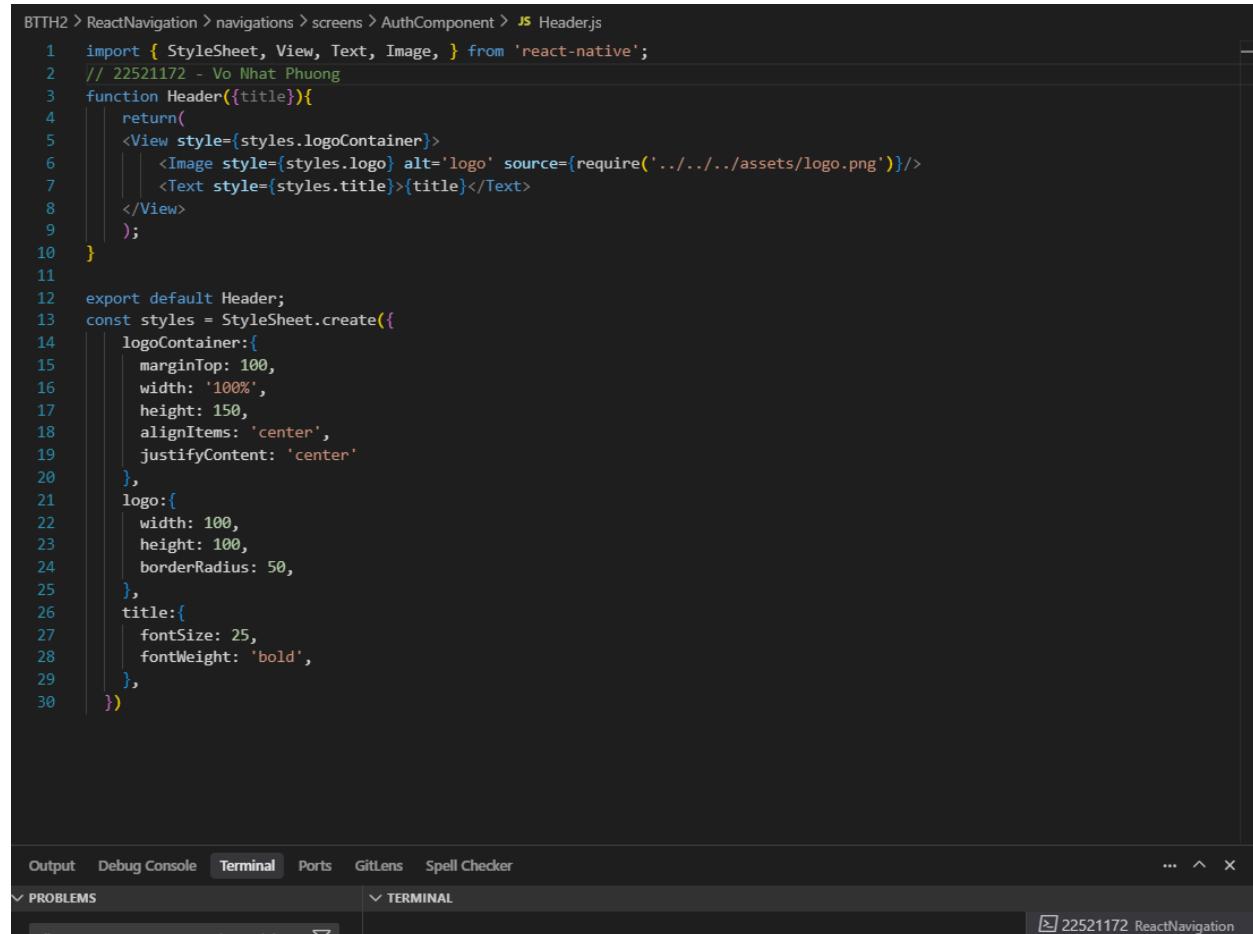
PROBLEMS ▾ TERMINAL

Filter (e.g. text, *.ts, !**/node_modules/...) ➔ Metro waiting on exp://10.0.130.181:8081

22521172 ReactNavigation

3.4. Nội dung file navigations/screens/AuthComponent/Header.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



The screenshot shows a code editor window with the following details:

