

Mobile Application Set08114 coursework

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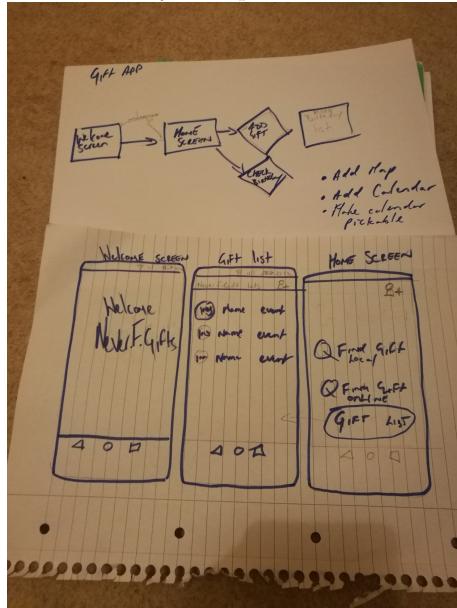
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1 Introduction

The scope for this coursework was to create design implement and evaluate a prototype Mobile application on android studio. Having no experience of application building or using android studio, the first stage was to research the different type of applications available in my android phone.

1.1 Application choice overview

My first choice of application was to create a gift app that allowed the user to store birthdays or special events with easy access to their favourite gift store.



this image is an example of some of the sketches I created while deciding which application I wanted to create. The application would include the functionality of using calendar to pick dates and the access of map for the user to search for local gift store.

1.2 Learning on the job

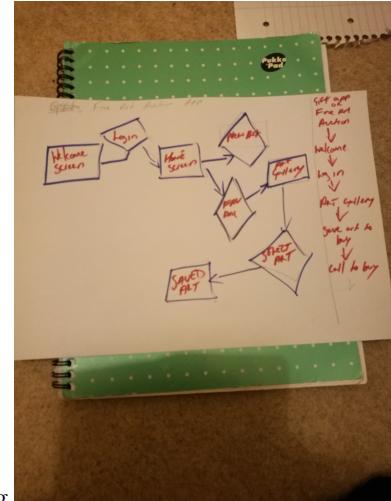
While planning the application, I took up a course online with udemy focused on android and Java development. along side the coursework book, I used the lessons to see if i could achieve the goal I set for myself.

2 Software Design

The Gift application I selected to create had the following requirements to make it work:

- calendar to allow the user to select and input dates
- map to allow the user to search local area for gift shops
- name input area to all user to add the name or person then were planning for
- the functionality of tracking gifts that have been bought already.

For the plan to make sense I create design flow sketches to give me a better idea of how may screens I would need and how each screen and ac-

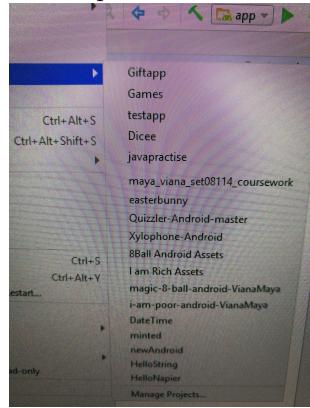


tion/decision will connect together. flow.jpg

By this point in the plan I realised I had bitten off more than I could chew- this will be included in the evaluation section. I had to invest a large amount of time working through the udemy course to better understand how to implement my design. I concentrated all my effort in the lesson I did not create my usually mockups after the sketch as I felt more time need in the actually learning and understanding of the android studio and Java.

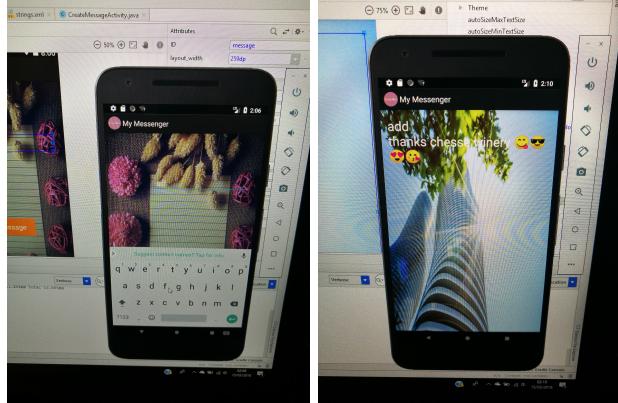
3 Application implementation

The implementation of the design forced the change of the final application.



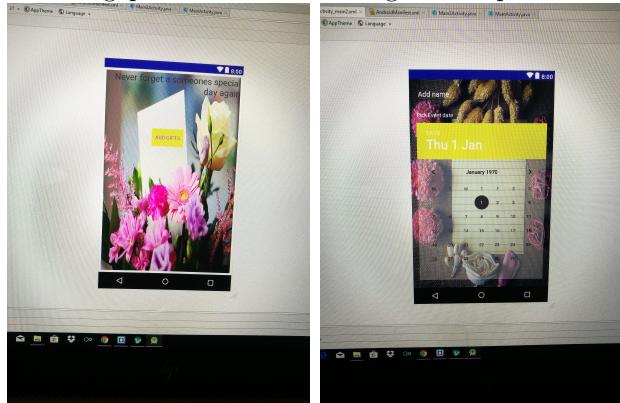
this image showcases the list of the many failed attempts and various forms of the application app creation that got me to this point. I started with basic applications such as testapp to understand how to connect the activities to allow for better interaction. The test was fine however once I started look into how to implement the map and date-picker, I seem to crash or break my application. The application I had built alongside the udemy courses, such as the dicee, 8 ball and love calculator, were great for understanding Android studio work-space and how to add images, vector assets, change layout and code simple Java code that make the buttons and activities work. However I the code along example had read added code. This cause confusion on understanding how to build from scratch. As (dear I write it) time was catching up with me, I decided to revisit one of the applications I had worked on using the Head First Android Development. I was able to create a messaging application, that had little functional requirement, however it saved a create purpose. I finally know how to use intent to move between activities and to showcase data, such as the message that the user would input in the message box.

