Ara Art Tour : Mobile Application

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ABSTRACT

This paper gives an overview of how I developed and released the *Ara Art Tour* mobile application. The project was initiated by the art curator at Ara Institute of Canterbury. Its purpose is to actively educate students on artworks present on campus. The mobile application feature includes a Map and a Finder. The project methodology is a single person modification of the Lean methodology. The application is publicly available on the Google Play store.

Keywords: Android, Android Studio, Gamification, Mobile Application, Lean methodology

1. INTRODUCTION

Ara Art Tour is a mobile application designed for art discovery. Its purpose is to actively engage students into learning about artworks displayed at the Ara Madras campus.

The application will contain the following features:
- Map of selected artwork locations
- Direction Finder pointing to a specific artwork
- Puzzle (game)
- Artwork details and images

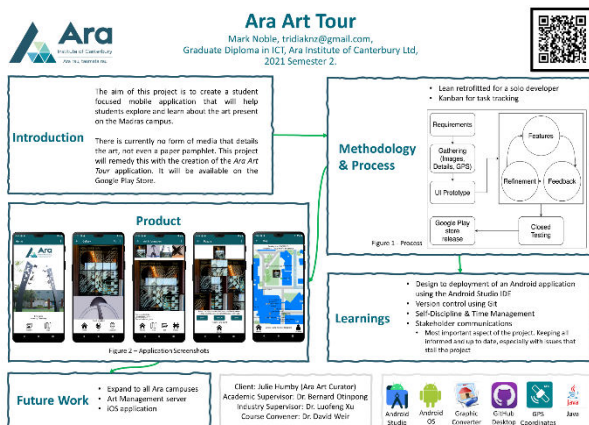These features will help the student learn about each artwork that interests them.

Figure 1 – Poster

2. PROCESS

The project was done using a modified version of the Lean methodology (Kanbanize, 2021), using a digital Kanban board (Rehkopf, 2021) for task tracking.

Because I had already created a prototype earlier in the year for the client, defining the UI and features was very quick.

Coding was done using the Android Studio IDE with the Java programming language. GitHub was used for version control.

The first task was to produce a UI prototype. Key features were not implemented. The purpose was to decide on the look.

Thereafter, I coded one or two features at a time (Lean 'implement fast'), presented them to my supervisors and added them to a 'feedback queue' to await approval from the client. Client review occurred roughly once every two weeks.

If any changes were required, I either did them immediately (simple changes) or created a new task for the Kanban board to do as soon as practical. This process repeated itself until the application was completed.

Code QA consisted of Java Best Practices (XPerti, 2021) and built-in Android Studio tools, specifically the analyser.

A closed testing release was made. The app was uploaded to the Google Play store and selected testers could download it and give feedback.

3. OUTPUT

The mobile application is now available on the Google Play store (released 18th Nov, 2021. https://play.google.com/store/apps/details?id=nz.ara.araart).

The application has implemented all features stated in the introduction. Figure 2 below shows the key screens of the application. From left to right: Home, Gallery, Art Information, Puzzle, Map.
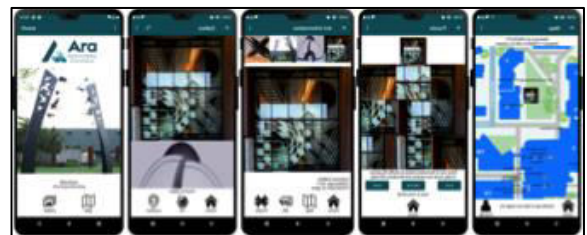

Figure 2 - App Screenshots

Figure 3 - Play Store QR Code

Two legal issues cropped up.

- All images in the app are copyrighted. Nothing can prevent the user from doing whatever they want with the images so the image quality is suitable for a phone, but not for reproduction purposes.
- Privacy policy. This has become a complex topic and even an application as basic as this have several pages of privacy details.

4. CONCLUSION

Being a long-time hobbyist programmer was a big help doing this project. Still I learnt a lot: new platform and IDE; time management; industry approved methodology (if a bit modified) and version control (Git, GitHub).

Future possibilities for the application:

- Expanded to include all Ara campuses in Christchurch.
- Ported to the iOS platform (and possibly PCs and laptops).
- Have an Art Management server implemented to make artwork updates easier.

5. REFERENCES

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