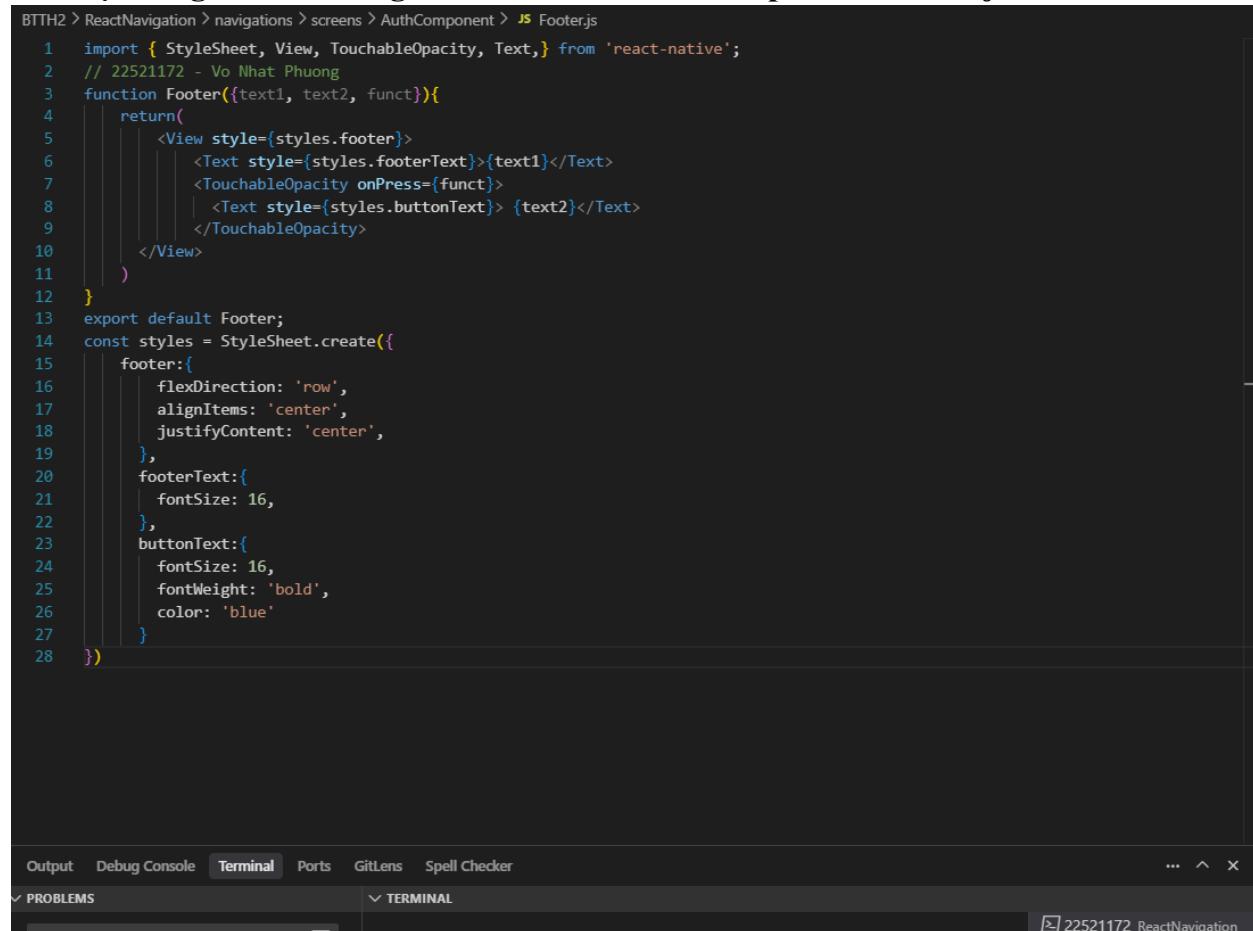
- File Path:** BTTH2 > ReactNavigation > navigations > screens > AuthComponent > **Header.js**
- Code Content:** The code defines a `Header` component that returns a `View` containing a `Image` and a `Text`. It uses a `StyleSheet.create` block to define styles for `logoContainer`, `logo`, and `title`.

```
BTTH2 > ReactNavigation > navigations > screens > AuthComponent > Header.js
1 import { StyleSheet, View, Text, Image, } from 'react-native';
2 // 22521172 - Vo Nhat Phuong
3 function Header({title}){
4     return(
5         <View style={styles.logoContainer}>
6             <Image style={styles.logo} alt='logo' source={require('../..../assets/logo.png')} />
7             <Text style={styles.title}>{title}</Text>
8         </View>
9     );
10 }
11
12 export default Header;
13 const styles = StyleSheet.create({
14     logoContainer:{
15         marginTop: 100,
16         width: '100%',
17         height: 150,
18         alignItems: 'center',
19         justifyContent: 'center'
20     },
21     logo:{
22         width: 100,
23         height: 100,
24         borderRadius: 50,
25     },
26     title:{
27         fontSize: 25,
28         fontWeight: 'bold',
29     },
30 })
```

- IDE UI Elements:** The top bar includes tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker. The bottom bar shows sections for PROBLEMS, TERMINAL, and a status bar indicating the project name (22521172 ReactNavigation).

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

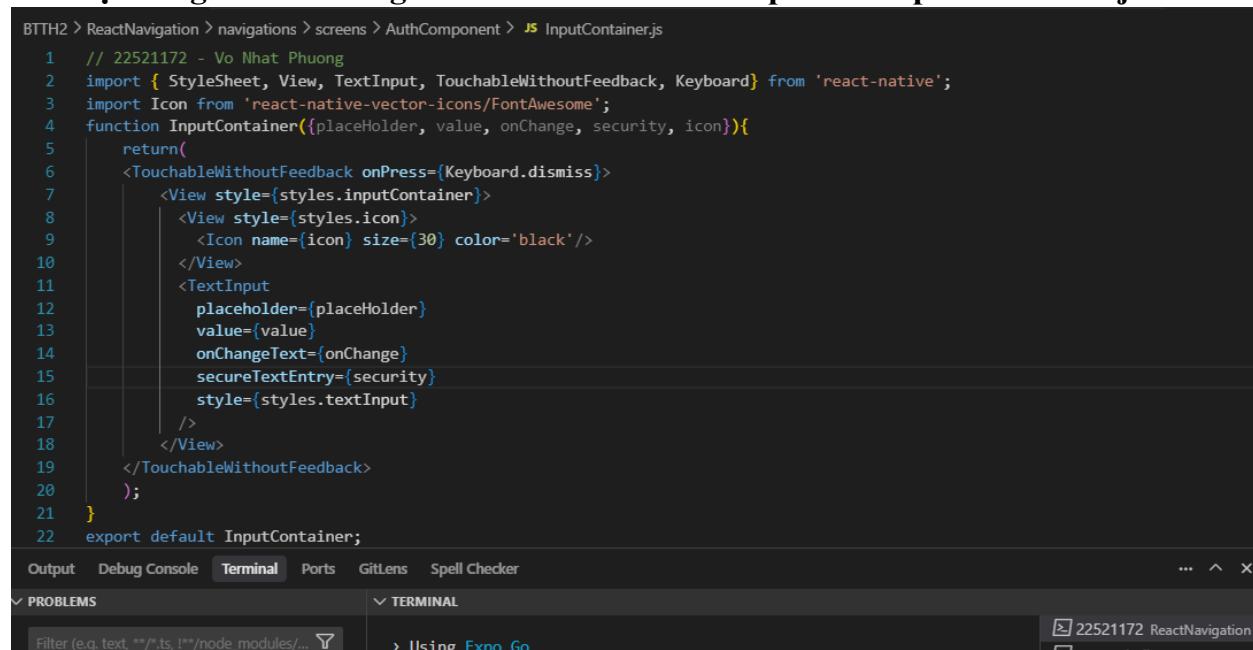
3.5. Nội dung file file navigations/screens/AuthComponent/Footer.js