3.1 Screen-shots



4 Critical Evaluation

Critically I wish I could have picked up the syntax and pattern of how to place all the elements of my initial application together. I found because the use of map within the application and trying to make the search link to google was a daunting process. I had managed to input the calendar as pick-able



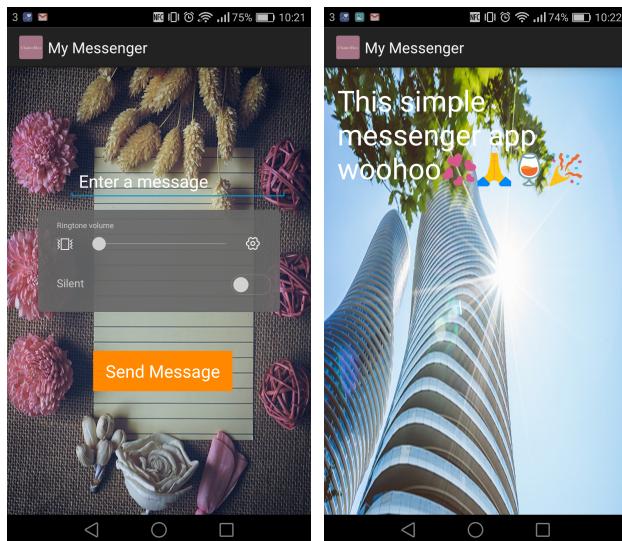
data. While trying to code the intent for the button in the main page to call up the calendar page I broke the process. I struggled to connect where I was going wrong and I preferred to start a new simpler application instead of forcing this one to work with a patchwork band-aid codes. However I find the final application is much closer to my mobile development skills. Focusing on a simple creation such as the messenger application linking to each other using: public void onSendMesage(View view) Intent intent = new Intent (this, RecieveMesageActivities.class); startActivity(intent);

For the intent to work I had to import android.content.Intent in the import section at the top of the ReceiveMessageActivity.java.

4.1 Comparison against original concepts

The final messenger application is very basic, compared to the ambitious plan illustrated in the introduction. Although the final application is simple I found it has reinforced some of the basic fundamentals of working with android and How to search through relevant sources to solve problems. I found reading some of the stake overflow helpful to understand syntax and where people were making the same mistake as me. However I wish was able to deliver the initial application as it had more scope and better elements to fully showcase the power of android.

4.2 Comparison against other application/games in the genre



My application was inspired by Whatsapp and other messenger applications that I use everyday. However, mine is a very basic version, in that it's soul focus is to call the second page activity and to display the message created in the first page. Starting at this basic point allowed me to understand the area that I was getting most confused in- activities and connecting multiple activities.

4.3 Areas for improvement to the application

This application chose has so much potential for improvement. I would add functionality such as video and GIF shares, allow the user to add contacts to actually share the message with. I would allow for customisation of the background so the user can change the app their own style. I would include a shut down button or go back button to keep the flow of the interaction, because, at the moment is very clunky with the text not accessing a send button, the user has to minimise the text bar before they can push the send button.

5 Personal Evaluation

Personally I feel that I have learnt a good amount of solid fundamentals while under such intensive pressure to learn and implement a working prototype. I feel my access to udemy courses, books and course workbook helped me not to feel too overwhelmed. I was able to abort applications and start again quickly. And with each new basic application I was able to use sections of it to work on my final application, along site the Head first book. However the plan was to always create the gift application so there I let myself down as I could find a way to solve my blocks in this app and wasted a chunk of time trying to mine through stake overflow. However I feel my first attempt at building application was fun and huge learning curve. I also feel that I haven't achieved what I hoped to give me great mark, but this application has the required interaction to display little me . My plan is to continue to work on the messenger application and to also try to understand how API works so that can finally build the gift application too.

6 References

Below are some of the udemy courses I used to help me with this coursework.
<https://www.udemy.com/courses/development/>

- Tim Buchalka Complete Java Masterclass
 - London App brewery Android O and Java Mobile application
- Head First Android development, 2nd edition <https://developer.android.com/index.html>

7 Resources

Images were downloaded from free source:

- <https://www.pexels.com/royalty-free-images/>
- Photoshop CC to minimise and export the image to PNG as Android seem to crash if an image was in jpeg.

8 APK

[{"outputType":"type":"APK","apkInfo":"type":"MAIN","splits":[],"versionCode":1,"path":"app-debug.apk","properties":"packageId":"com.vianamaya.mymessenger","split":""}, {"minSdkVersion":15}]