ชื่อ.....นาย...สหัสวรรษ.....หิรัญเพชร.....

รหัสนักศึกษา.....61070239.....

Lab 6 : Core APIs

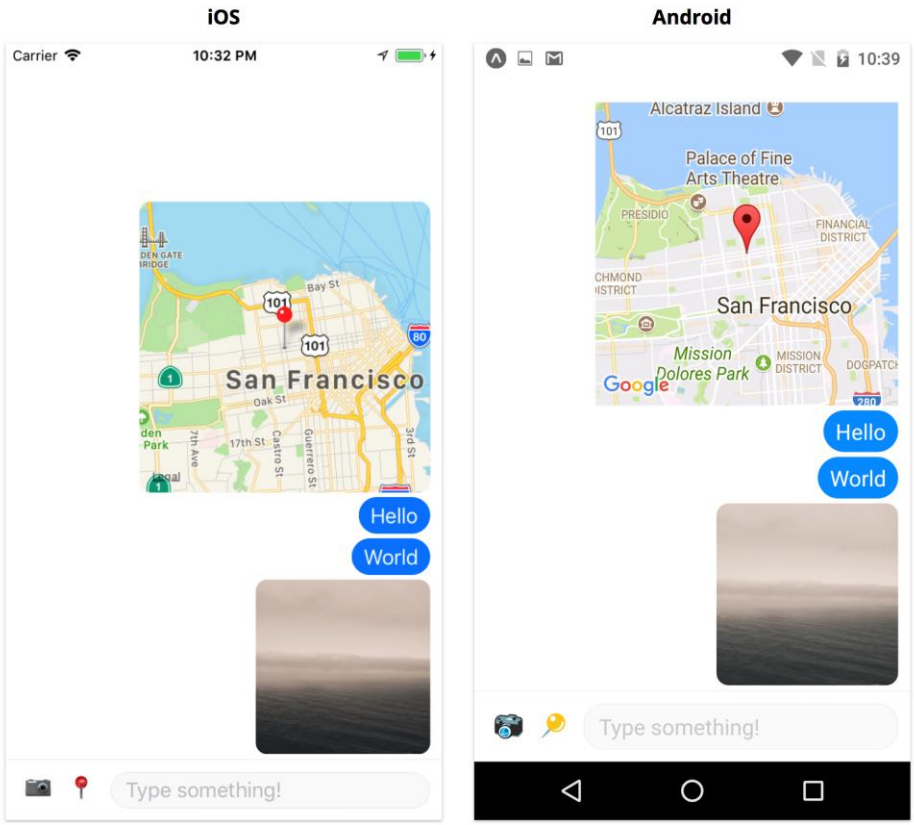
1. ให้นักศึกษาทำการสร้าง New Project โดยให้ Folder มีดังนี้ Mobile\<รหัสนักศึกษา>\Message

   Expo init <path\folder\StudentID\Project name>

2. ให้นักศึกษาเขียนโปรแกรมเพื่อรับส่งข้อความและรูปภาพ (ดังแสดงตามรูปภาพข้างล่างนี้) โดยการปฏิบัติครั้งนี้ให้นักศึกษาทำการสร้าง NetInfo, StatusBar, MessageList, Alert