The screenshot shows the Footer.js file in a code editor. The code defines a Footer component that takes text1, text2, and funct as props. It returns a View containing a Text for text1, a TouchableOpacity with an onPress handler for funct, and another Text for text2. The styles are defined in a StyleSheet.create object with properties for footer, footerText, and buttonText. The footer has a flexDirection of 'row', alignItems of 'center', and justifyContent of 'center'. The footerText has a fontSize of 16. The buttonText has a fontSize of 16, a bold font weight, and a blue color. The code editor interface includes tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker, and a bottom bar with PROBLEMS, TERMINAL, and a search field.

```
BTTH2 > ReactNavigation > navigations > screens > AuthComponent > Footer.js
1 import { StyleSheet, View, TouchableOpacity, Text } from 'react-native';
2 // 22521172 - Vo Nhat Phuong
3 function Footer({text1, text2, funct}){
4     return(
5         <View style={styles.footer}>
6             <Text style={styles.footerText}>{text1}</Text>
7             <TouchableOpacity onPress={funct}>
8                 <Text style={styles.buttonText}> {text2}</Text>
9             </TouchableOpacity>
10        </View>
11    )
12 }
13 export default Footer;
14 const styles = StyleSheet.create({
15     footer:{
16         flexDirection: 'row',
17         alignItems: 'center',
18         justifyContent: 'center',
19     },
20     footerText:{
21         fontSize: 16,
22     },
23     buttonText:{
24         fontSize: 16,
25         fontWeight: 'bold',
26         color: 'blue'
27     }
28 })
```

3.6. Nội dung file file navigations/screens/AuthComponent/InputContainer.js



The screenshot shows the InputContainer.js file in a code editor. The code defines an InputContainer component that takes placeHolder, value, onChange, security, and icon as props. It returns a TouchableWithoutFeedback with an onPress handler to dismiss the keyboard. Inside, it has a View with an icon and a TextInput with the specified props. The code editor interface includes tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker, and a bottom bar with PROBLEMS, TERMINAL, and a search field.

```
BTTH2 > ReactNavigation > navigations > screens > AuthComponent > InputContainer.js
1 // 22521172 - Vo Nhat Phuong
2 import { StyleSheet, View, TextInput, TouchableWithoutFeedback, Keyboard } from 'react-native';
3 import Icon from 'react-native-vector-icons/FontAwesome';
4 function InputContainer({placeHolder, value, onChange, security, icon}){
5     return(
6         <TouchableWithoutFeedback onPress={Keyboard.dismiss}>
7             <View style={styles.inputContainer}>
8                 <View style={styles.icon}>
9                     <Icon name={icon} size={30} color='black' />
10                </View>
11                <TextInput
12                    placeholder={placeHolder}
13                    value={value}
14                    onChangeText={onChange}
15                    secureTextEntry={security}
16                    style={styles.textInput}
17                />
18            </View>
19        </TouchableWithoutFeedback>
20    );
21 }
22 export default InputContainer;
```

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
24 // 22521172 - Vo Nhat Phuong
25 const styles = StyleSheet.create({
26   inputContainer:{
27     width: 300,
28     height: 50,
29     borderRadius: 10,
30     borderColor: 'gray',
31     borderWidth: 1,
32     paddingHorizontal: 10,
33     paddingVertical: 0,
34     margin: 10,
35     flexDirection: 'row',
36     alignItems: 'center',
37   },
38   icon:{
39     width:30,
40     height:30,
41     alignItems: 'center',
42     justifyContent: 'center',
43     marginRight: 10,
44   },
45   textInput: {
46     flex: 1,
47     padding: 0,
48     margin: 0,
49   }
50 })
```

Output Debug Console Terminal Ports GitLens Spell Checker ... ^ x

PROBLEMS TERMINAL 22521172 ReactNavigation

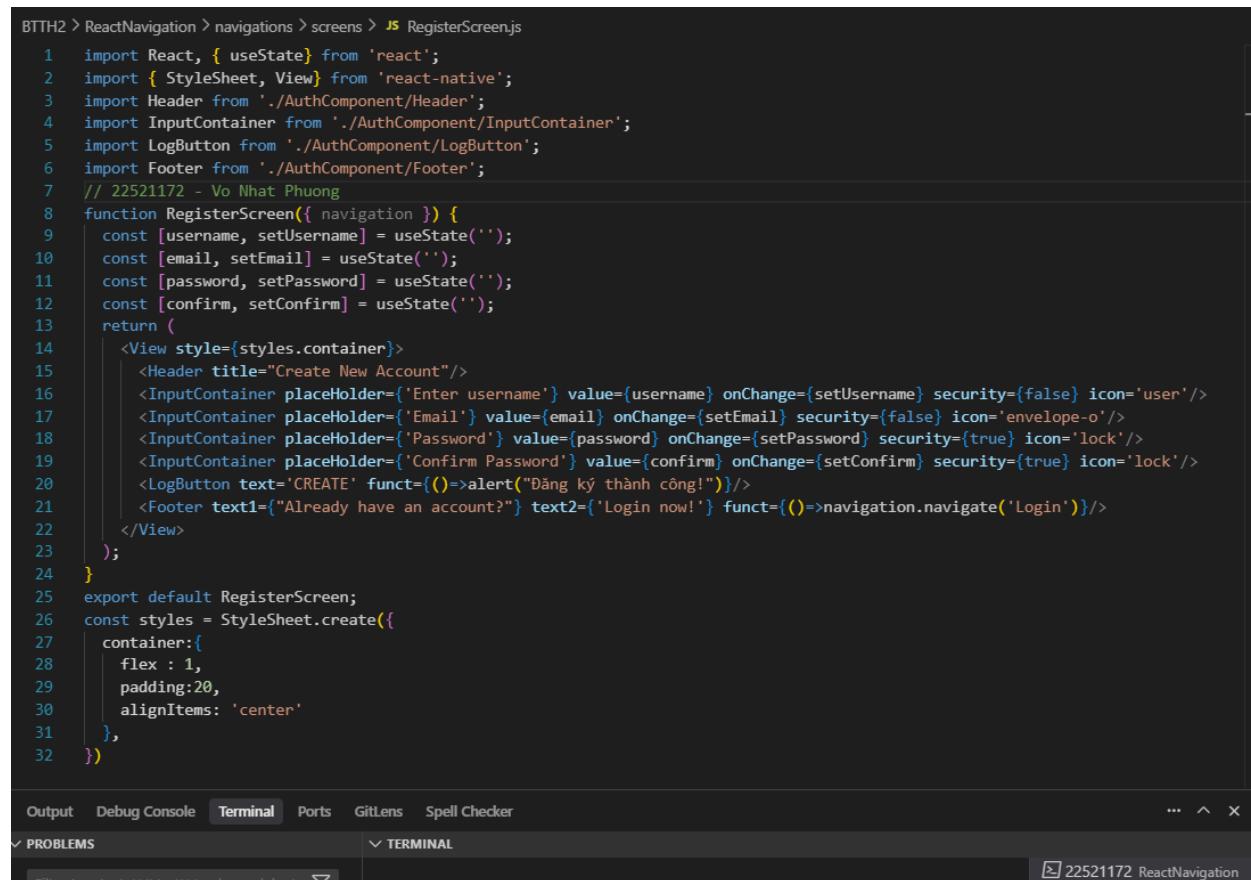
3.7. Nội dung file file navigations/screens/AuthComponent/LogButton.js

