Documentation

The Purpose

According to Medium (2023) Providing users with genuine and significant value should be the primary objective of any mobile application. This is resolving issues, making chores easier, or offering enjoyable amusement. An app that enhances a user's quality of life and is frequently used is considered worthwhile. The main objectives of this app is to not only to educate the users on the people who have left a mark in this world, but provide a enjoyable app. The purpose of this app is to educate users on the death and the impact of the famous people. The History App is an app that shows the user various famous people who died from the age of 20 right to the age of 40. The app also shows how much of an impact they left in our world and the work they did. This app serves to educate the user on not just the death of the famous people but to educate the user on these people.

Design Considerations

The background of the design is unique in the sense that it shows old history books in the different brown shades to show that its old and its about a history app. The middle of the background needs to be clear so that the text can be displayed. According to the Harvard University, using good backgrounds and images helps improve your work. According to Harvard University background images “are useful for conveying concepts and information, and they can help improve comprehension by reinforcing information provided in text”. The bold text I used in the design was used to enhance the text and make it readable to the user. The two buttons used in this application are designed to make it easier for the user to generate the history and clear the history. The empty text view box is used to display the history that is displayed.

The light brown background on the app is a light shade of brown so the text is clear and readable. According to Uxbert Labs (2017) using colors and images in your app attract the user’s attention and make the user gravitate towards it. Uxbert Labs (2017) states that programmers Minimize UI elements when designing your products. Users stay interested in and comfortable with products that have simple designs. Only content and features that are necessary for the user are displayed. Your users will find every extra element overpowering because of the limited space on a small screen. A menu ought to provide access to secondary content. Regardless of length, menu listings must contain straightforward language and progressive disclosure to avoid confusing visitors. If possible, replace words with icons to further reduce clutter.

The app is also designed in a way that makes it easy to navigate and use the app. The app has two buttons that are used to generate history and clear the other history to generate more. According to Uxbert Labs (2017) for your design to succeed, it must be learnable. The main functions of your programme should be easily accomplished by users through straightforward path navigation and self-explanatory prompts for all major actions. Uxbert Labs (2017) also states that To achieve what they want, users aren't patient enough to try to follow complicated steps. Your product will probably lose users if it takes them too long or too much effort to figure out how to utilize it. To complete a job within a single app, user journeys should make sense. To accomplish tasks, avoid requiring users to navigate between pages and apps. Keep everything easily accessible and streamline the procedure.

In terms of the text sized that I choose for this app, I choose the size 24. This text size fits right in with my app and makes it accessible for the user to to use. I made the interface big enough for the user to read and use. I have made the space between the different interfaces and actions good enough, so the user does not risk on a different interface or action. The generate and clear button are there so that the user does not make errors.

The app also provides the user with the ability to control their actions. An example of this is the user having the freedom to generate the history they want to see by simply typing the age they want, and the history relating to that age will be generated. According Uxbert Labs (2017), users lack the patience to try to complete difficult steps to get what they desire. If it takes people too long or too much work to learn how to utilize your product, they will most likely stop using it. User journeys should make sense so that tasks may be finished in a single app. Do not have consumers traverse between pages and apps to complete activities. Streamline the process and make everything easily accessible.

With the ability to control actions users also need to understand the text of the app. Aashna Arora (20220 states that A positive user experience (UX) is greatly influenced by the typography you use for your mobile application. It has a major effect on how people understand your words. It has the ability to amplify or muffle the messages.

Readability is the key to mobile app typography. There is no purpose in offering material if it cannot be read by users of your software. Thus, when choosing fonts, designers need to use extreme caution. It ought to make the point clearly.

Finding a balance between readability and space conservation is the greatest

method to guarantee perfect typography. On a mobile device, it is usually difficult to read any text smaller than 16 pixels. Large font sizes, on the other hand, cause unintentional hyphenation, which could annoy users.

Ashna Arora (2022) When it comes to designing excellent mobile user experiences, this is one of the fundamental UI/UX principles. It is nearly impossible to type long paragraphs in mobile apps. Additionally, customers will be happy with your mobile app the less you force them to stretch their fingers over the keypad. You can use the following advice to make your app less stressful and more user-friendly: Make intelligent suggestions by utilising autocomplete functionality. Provide users with the ability to identify the field they missed by using a field check tool that displays colours or special characters. Allow users to swiftly respond to queries.

GitHub and GitHub Actions

1. Create a New GitHub Repository:

Go to the GitHub website (https://github.com/) and sign in to your account.

Click on the "+" icon in the top right corner and select "New repository".

Give your repository a name (your student number and name – in one word), add a description (use IMAD5112 Assignment 1) and choose public.

Click on the "Create repository" button.

2. Initialise the Repository with a README File:

After creating the repository, you'll see an option to "Initialize this repository with a README". Check this option to create a README file.

Click on the "Create repository" button to finalize the creation of the repository.

3. Commit and Push Your Project Files to the GitHub Repository:

In Android Studio, go to VCS (Version Control System) -> Import into Version Control -> Share Project on GitHub.

Log in to your GitHub account if prompted, and select the repository you created earlier.

Click on the "Share" button to push your project files to the GitHub repository.

4. Regularly Commit and Push Your Code as You Make Progress:

After the initial push, continue making changes to your project in Android Studio.