   Hint: (Component) View, Text, Image

   (APIs) NetInfo, MessageList, Statusbar, Alert



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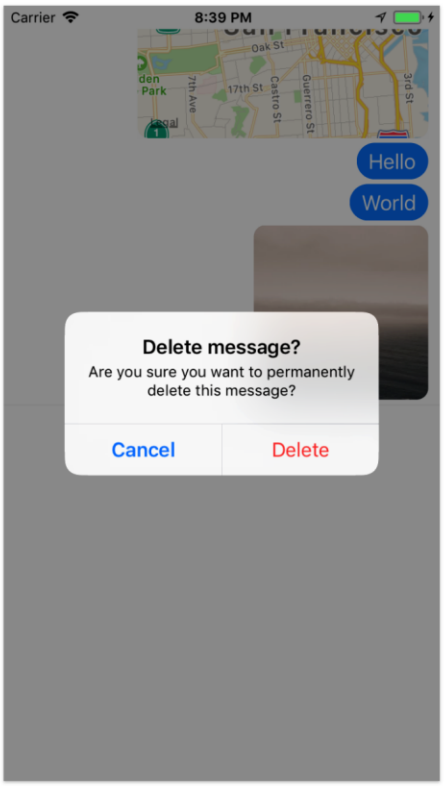
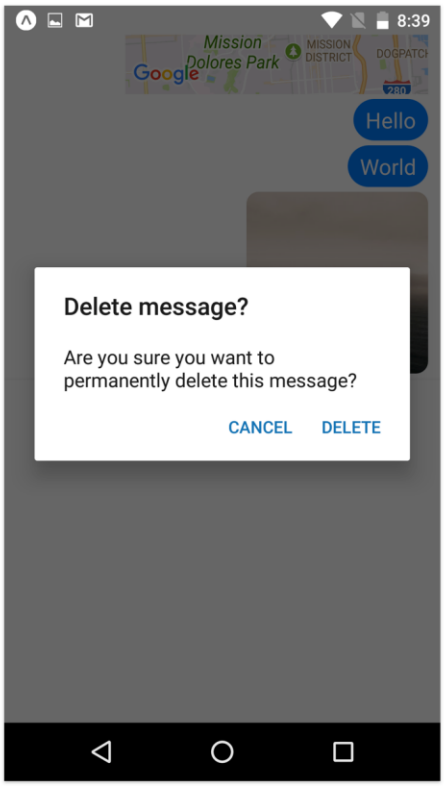
iOS



Android



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App.js (1/2)

App.js | Status.js | MessageList.js | MessageUtils.js

Message > App.js > App > renderToolbar

```
import { StyleSheet, View , TextInput,Text} from "react-native";
import React from "react";
import Status from "./components/Status";
import Meslist from "./components/MessageList";
import {createTextMessage, createImageMessage, createLocationMessage} from "./utils/MessageUtils";
export default class App extends React.Component {
  constructor(props) {
    super(props);
    this.state = {
      textinp: "",
      listmes: [],
    };
  }
  setlistmes = () => {
    if (this.state.textinp.trim().length == 0) {
      return;
    }
    this.setState({
      listmes: [createTextMessage(this.state.textinp), ...this.state.listmes],
      textinp: ""
    });
  };

  deleteMessage = (id) => {
    console.log("ASDasdas");
    this.setState({
      listmes: this.state.listmes.filter((obj) => obj.id !== id)
    })

  };

  renderMessageList() {
    return (
      <View style={styles.areames}>
        <Meslist message={this.state.listmes} deleteMessage={this.deleteMessage} />
      </View>
    );
  }
  renderInputMethodEditor() {
    return <View style={styles.inputMethodEditor}></View>;
  }
```

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App.js (2/2)

```
renderToolbar() {
  // style={styles.toolbar}
  return <View >
  <TextInput
    style={styles.textInput}
    placeholder="Type something!"
    onChangeText={(text) => this.setState({ textinp: text })}
    // onSubmitEditing={() => this.setState({ listmes: this.state.li
    onSubmitEditing={this.setlistmes}
    value={this.state.textinp}
    // value={(text) => this.setState({ textinp: text })}
  />
</View>;
}
render() {
  return (
    <View style={styles.container}>
      <Status />
      {this.renderMessageList()}
      {this.renderToolbar()}
      {/* {this.renderInputMethodEditor()} */}
    </View>
  );
}
}
const styles = StyleSheet.create({
  container: {
    flex: 1,
    backgroundColor: "white",
  },
  inputMethodEditor: {
    flex: 1,
    backgroundColor: "white",
  },
  // toolbar: {
  //   borderTopWidth: 1,
  //   borderTopColor: "rgba(0,0,0,0.04)",
  //   backgroundColor: "white",
  // },
  areames: {
    alignItems: "flex-end",
    alignContent: "flex-end",
    flex: 5,
    paddingRight: 15,
  },
  textInput: {
    color: "black",
    backgroundColor: "#eee",
    paddingVertical: 5,
    paddingHorizontal: 10,
    borderRadius: 15,
    marginBottom:5
  },

});
```

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Status.js (1/2)