```
BTTH2 > ReactNavigation > navigations > screens > AuthComponent > LogButton.js
1 import { StyleSheet, Text, TouchableOpacity } from 'react-native';
2
3 function LogButton({funct, text}){
4   return(
5     <TouchableOpacity style={styles.buttonContainer} onPress={funct}>
6       <Text style={styles.textButton}>{text}</Text>
7     </TouchableOpacity>
8   )
9 }
10 // 22521172 - Vo Nhat Phuong
11 export default LogButton;
12 const styles = StyleSheet.create({
13   buttonContainer:{
14     width:300,
15     height: 60,
16     borderRadius: 15,
17     backgroundColor: 'orange',
18     justifyContent:'center',
19     alignItems: 'center',
20     margin: 10,
21   },
22   textButton:{
23     color: 'white',
24     fontSize: 20,
25   },
26 })
```

Output Debug Console Terminal Ports GitLens Spell Checker ... ^ x

PROBLEMS TERMINAL 22521172 ReactNavigation

3.8. Nội dung file navigations/screens/RegisterScreen.js



```
BTTH2 > ReactNavigation > navigations > screens > JS RegisterScreen.js
 1 import React, { useState } from 'react';
 2 import { StyleSheet, View } from 'react-native';
 3 import Header from './AuthComponent/Header';
 4 import InputContainer from './AuthComponent/InputContainer';
 5 import LogButton from './AuthComponent/LogButton';
 6 import Footer from './AuthComponent/Footer';
 7 // 22521172 - Vo Nhat Phuong
 8 function RegisterScreen({ navigation }) {
 9   const [username, setUsername] = useState('');
10   const [email, setEmail] = useState('');
11   const [password, setPassword] = useState('');
12   const [confirm, setConfirm] = useState('');
13   return (
14     <View style={styles.container}>
15       <Header title="Create New Account"/>
16       <InputContainer placeHolder={'Enter username'} value={username} onChange={setUsername} security={false} icon='user'/>
17       <InputContainer placeHolder={'Email'} value={email} onChange={setEmail} security={false} icon='envelope-o'/>
18       <InputContainer placeHolder={'Password'} value={password} onChange={setPassword} security={true} icon='lock'/>
19       <InputContainer placeHolder={'Confirm Password'} value={confirm} onChange={setConfirm} security={true} icon='lock'/>
20       <LogButton text='CREATE' funct={()=>alert("Đăng ký thành công!")}/>
21       <Footer text1="Already have an account?" text2="Login now!" funct={()=>navigation.navigate('Login')}/>
22     </View>
23   );
24 }
25 export default RegisterScreen;
26 const styles = StyleSheet.create({
27   container: {
28     flex: 1,
29     padding: 20,
30     alignItems: 'center'
31   },
32 })
```

Output Debug Console Terminal Ports GitLens Spell Checker ... ^ x

PROBLEMS TERMINAL 22521172 ReactNavigation

3.9. Nội dung file navigations/screens/LoginScreen.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > ReactNavigation > navigations > screens > JS LoginScreen.js
1 import React, { useState, useContext } from 'react';
2 import { StyleSheet, View, TextInput, Button, Text, Image, TouchableOpacity, TouchableWithoutFeedback, Keyboard } from 'react-native'
3 import { AuthContext } from '../context/AuthContext';
4 import Header from './AuthComponent/Header';
5 import InputContainer from './AuthComponent/InputContainer';
6 import LogButton from './AuthComponent/LogButton';
7 import Footer from './AuthComponent/Footer';
8 // 22521172 - Vo Nhat Phuong
9 function LoginScreen({ navigation }) {
10   const { login } = useContext(AuthContext);
11   const [email, setEmail] = useState('');
12   const [password, setPassword] = useState('');
13
14   return (
15     <View style={styles.container}>
16       <Header title="Welcome"/>
17       <InputContainer placeHolder="Email" value={email} onChange={setEmail} security={false} icon='envelope-o' />
18       <InputContainer placeHolder="Password" value={password} onChange={setPassword} security={true} icon='lock' />
19       <Text style={styles.forgot}>Forgot password?</Text>
20       <LogButton text='LOG IN' funct={()=>login(email, password)} />
21       <View style={styles.otherOption}>
22         <Text style={styles.title}>Or login with</Text>
23         <View style={styles.iconRow}>
24           <Image style={styles.socialMediaIcon} source={require('../assets/fbIcon.png')} />
25           <Image style={styles.socialMediaIcon} source={require('../assets/googleIcon.png')} />
26         </View>
27       </View>
28       <Footer text1="Don't have an account?" text2="Sign up here!" funct={()=>navigation.navigate('Register')} />
29     </View>
30   );
31 }
32 export default LoginScreen;
33 const styles = StyleSheet.create({
```

