Go-Go Connect Mobile Application

Client: Ray Law

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1 BACKGROUND

Go-Go Connect is an existing non-profitable mobile application owned by Ray Law, a representative of a Non-Governmental Organisation (NGOs). Mr Law has noticed an increased number of elderly Chinese migrants who suffer from anxiety and depression. These issues are caused by cultural differences and language proficiency, which often lead to mental health issues. He believes that the GoGo Connect mobile application will help and support the elderly Chinese community connect to New Zealand culture and society. We were presented with a prototype and his vision, we were tasked to debug and test the current mobile application and prepare it for deployment.

2 RATIONALE

Our initial project scope was debugging and testing on a existing application that was presented to us. We debugged and tested the existing application and elected to start development of an entirely new application.

We redesigned the project scope and decided on new software and SDK to create the application. We created conceptual designs, documentation and prototypes.

The purpose of this system is to enhance communication and offer the elderly migrants assistance relating to mental health awareness, local events information, request for a volunteer to assist them with everyday routine.eg. shopping, cleaning and counselling.

3 OBJECTIVES

- Identify the bugs on the existing app
- The existing app can not be tested. unusable
- Re-design the system with approval from the client. Conceptual designs
- Create a product backlog, which identifies all the implementation. Done through trello
- Deliver product backlog to deliver short term implementation cycles. This was done in sprints
- Test the implemented features and create proper documentations for each feature.

4 GOALS

Planning
Benchmark Gogo Connect to similar applications.
Clients vision.

Research &Analysis
Research specific users we are developing for, UX & UI.
Analysis app features.

Design
Creating Conceptual designs
Create Research documentation of front & back end development

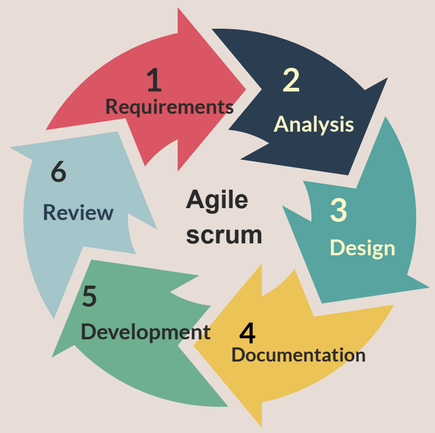
Development & Testing
Develop features, conduct testing for app improvement.
Preparation of documentation for project handover

Implementation
Completed all documentations for Client, AUT and project handover for next development team.

5 METHODOLOGY

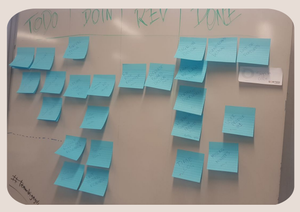
With our prior knowledge on project management methodology we decided to use a Hybrid approach (UCD and Agile Scrum). We have successfully created artefacts and followed these management documentations.

- Scope Statement
- Project charter
- Work Breakdown Schedule (WBS)
- Change Management Plan
- Quality Assurance
- Communications Plan
- Risk Register
- Issue Log
- Project Schedule
- Milestone Report



Agile Scrum has helped us become more interactive during our development phase, allowing us to work collaboratively rather than individually. Also, this approach allows us to micro manage, view the progress of work and how much is being contributed.

UCD was used during our Analysis and Design phases. This approach has allowed the team to work closely with the client, create designs, prototypes and user stories based on the user's requirements.