App.js | Status.js | MessageList.js | MessageUtils.js

Message > components > Status.js > ...

```
1   import Constants from "expo-constants";
2   import NetInfo from "@react-native-community/netinfo";
3   import { Platform, StatusBar, StyleSheet, Text, View } from "react-native";
4   import React from "react";
5   export default class Status extends React.Component {
6     state = {
7       isConnected: true,
8     };
9
10    render() {
11      const { isConnected } = this.state;
12      const backgroundColor = isConnected ? "white" : "red";
13      const statusBar = (
14        <StatusBar
15          backgroundColor={backgroundColor}
16          barStyle={isConnected ? "dark-content" : "light-content"}
17          animated={false}
18        />
19      );
20
21      const messageContainer = (
22        <View style={styles.messageContainer} pointerEvents={"none"}>
23          {statusBar}
24          {!isConnected && (
25            <View style={styles.bubble}>
26              <Text style={styles.text}>No network connection</Text>
27            </View>
28          )}
29        </View>
30      );
31      // console.log(Platform.OS);
32      if (Platform.OS === "android") {
33        return (
34          <View style={[styles.status, { backgroundColor }]}>
35            {messageContainer}
36          </View>
37        );
38      }
39      return null; // Temporary!
40    }
41    async componentDidMount() {
42      this.subscription = NetInfo.addEventListener(this.handleChange);
43      const { isConnected } = await NetInfo.fetch();
44      this.setState({ isConnected });
45    }
46    componentWillUnmount() {
47      this.subscription();
48    }
```

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Status.js (2/2)

JS App.js | JS Status.js | JS MessageList.js | JS MessageUtils.js

Message > components > JS Status.js > ...

```
49    handleChange = ({ isConnected }) => {
50      this.setState({ isConnected });
51    };
52  }
53  const handler = (status) => {
54    console.log("Network status changed", status);
55  };
56  const subscription = NetInfo.addEventListener(handler);
57  const statusHeight = Platform.OS === "ios" ? Constants.statusBarHeight : 0;
58
59  const styles = StyleSheet.create({
60    status: {
61      zIndex: 1,
62      height: statusHeight,
63    },
64    messageContainer: {
65      zIndex: 1,
66      position: "absolute",
67      top: statusHeight + 20,
68      right: 0,
69      left: 0,
70      height: 80,
71      alignItems: "center",
72    },
73    bubble: {
74      paddingHorizontal: 20,
75      paddingVertical: 10,
76      borderRadius: 20,
77      backgroundColor: "red",
78    },
79    text: {
80      color: "white",
81    },
82  });
```

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MessageList.js

App.js | Status.js | MessageList.js | MessageUtils.js

Message > components > MessageList.js > MessageList > defaultProps

```
import React from "react";
import PropTypes from "prop-types";
import { StyleSheet, View, Text, FlatList, Alert , TouchableOpacity} from "react-native";
import { MessageShape } from "../utils/MessageUtils";
const keyExtractor = (item) => item.id.toString();
export default class MessageList extends React.Component {
  static propTypes = {
    messages: PropTypes.arrayOf(MessageShape).isRequired,
    onPressMessage: PropTypes.func,
  };
  static defaultProps = {
    onPressMessage: () => {},
  };
  render() {
    const deleteMessage = (id) => {
      Alert.alert(
        "Delete message?",
        "Are you sure you want to permanently delete this message?",
        [
          {
            text: "Cancel",
          },
          {
            text: "Delete",
            onPress: () => this.props.deleteMessage(id),
          },
        ]
      );
    };
    const MessageItem = (itemData) => {
      return (
        <TouchableOpacity
          style={styles.message}
          key={itemData.item}
          onLongPress={() => deleteMessage(itemData.item.id)}
        >
          <Text style={styles.text}>{itemData.item.text}</Text>
        </TouchableOpacity>
      );
    };
    return <FlatList
    data={this.props.message}
    // renderItem={(item) => <Text style={styles.text}>{item.item.text}<
    renderItem={MessageItem} inverted
  />;
  }
}
```

```
const styles = StyleSheet.create({
  text: {
    paddingHorizontal: 10,
    paddingVertical: 6,
    borderRadius: 20,
    backgroundColor: "lightblue",
  },
  message: {
    justifyContent: "center",
    alignItems: "flex-end",
    padding: 3,
  },
});
```