Output Debug Console Terminal Ports GitLens Spell Checker ... ^ x

PROBLEMS TERMINAL 22521172 ReactNavigation

3.10. Nội dung file navigations/screens/HomeScreen.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with a dark theme. At the top, the file path is displayed: BTTH2 > ReactNavigation > navigations > screens > **JS** HomeScreen.js. Below the path is the content of the HomeScreen.js file:

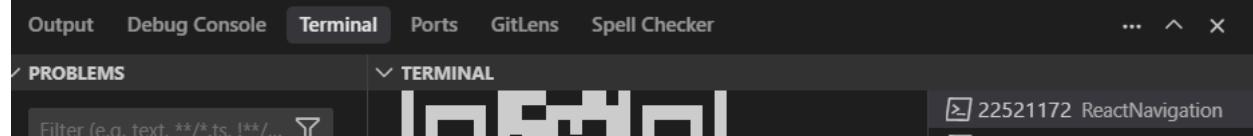
```
1 import React from 'react';
2 import { View, Text, StyleSheet } from 'react-native';
3 // 22521172 - Vo Nhat Phuong
4 function HomeScreen() {
5   return (
6     <View style={styles.container}>
7       <Text>Home Screen</Text>
8     </View>
9   );
10 }
11
12 export default HomeScreen;
13 const styles=StyleSheet.create({
14   container:{
15     flex:1,
16     justifyContent: 'center',
17     alignItems: 'center',
18   }
19 })
20
```

Below the code editor is a terminal window with the title "22521172 ReactNavigation". The terminal interface includes tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker. The Terminal tab is active, showing a command prompt and some graphical icons.

3.11. Nội dung file navigations/screens/CategoriesScreen.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
BTTH2 > ReactNavigation > navigations > screens > JS CategoryScreen.js
 1 import React from 'react';
 2 import { View, Text, StyleSheet } from 'react-native';
 3 // 22521172 - Vo Nhat Phuong
 4 function CategoryScreen() {
 5   return (
 6     <View style={styles.container}>
 7       <Text>Category Screen</Text>
 8     </View>
 9   );
10 }
11
12 export default CategoryScreen;
13 const styles=StyleSheet.create({
14   container:{
15     flex:1,
16     justifyContent: 'center',
17     alignItems: 'center',
18   }
19 })
20
```



3.12. Nội dung file navigations/screens/FavoriteScreen.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with a dark theme. The file being edited is `FavoriteScreen.js`, which contains the following code:

```
1 import React from 'react';
2 import { View, Text, StyleSheet } from 'react-native';
3 // 22521172 - Vo Nhat Phuong
4 function FavoriteScreen() {
5     return (
6         <View style={styles.container}>
7             <Text>Favorite Screen</Text>
8         </View>
9     );
10 }
11
12 export default FavoriteScreen;
13 const styles=StyleSheet.create({
14     container:{
15         flex:1,
16         justifyContent: 'center',
17         alignItems: 'center',
18     }
19 })
```

Below the code editor is a terminal window showing a grayscale logo and the text "22521172 ReactNavigation". The terminal interface includes tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker.

3.13. Nội dung file navigations/screens/ProfileScreen.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with a dark theme. The file being edited is `ProfileScreen.js`, which is part of a React Native application. The code defines a component `AccountScreen` that displays a "Profile Screen" with a "LOG OUT" button. It also includes a style sheet `styles` that centers the content within a container view.

```
BTTH2 > ReactNavigation > navigations > screens > JS ProfileScreen.js

1 import React, { useContext } from 'react';
2 import { View, Text, Button, StyleSheet } from 'react-native';
3 import { AuthContext } from '../../context/AuthContext';
4 // 22521172 - Vo Nhat Phuong
5 function AccountScreen() {
6   const { logout } = useContext(AuthContext);
7   return (
8     <View style={styles.container}>
9       <Text>Profile Screen</Text>
10      <Button title="LOG OUT" onPress={logout} />
11    </View>
12  );
13}
14
15 export default AccountScreen;
16 const styles = StyleSheet.create({
17   container: {
18     flex: 1,
19     justifyContent: 'center',
20     alignItems: 'center',
21   }
22 })
23
```

Below the code editor is a terminal window showing the command `22521172 ReactNavigation`. The terminal interface includes tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker, with the Terminal tab currently active.

3.14. Nội dung file navigations/AuthStack.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor with the file `AuthStack.js` open. The code defines a stack navigator with two screens: `Login` and `Register`. The `headerShown` prop is set to `false` for the `screenOptions`.

```
BTTH2 > ReactNavigation > navigations > JS AuthStack.js
1 import React from 'react';
2 import { createStackNavigator } from '@react-navigation/stack';
3 import LoginScreen from './screens/LoginScreen';
4 import RegisterScreen from './screens/RegisterScreen';
5 // 22521172 - Vo Nhat Phuong
6 const Stack = createStackNavigator();
7
8 function AuthStack() {
9   return (
10   <Stack.Navigator screenOptions={{ headerShown: false }}>
11   <Stack.Screen name="Login" component={LoginScreen} />
12   <Stack.Screen name="Register" component={RegisterScreen} />
13   </Stack.Navigator>
14 );
15 }
16
17 export default AuthStack;
```

The VS Code interface includes tabs for Output, Debug Console, Terminal (which is active), Ports, GitLens, and Spell Checker. Below the tabs are sections for PROBLEMS and TERMINAL. A status bar at the bottom shows the file path `22521172 ReactNavigation`.

3.15. Nội dung file navigations/MainBottom.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

The screenshot shows a code editor interface with the following details:

- File Path:** BTTH2 > ReactNavigation > navigations > **MainBottom.js**
- Code Content:** The code defines a bottom tab navigator with four screens: HomeScreen, CategoryScreen, FavoriteScreen, and ProfileScreen. It includes custom tab bar icons and header settings.
- Terminal Output:** The terminal shows the command to open the application on Android and the URL for the development server.
- IDE UI Elements:** The interface includes tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker. There are also icons for closing and maximizing the window.