6 ARTEFACTS

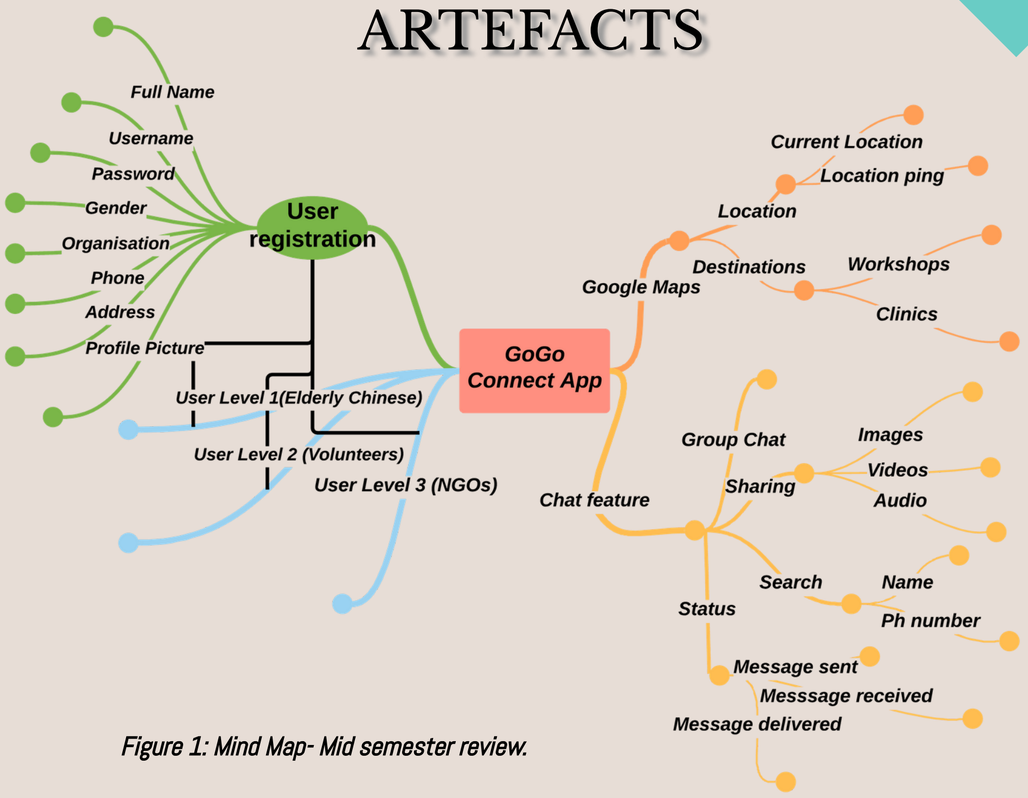


Figure 1: Mind Map- Mid semester review.

The mind map (Figure 1) was created to visualise the ideas and concepts of the app in a graphical view. This helped us to structure the information while helping us to better analyse, and generate ideas regarding the app. A conceptual design was created to show what the interface would look like and how the client described it. Alternative designs (Figure 2) was also created and feedback from client was recorded.

Figure 2: Conceptual Design

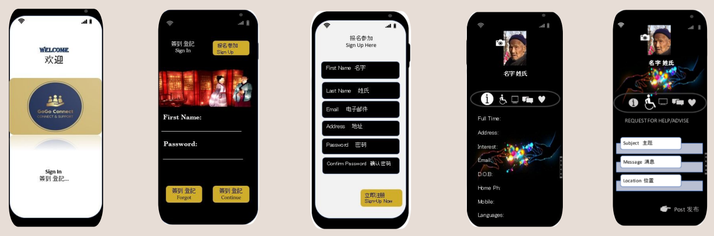


Figure 3: Alternative Design

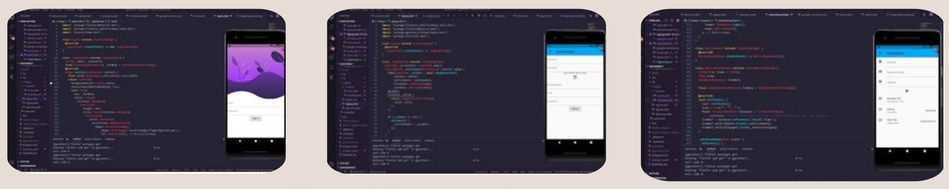


Figure 4: Feature testing

7 QUALITY ASSURANCE

This project's quality assurance plan consisted of:

- Quality Assurance Plan
- Analysis design models to get feedback
- Acceptance test
- Planning poker
- Definition of done
- Usability Testing
- Project Management Plans (Issue logs and Risk Register
- Auditing portfolio to ensure version control and proper documentations have been created and manage accordingly.

8 CHALLENGES

Technical

Issue -Hardware - Our development hindered due to hardware issues, our Lead developer had many issues during our middle to latter stages of development which affected testing.

Solution - We developed what features we could, there is a base application, we further went in detail with our research documentation for project handover.

Issue - Initial scope issue- debugging the application from the prior project was impossible due to the lack of documentation and issues we had with the ex-programmers code.

Solution - redesigned the scope to create an application from scratch with entirely new software and language, the project will be prepared with documentation for another project handover.

Non-Technical

Issue - COVID-19-Pandemic, early on during our development phase, the world was shook with COVID-19 causing country wide lock-down, this affected our team a lot with collaborative learning difficulties.

Solution - We set up zoom meetings, Microsoft teams and Facebook calls to work collaboratively throughout the lock-down period.

LESSONS LEARNT

Lessons learned throughout the duration of the project:

- What and how the Definition of Done is applied and how all organisations, stakeholders, team members has a contribution to the definition of Done.
- The importance of being more resilient
- The importance of effective communication and team collaboration.

9 RECOMMENDATIONS

Future development on this project should focus on:

- Enhancing UI and UX with Flutter
- Conceptualising on Adobe XD
- Firebase realtime, Firestore and Firebase auth
- G Suite for Nonprofits
- Google Earth Outreach/Google Maps platform

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