Android Assignment
CSCU9YH

Student number: 2626628

Contents

Introduction

The main objective of this project is to develop an Android application using Java language. This application includes unit conversion. The application should be able to accept the user input and converts into desired units(e.g. meter to yards, miles to yards, grams to ounces, kilograms to pounds).

The methodology involves data fragmentations. The UI is user friendly and easy to use even without the any instructions and the application provides different unit conversions.

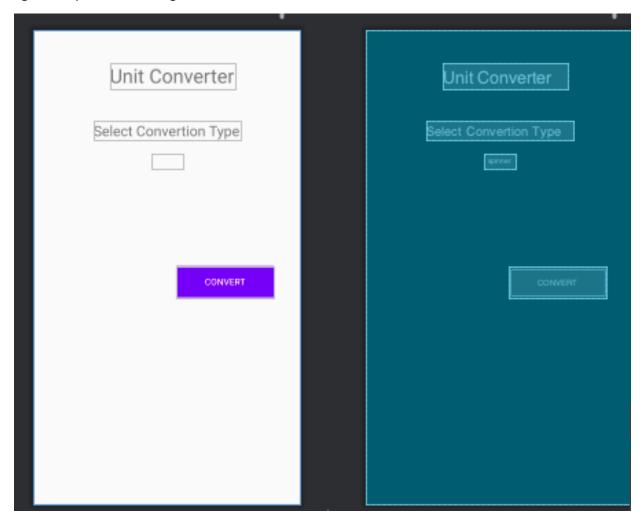**Figure 1** represents the fragment 1

Figure 1

Structure of the app

The Unit Converter app includes two fragments. The first fragment includes four spinners (meter to yards, miles to yards, grams to ounces, kilograms to pounds) and Convert button. The first fragment has default conversion (meters to yards). The second screen looks like a calculator allowing the user to type in a value for the conversion.

Features

Screen 1: The first fragment includes four spinners (meter to yards, miles to yards, grams to ounces, kilograms to pounds) and Convert button. The first fragment has default conversion (meters to yards). After choosing one of those four spinners and clicking on the convert button the app navigates to the second fragment.

Screen 2: The second screen looks like a calculator allowing the user to type in a value for the conversion. Based on the inputs given the application automatically converts the input into desired units. It also provides clear button to clear the input.

The back button in the second screen helps to navigate to the first screen.

Code Listings

This application was developed in Java language. Below is a list with all the resources xml files:

I.   **Layout:**

activity_main.xml	It is an empty layout
fragment_first.xml	This is the main screen in the application
fragment_second.xml	This is the second screen of the applications which does automatic conversions

CSCU9YH

Values

colors.xml	This file contains the colors used for the app design
strings.xml	App_name

Below is a list with all the Java files of the application:

MainActivity	This file includes the fragment
FirstFragment	It includes the implementation and the features of the screen 1
SecondFragment	It includes the implementation and the features of the screen 2

Additional Functionality

Finally, the application is running smoothly without any glitches. Furthermore, the app can be updated with additional features. These features may include:

- Sliding menu
- More conversion units (Currency, temperature etc.,)
- Multi conversions (e.g. km-m-cm)
- Dark mode
- An option to change language
- User feedback
- Copy the acquired result obtained