```
1 import React from "react";
2 import { createBottomTabNavigator } from "@react-navigation/bottom-tabs";
3 import HomeScreen from "./screens/HomeScreen";
4 import CategoryScreen from "./screens/CategoryScreen";
5 import FavoriteScreen from "./screens/FavoriteScreen";
6 import ProfileScreen from "./screens/ProfileScreen";
7 import { StyleSheet, Image } from "react-native";
8 import Icon from 'react-native-vector-icons/FontAwesome';
9 // 22521172 - Vo Nhat Phuong
10 const Tab = createBottomTabNavigator();
11
12 function MainBottom() {
13   return (
14     <Tab.Navigator>
15       <Tab.Screen
16         name="Home"
17         component={HomeScreen}
18         options={{
19           tabBarIcon: ({ focused }) => (
20             <Icon name='home' size={30} color={focused ? 'blue' : 'black'} />
21           ),
22           headerShown: false,
23         }}
24       />

```

Output Debug Console **Terminal** Ports GitLens Spell Checker ... ^ x

PROBLEMS TERMINAL

Filter (e.g. text, **/*.ts, !**/...)

Press Ctrl+C to exit.

> Opening on Android...

> Opening exp://10.0.130.181:8081 on CPH1

22521172 ReactNavigation

powershell

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