Whenever you make significant progress or changes, commit your changes locally in Android Studio using VCS -> Commit Changes.

Once committed, push your changes to the GitHub repository using VCS -> Git -> Push.

Testing and Automated Testing:

1. Conduct Manual Testing:

Manually test your app to ensure it functions seamlessly and offers an enjoyable educational experience for learners.

To test various features and user interactions do the following:

1. Create a New Test Class:

In your Android project, navigate to the tests directory (or create it if it doesn't exist).

Create a new Kotlin file for your test class. Name it appropriately to indicate what component or functionality you are testing.

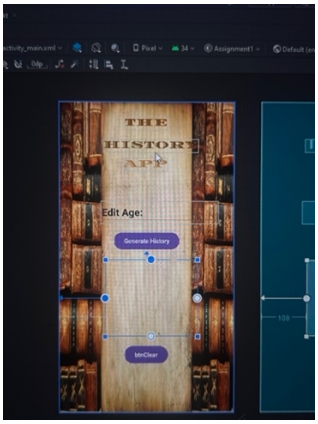
2. Write Test Methods:

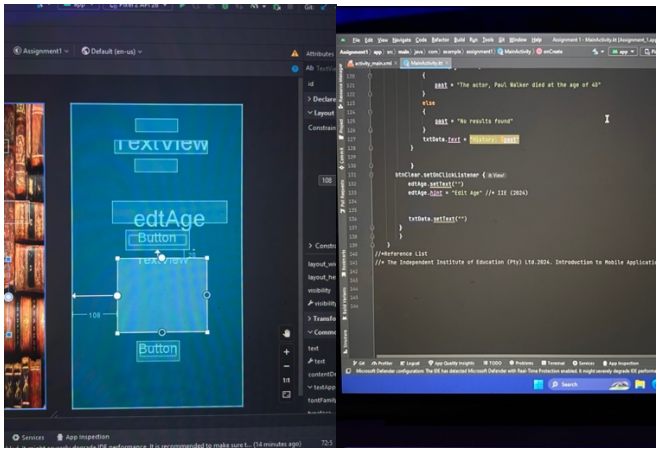
Inside the test class, write test methods like the example below.

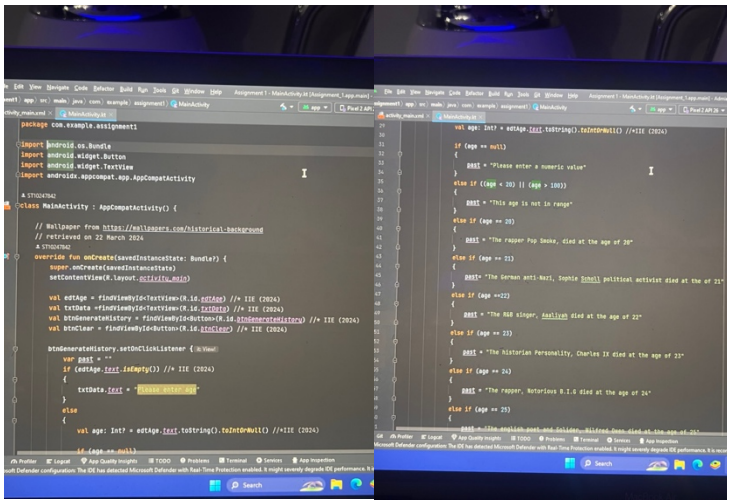
3. Use assertions to verify the expected behaviour of your code.

4. Run the Tests:

Run the tests using the testing framework's tools provided by Android Studio or through the command line.


THE
HISTORY
APP
Edit Age:
Generate History
btnClear


TextView
edtAge
Button
Button


package com.example.assignment1
import android.os.Bundle
import android.widget.Button
import android.widget.TextView
import androidx.appcompat.app.AppCompatActivity
class MainActivity : AppCompatActivity() {
override fun onCreate(savedInstanceState: Bundle?) {
setContentView(R.layout.activity_main)
val edtAge = findViewById<TextView>(R.id.edtAge)
val txtData =findViewById<TextView>(R.id.txtData)
val btnGenerateHistory = findViewById<Button>(R.id.btnGenerateHistory)
val btnClear = findViewById<Button>(R.id.btnClear)
btnGenerateHistory.setOnClickListener {
txtData.text = "Please enter age"
val age: Int? = edtAge.text.toString().toIntOrNull()
if (age == 20)
"The rapper Pop Smoke, died at the age of 20"
if (age == 21)
"The German anti-Nazi, Sophie Scholl political activist died at the of 21"
if (age ==22)
"The R&B singer, Aaliyah died at the age of 22"
if (age == 23)
"The historian Personality, Charles IX died at the age of 23"
if (age == 24)
"The rapper, Notorious B.I.G died at the age of 24"
if (age == 25)

Reference List

Documentation:

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- Experience, A. 2017 10 Mobile Ux Design Principles you should know *Uxbert Labs,* 13 July 2017. Available at https://uxbert.com/10-mobile-ux-design-principles/ [Accessed 4 April 2024].

Code:

- The Independent Institute Of Education (Pty) Ltd. 2024. *Introduction to Mobile Application Development Module Manual* 1st ed. Johannesburg: The Independent Institute of Education.
- The Famouse People Who Died 2024 [Online] Available at https://www.thefamouspeople.com/died-at-20.php [Accessed 2 April 2023].