



Mobile Computing

Lab #1

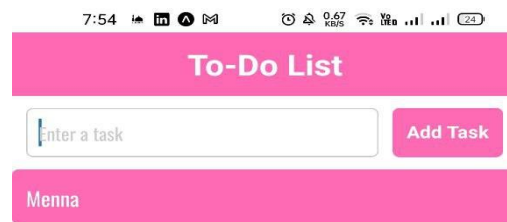
To-Do List

- **Name:** Menna Mabrouk Aly
- **Section:** 2
- **Department:** Computer and Systems (4th year)

Introduction

This report presents the development of a simple and interactive To-Do List application built using React Native. The application enables users to efficiently manage their tasks by adding new tasks and viewing them in a structured list format

Screenshots



7:56 0.79 KB/s 24

To-Do List

Enter a task Add Task

Menna

Test

Math

Algebra

Menna mabrouk aly

Task 1

To do list

Test 2

7:57 1.00 KB/s 25

To-Do List

Enter a task Add Task

Menna

Test

Math

Algebra

Menna mabrouk aly

Task 1

To do list

Test 2

.

Test 3

Test

Ttt

Testt

Colors and Fonts Used

- **Primary Color:** Pink (#FF69B4)
- **Background Color:** White (#FFFFFF)
- **Text Color:** White (#FFFFFF) for button and tasks
- **Font Used:** Oswald

Code Used

App.js

```
import React, { useState, useEffect, useCallback } from 'react';
import { View } from 'react-native';
import * as Font from 'expo-font';
import * as SplashScreen from 'expo-splash-screen';
import ToDoListComponent from './component/ToDoListComponent';
```

```
SplashScreen.preventAutoHideAsync();
```

```
export default function App() {
  const [fontsLoaded, setFontsLoaded] = useState(false);
```

```
  const loadFonts = useCallback(async () => {
    await Font.loadAsync({
      'Oswald': require('./assets/fonts/Oswald.ttf'),
    });
    setFontsLoaded(true);
    await SplashScreen.hideAsync();
  }, []);
```

```
  useEffect(() => {
```

```
    loadFonts();
  }, [loadFonts]);

  if (!fontsLoaded) {
    return null;
  }

  return (
    <View style={{ flex: 1 }}>
      <ToDoListComponent />
    </View>
  );
}
```

Screenshot of App.js

```
JS App.js M X JS ToDoListComponent.js U JS theme.js U
JS App.js > App
1 import React, { useState, useEffect, useCallback } from 'react';
2 import { View } from 'react-native';
3 import * as Font from 'expo-font';
4 import * as SplashScreen from 'expo-splash-screen';
5 import ToDoListComponent from '../component/ToDoListComponent';
6
7 SplashScreen.preventAutoHideAsync();
8
9 export default function App() {
10   const [fontsLoaded, setFontsLoaded] = useState(false);
11
12   const loadFonts = useCallback(async () => {
13     await Font.loadAsync({
14       'Oswald': require('../assets/fonts/Oswald.ttf'),
15     });
16     setFontsLoaded(true);
17     await SplashScreen.hideAsync();
18   }, []);
19
20   useEffect(() => {
21     loadFonts();
22   }, [loadFonts]);
23
24   if (!fontsLoaded) {
25     return null;
26   }
27
28   return (
29     <View style={{ flex: 1 }}>
30       <ToDoListComponent />
31     </View>
32   );
33 }
```

ToDoListComponent.js

```
import React, { useState } from 'react';
import { View, Text, TextInput, TouchableOpacity, FlatList } from 'react-native';
import styles from '../theme';

const ToDoListComponent = () => {
  const [task, setTask] = useState("");
  const [tasks, setTasks] = useState([]);

  const addTask = () => {
    if (task.trim()) {
      setTasks([...tasks, { id: Date.now().toString(), text: task }]);
      setTask("");
    }
  };

  return (
    <View style={styles.container}>
      <Text style={styles.header}>To-Do List</Text>
      <View style={styles.insideView}>
        <TextInput
          style={styles.input}
          placeholder="Enter a task"
          placeholderTextColor="#ccc"
          value={task}
          onChangeText={setTask}
        />
        <TouchableOpacity style={styles.button} onPress={addTask}>
          <Text style={styles.buttonText}>Add Task</Text>
        </TouchableOpacity>
      </View>
    </View>
  );
};
```

```
        </TouchableOpacity>
      </View>
    <FlatList
      data={tasks}
      keyExtractor={({item}) => item.id}
      renderItem={({ item }) => (
        <View style={styles.task}>
          <Text style={styles.taskText}>{item.text}</Text>
        </View>
      )}
    />
  </View>
);
};

export default ToDoListComponent;
```