```
14      <Tab.Navigator>
15      /*
16      * 22521172 - Vo Nhat Phuong */
17      <Tab.Screen
18          name="Category"
19          component={CategoryScreen}
20          options={{
21              tabBarIcon: ({ focused }) => (
22                  <Icon name='th-large' size={30} color={focused ? 'blue' : 'black'} />
23              ),
24              headerShown: false,
25          }}
26      />
27      <Tab.Screen
28          name="Favorite"
29          component={FavoriteScreen}
30          options={{
31              tabBarIcon: ({ focused }) => (
32                  <Icon name='heart' size={30} color={focused ? 'blue' : 'black'} />
33              ),
34              headerShown: false,
35              tabBarBadge: 3,
36          }}
37      />
38      <Tab.Screen
39          name="Profile"
40          component={ProfileScreen}
41          options={{
42              tabBarIcon: ({ focused }) => (
43                  <Icon name='user' size={30} color={focused ? 'blue' : 'black'} />
44              ),
45          }}
46      />
```

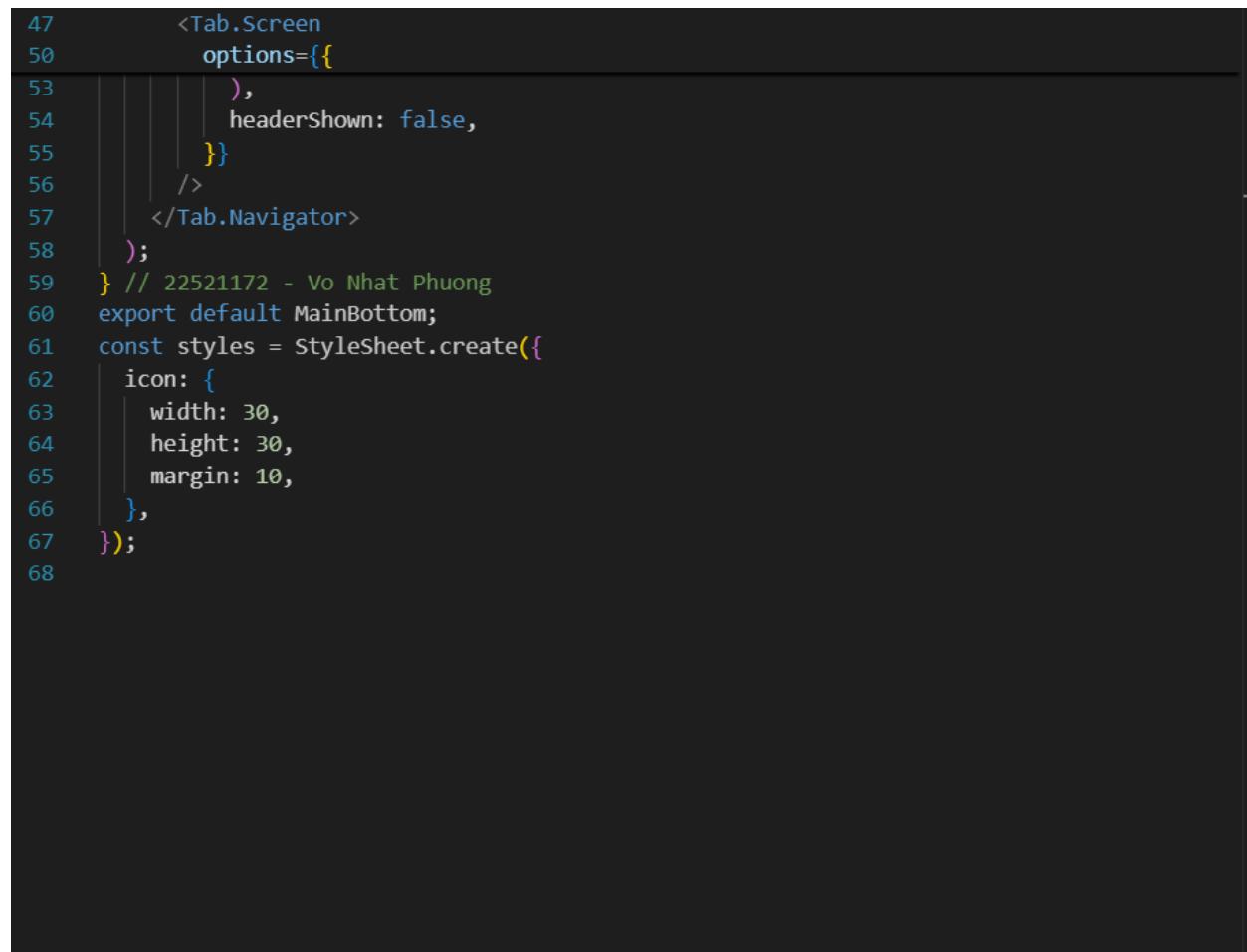
Output Debug Console Terminal Ports GitLens Spell Checker ... ^ x

PROBLEMS ▾ TERMINAL

No problems have been detected Press Ctrl+C to exit.

22521172 ReactNavigation

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12

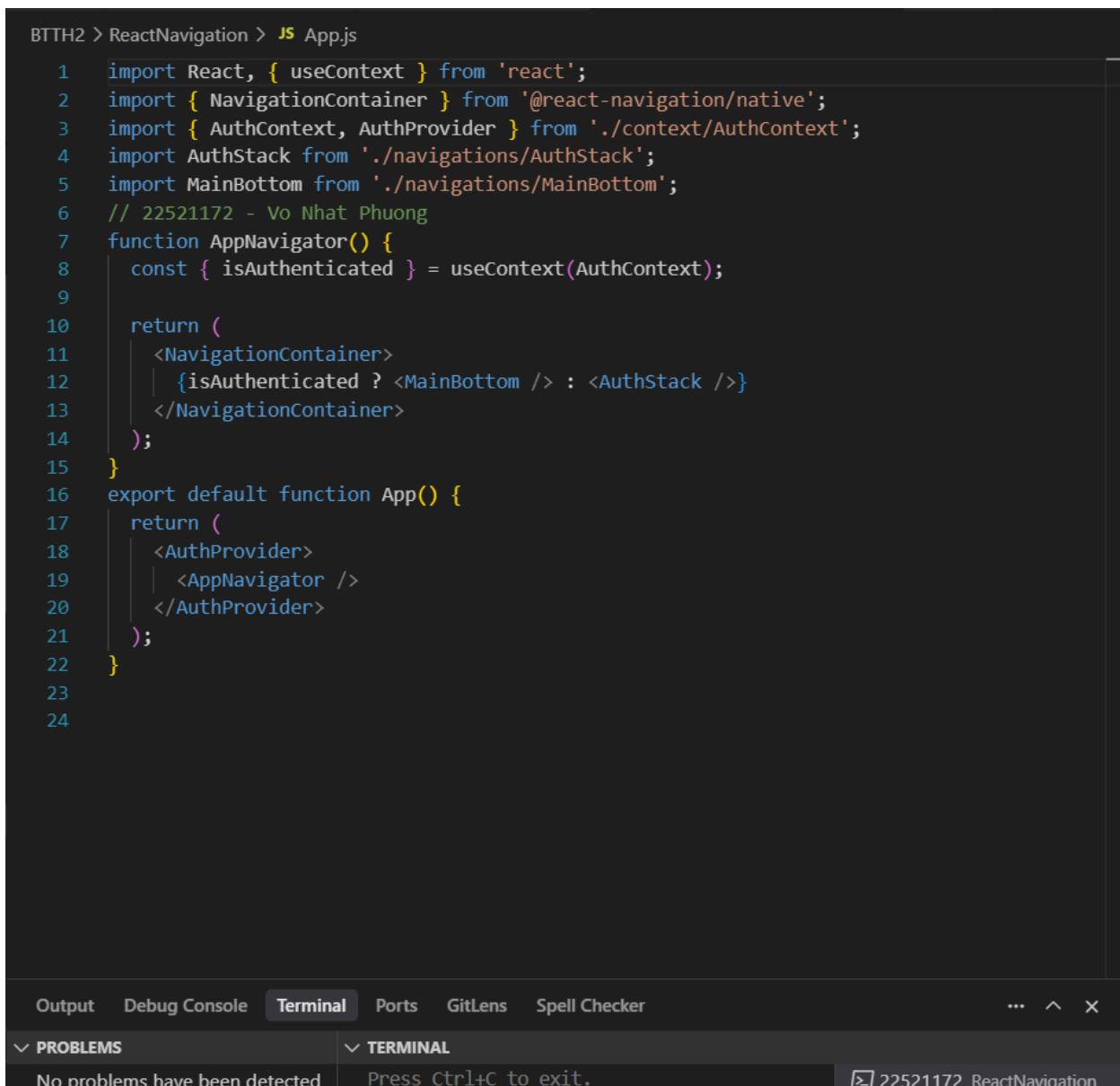


```
47     <Tab.Screen
48       options={{
49         |   |   |   |),
50         |   |   |   |   headerShown: false,
51         |   |   |   |}
52         |   |   |   />
53       </Tab.Navigator>
54     );
55   } // 22521172 - Vo Nhat Phuong
56   export default MainBottom;
57   const styles = StyleSheet.create({
58     |   icon: {
59       |   |   width: 30,
60       |   |   height: 30,
61       |   |   margin: 10,
62       |   },
63     });
64
65
66
67   });
68
```

The screenshot shows a code editor window with a dark theme. The main area displays a portion of a React Native component named `MainBottom.js`. The code uses the `Tab.Navigator` component from the `react-navigation` library. It specifies `headerShown: false` as an option for the screen. The component is wrapped in a comment block for a student with ID 22521172 and name Vo Nhat Phuong. Below the code editor is a terminal interface with tabs for Output, Debug Console, Terminal, Ports, GitLens, and Spell Checker. The Terminal tab is active, showing the message "No problems have been detected". The status bar at the bottom indicates the file path "22521172 ReactNavigation".

3.16. Nội dung file App.js

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



