DECO7350 Social Mobile Computing

Design Process Document

Team WePet

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1. Promotional Material
- The poster:
  https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Promotion/ProjectPoster.pdf
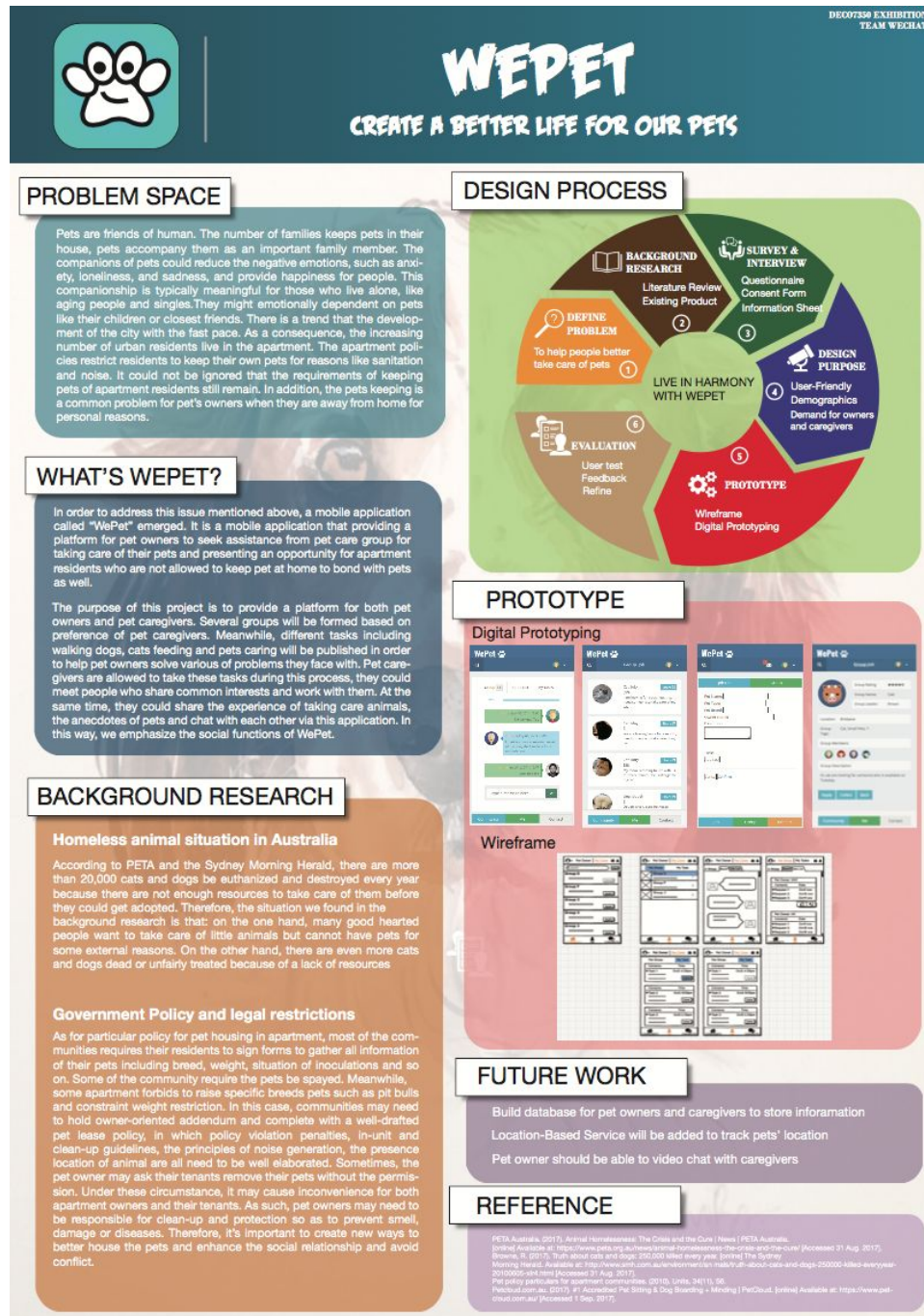
  Overview:

Figure 1 Promotion Poster Overview

- Flyer

https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Promotion/Flyer.pdf
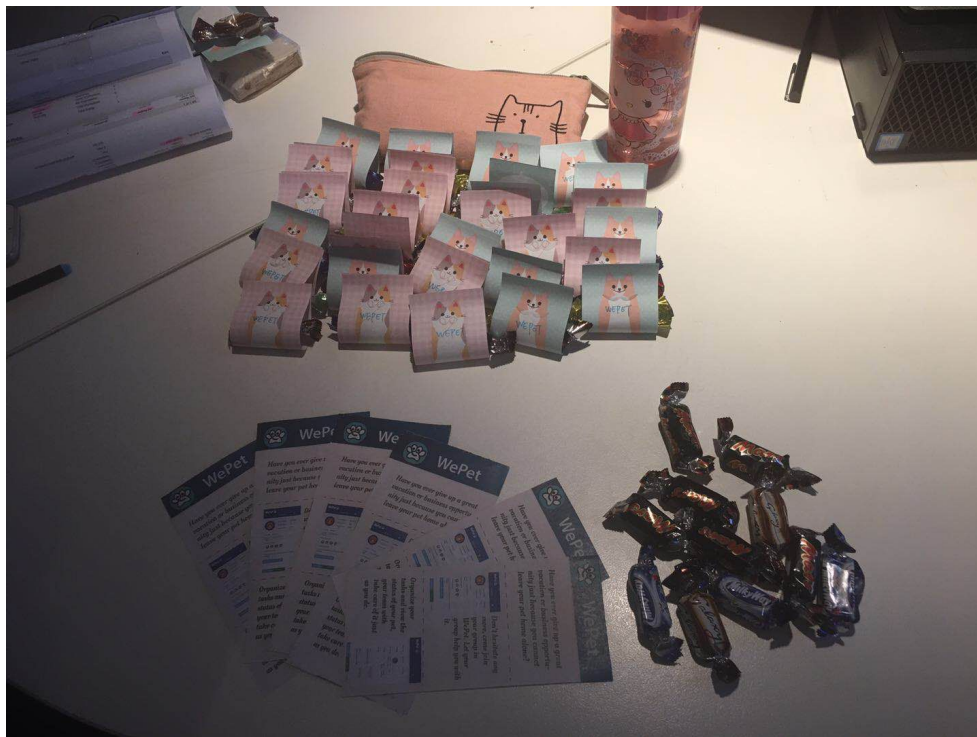
- Exhibition Table