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MessageUtils.js

JS App.js | JS Status.js | JS MessageList.js | JS MessageUtils.js ●

Message > utils > JS MessageUtils.js > ...

```
1   import PropTypes from "prop-types";
2   export const MessageShape = PropTypes.shape({
3     id: PropTypes.number.isRequired,
4     type: PropTypes.oneOf(["text", "image", "location"]),
5     text: PropTypes.string,
6     uri: PropTypes.string,
7     coordinate: PropTypes.shape({
8       latitude: PropTypes.number.isRequired,
9       longitude: PropTypes.number.isRequired,
10    }),
11  });
12
13  let messageId = 0;
14  function getNextId() {
15    messageId += 1;
16    return messageId;
17  }
18  export function createTextMessage(text) {
19    return {
20      type: "text",
21      id: getNextId(),
22      text,
23    };
24  }
25
26  export function createImageMessage(uri) {
27    return {
28      type: "image",
29      id: getNextId(),
30      uri,
31    };
32  }
33  export function createLocationMessage(coordinate) {
34    return {
35      type: "location",
36      id: getNextId(),
37      coordinate,
38    };
39  }
```

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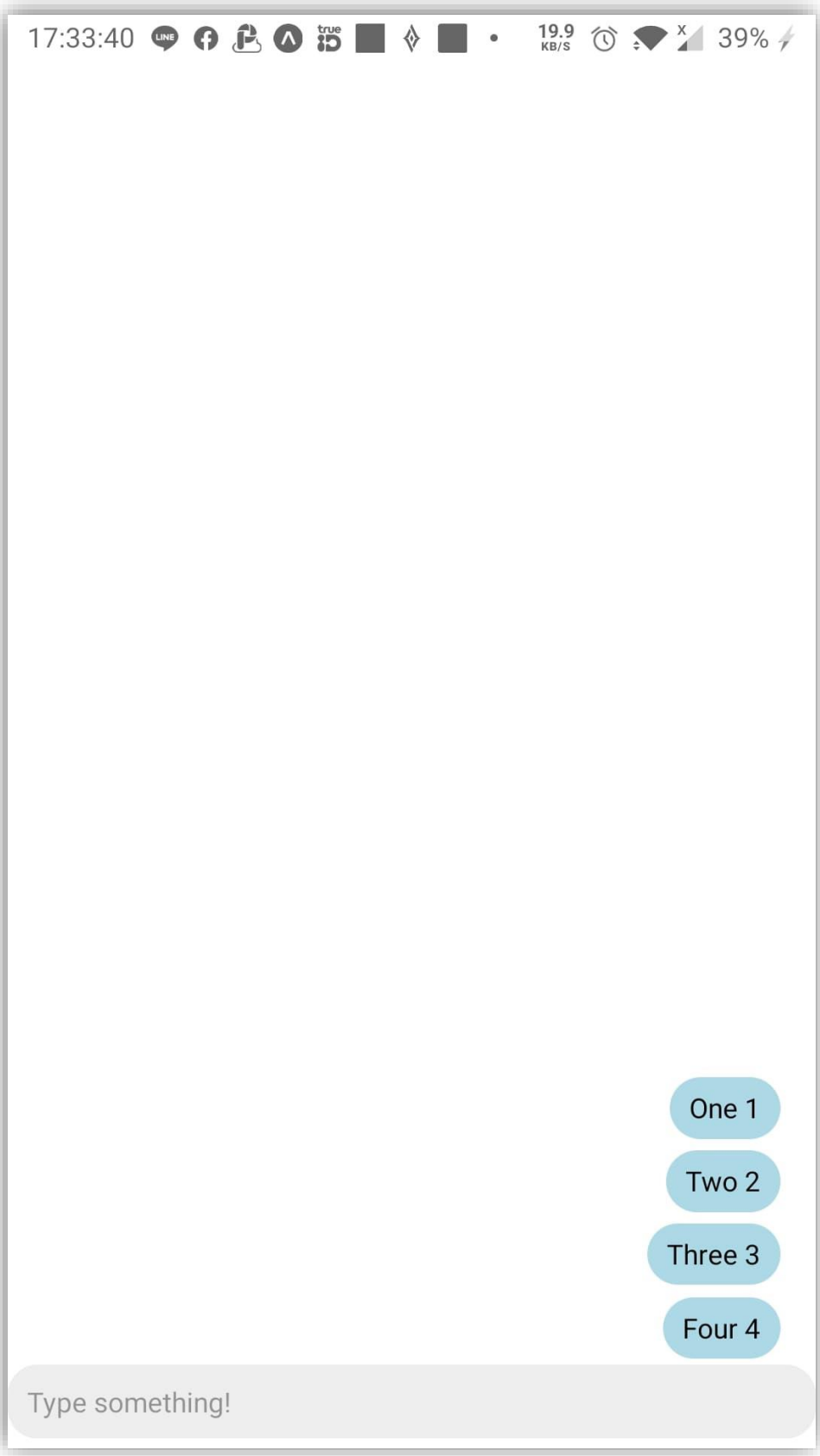