```
BTTH2 > ReactNavigation > JS App.js
1 import React, { useContext } from 'react';
2 import { NavigationContainer } from '@react-navigation/native';
3 import { AuthContext, AuthProvider } from './context/AuthContext';
4 import AuthStack from './navigations/AuthStack';
5 import MainBottom from './navigations/MainBottom';
6 // 22521172 - Vo Nhat Phuong
7 function AppNavigator() {
8   const { isAuthenticated } = useContext(AuthContext);
9
10  return (
11    <NavigationContainer>
12    | {isAuthenticated ? <MainBottom /> : <AuthStack />}
13    </NavigationContainer>
14  );
15}
16 export default function App() {
17  return (
18    <AuthProvider>
19    | <AppNavigator />
20    </AuthProvider>
21  );
22}
23
24
```

The screenshot shows a code editor window with the following details:

- Top Bar:** Shows the project path "BTTH2 > ReactNavigation > JS App.js".
- Code Area:** Displays the content of `App.js` as shown in the code block above.
- Bottom Bar:** Contains tabs for "Output", "Debug Console", **Terminal**, "Ports", "GitLens", and "Spell Checker".
- Terminal View:** Shows the message "No problems have been detected" and "Press Ctrl+C to exit.".
- Project View:** Shows a folder icon labeled "22521172 ReactNavigation".

3.17. Màn hình kết quả

Welcome

Email

Password

[Forgot password?](#)

LOG IN

Or login with

Don't have an account? [Sign up here!](#)

Create New Account

Enter username

Email

Password

Confirm Password

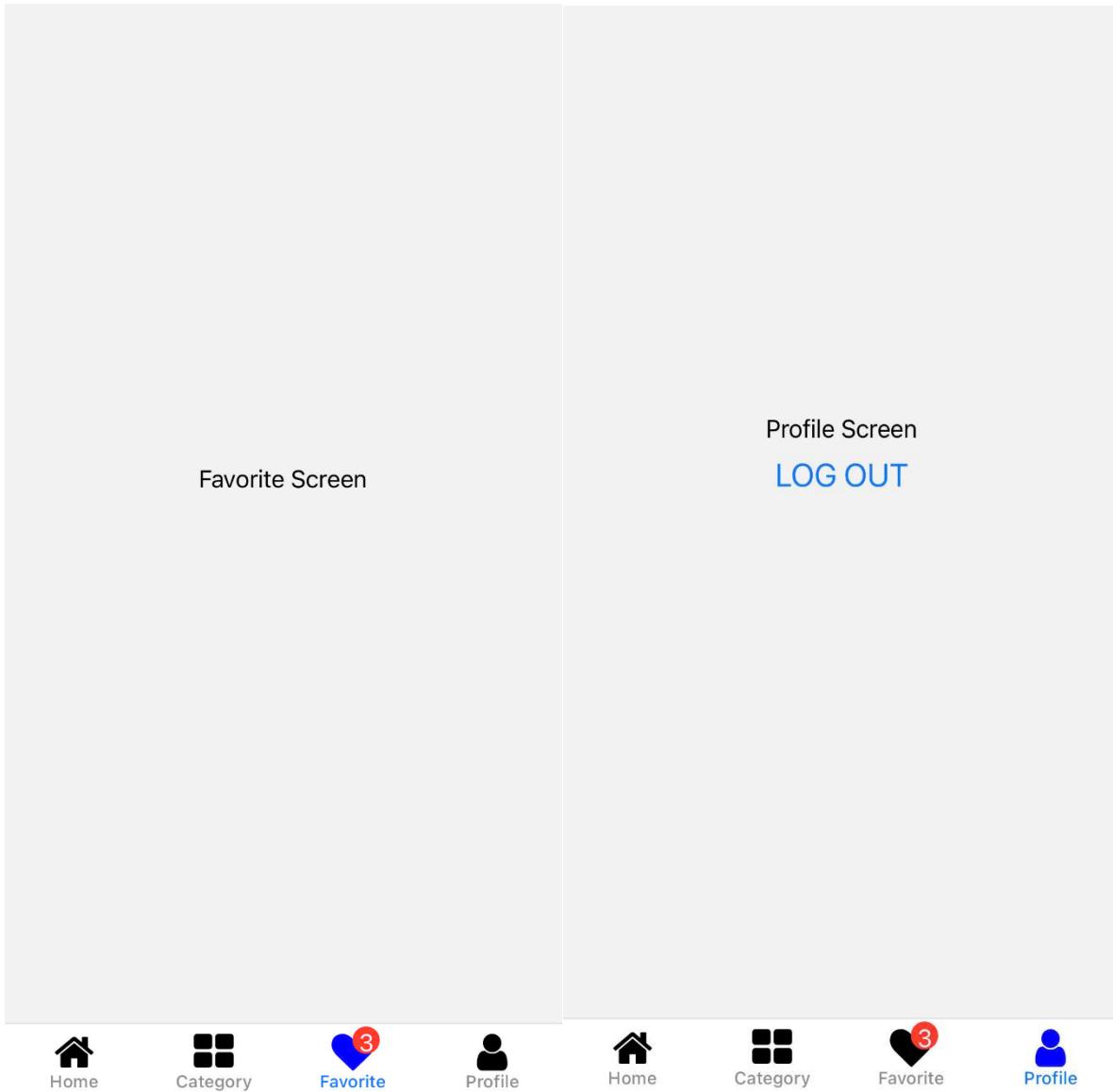
CREATE

Already have an account? [Login now!](#)

Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



Công nghệ lập trình đa nền tảng cho ứng dụng di động - IE307.Q12



3.18. Video màn hình kết quả

- Link video màn hình kết quả:

<https://drive.google.com/file/d/1HexypKCeOfJw77lpMY23rcx2cyDhiNMj/view?usp=sharing>

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