Screenshot of ToDoListComponent.js

```
JS App.js M    JS ToDoListComponent.js U X    JS theme.js U
component > JS ToDoListComponent.js > [x] ToDoListComponent
1  import React, { useState } from 'react';
2  import { View, Text, TextInput, TouchableOpacity, FlatList } from 'react-native';
3  import styles from '../theme';
4
5  const ToDoListComponent = () => {
6    const [task, setTask] = useState('');
7    const [tasks, setTasks] = useState([]);
8
9    const addTask = () => {
10     if (task.trim()) {
11       setTasks([...tasks, { id: Date.now().toString(), text: task }]);
12       setTask('');
13     }
14   };
15
16   return (
17     <View style={styles.container}>
18       <Text style={styles.header}>To-Do List</Text>
19       <View style={styles.insideView}>
20         <TextInput
21           style={styles.input}
22           placeholder="Enter a task"
23           placeholderTextColor="#ccc"
24           value={task}
25           onChangeText={setTask}
26         />
27         <TouchableOpacity style={styles.button} onPress={addTask}>
28           <Text style={styles.buttonText}>Add Task</Text>
29         </TouchableOpacity>
30       </View>
31       <FlatList
32         data={tasks}
33         keyExtractor={(item) => item.id}
34         renderItem={({ item }) => (
35           <View style={styles.task}>
36             <Text style={styles.taskText}>{item.text}</Text>
37           </View>
38         )}
39       />
40     </View>
41   );
42 };
43
44 export default ToDoListComponent;
45
```

theme.js (Styles)

```
import { StyleSheet } from 'react-native';
```

```
const styles = StyleSheet.create({
```

```
  container: {
```

```
    flex: 1,
```

```
    backgroundColor: '#fff',
```

```
  },
```

```
  header: {
```

```
    backgroundColor: '#FF69B4',
```

```
    color: '#fff',
```

```
    fontSize: 24,
```

```
    fontWeight: 'bold',
```

```
    fontFamily: 'Oswald',
```

```
    textAlign: 'center',
```

```
    padding: 10,
```

```
    marginBottom: 10,
```

```
    marginTop: 35,
```

```
  },
```

```
  insideView: {
```

```
    flexDirection: 'row',
```

```
    marginHorizontal: 10,
```

```
    marginBottom: 10,
```

```
  },
```

```
  input: {
```

```
    flex: 1,
```

```
    borderWidth: 1,
```

```
    borderColor: '#ccc',
```

```
    padding: 8,
```

```
marginRight: 10,
borderRadius: 5,
fontFamily: 'Oswald',
},
button: {
  backgroundColor: '#FF69B4',
  padding: 10,
  borderRadius: 5,
},
buttonText: {
  color: '#fff',
  fontWeight: 'bold',
  fontFamily: 'Oswald',
},
taskList: {
  marginHorizontal: 10,
},
task: {
  backgroundColor: '#FF69B4',
  padding: 10,
  marginBottom: 5,
  borderRadius: 5,
  marginHorizontal: 5,
},
taskText: {
  color: '#fff',
  fontSize: 16,
  fontFamily: 'Oswald',
},
```

```
});
```

```
export default styles;
```

Screenshot of theme.js



```
JS theme.js > [⌘] styles > 🔍 input
1  import { StyleSheet } from 'react-native';
2
3  const styles = StyleSheet.create({
4    container: {
5      flex: 1,
6      backgroundColor: '#fff',
7    },
8    header: {
9      backgroundColor: '#FF69B4',
10     color: '#fff',
11     fontSize: 24,
12     fontWeight: 'bold',
13     fontFamily: 'Oswald',
14     textAlign: 'center',
15     padding: 10,
16     marginBottom: 10,
17     marginTop: 35,
18   },
19   insideView: {
20     flexDirection: 'row',
21     marginHorizontal: 10,
22     marginBottom: 10,
23   },
24   input: {
25     flex: 1,
26     borderWidth: 1,
27     borderColor: '#ccc',
28     padding: 8,
29     marginRight: 10,
30     borderRadius: 5,
31     fontFamily: 'Oswald',
32   },
33 });
```

```

31     fontFamily: 'Oswald',
32   },
33   button: {
34     backgroundColor: '#FF69B4',
35     padding: 10,
36     borderRadius: 5,
37   },
38   buttonText: {
39     color: '#fff',
40     fontWeight: 'bold',
41     fontFamily: 'Oswald',
42   },
43   taskList: {
44     marginHorizontal: 10,
45   },
46   task: {
47     backgroundColor: '#FF69B4',
48     padding: 10,
49     marginBottom: 5,
50     borderRadius: 5,
51     marginHorizontal: 5,
52   },
53   taskText: {
54     color: '#fff',
55     fontSize: 16,
56     fontFamily: 'Oswald',
57   },
58   });
59
60   export default styles;
61

```

Conclusion

This To-Do List Task utilizes React Native with Expo for development, applying custom fonts and styles to enhance the user experience. The Task effectively manages tasks using the useState hook and displays them dynamically with FlatList