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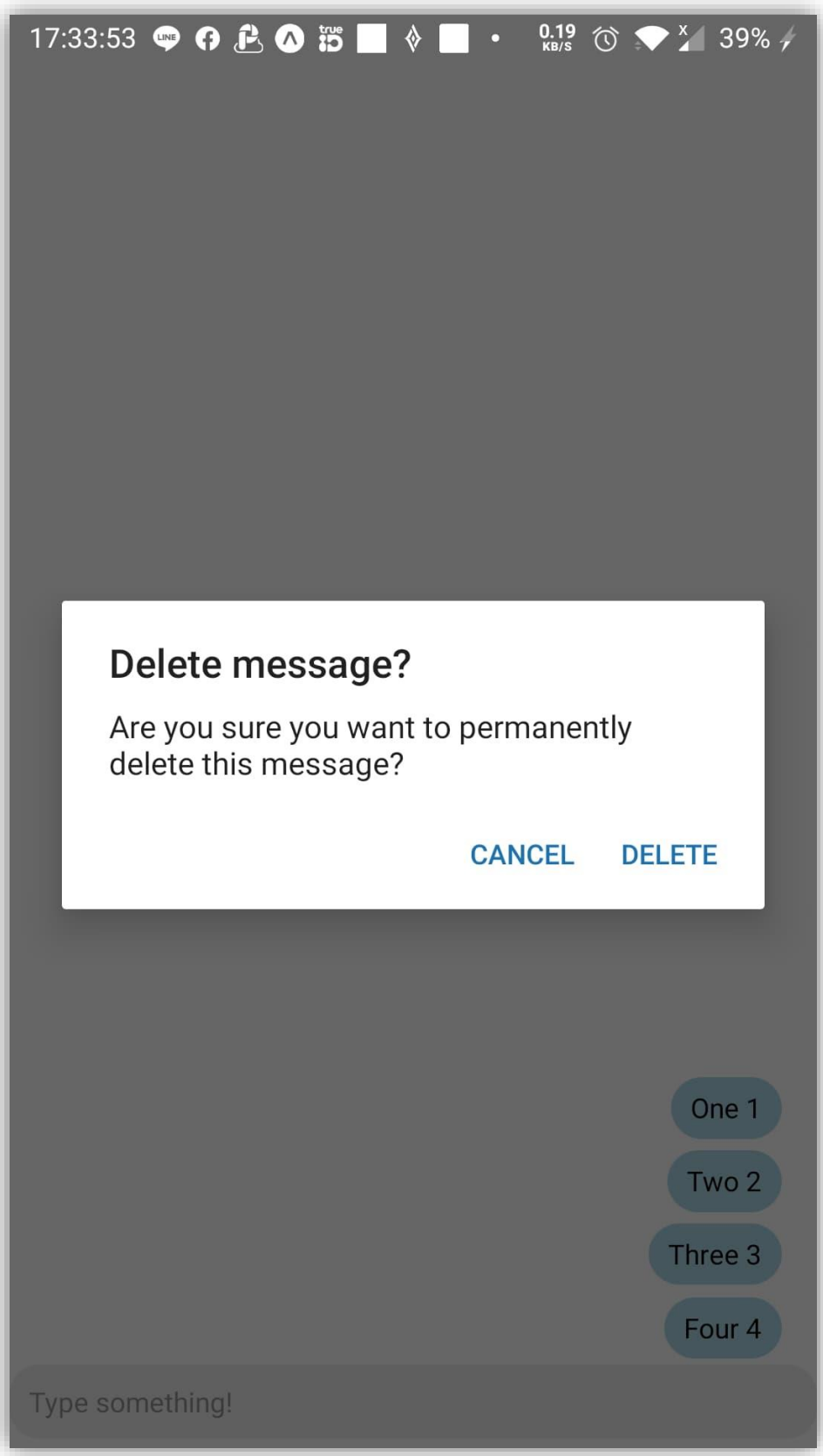

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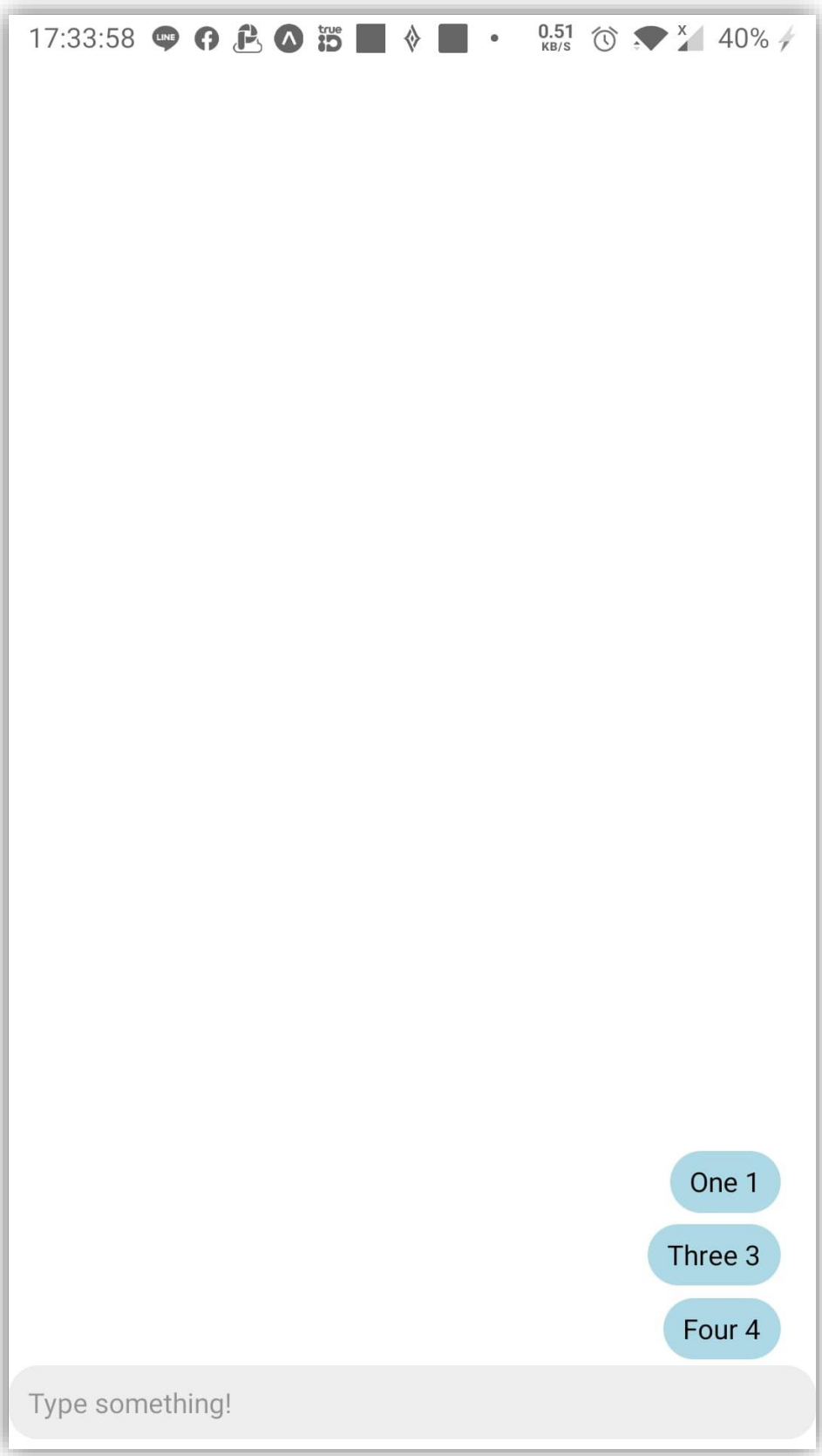

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