Figure 2 Exhibition Table

2. Prototype and Usage

The prototype can be accessed through:
https://s4443483-deco7180.uqcloud.net/deco7350/login_carer.html

It is a application designed for mobile devices. To view it in the correct size please use chrome developer mode and select Iphone 6. Or please use a smartphone to test the prototype.
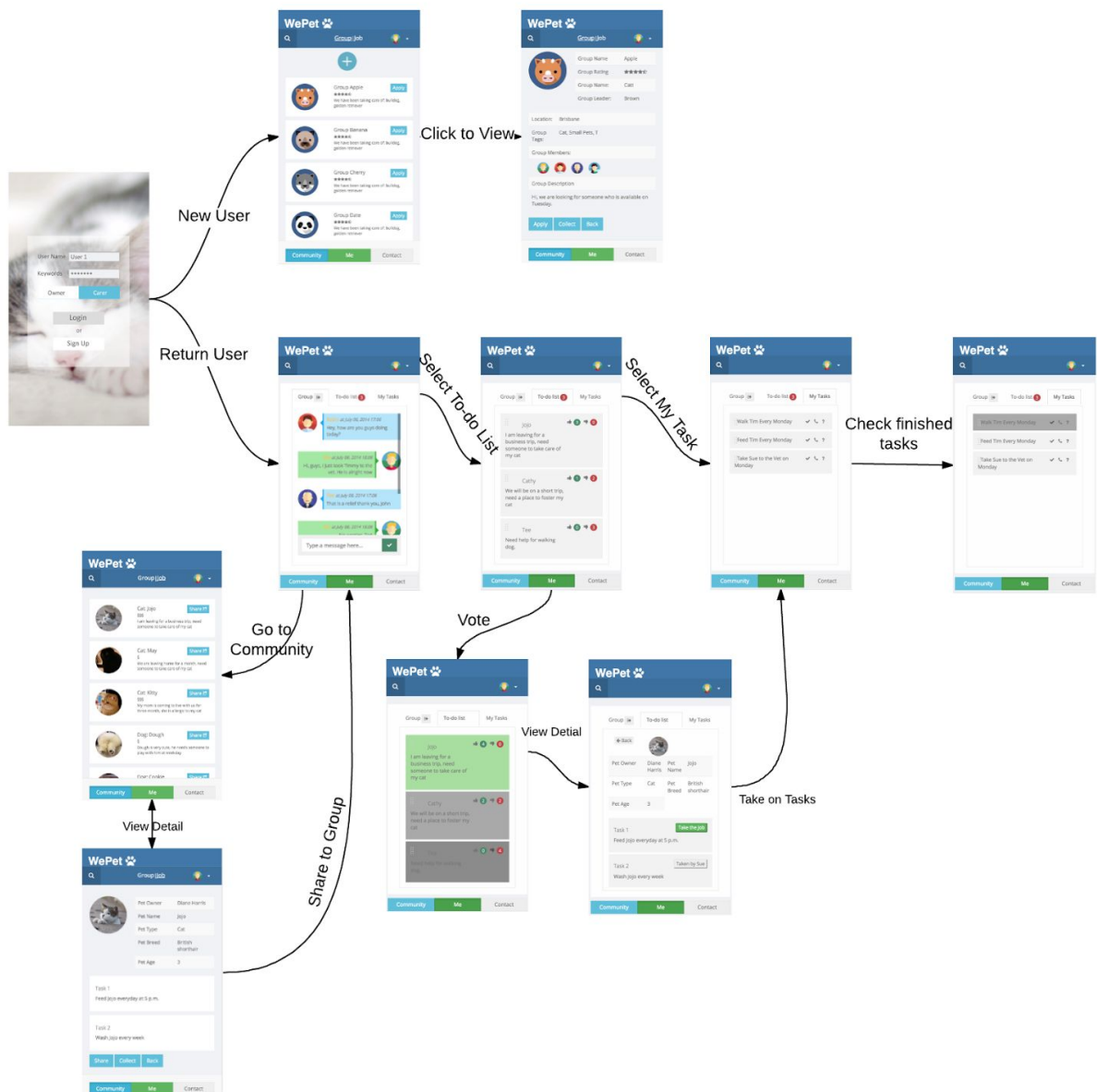
- **For Pet Carers:**

Figure 3 Task Flow for Pet Carer
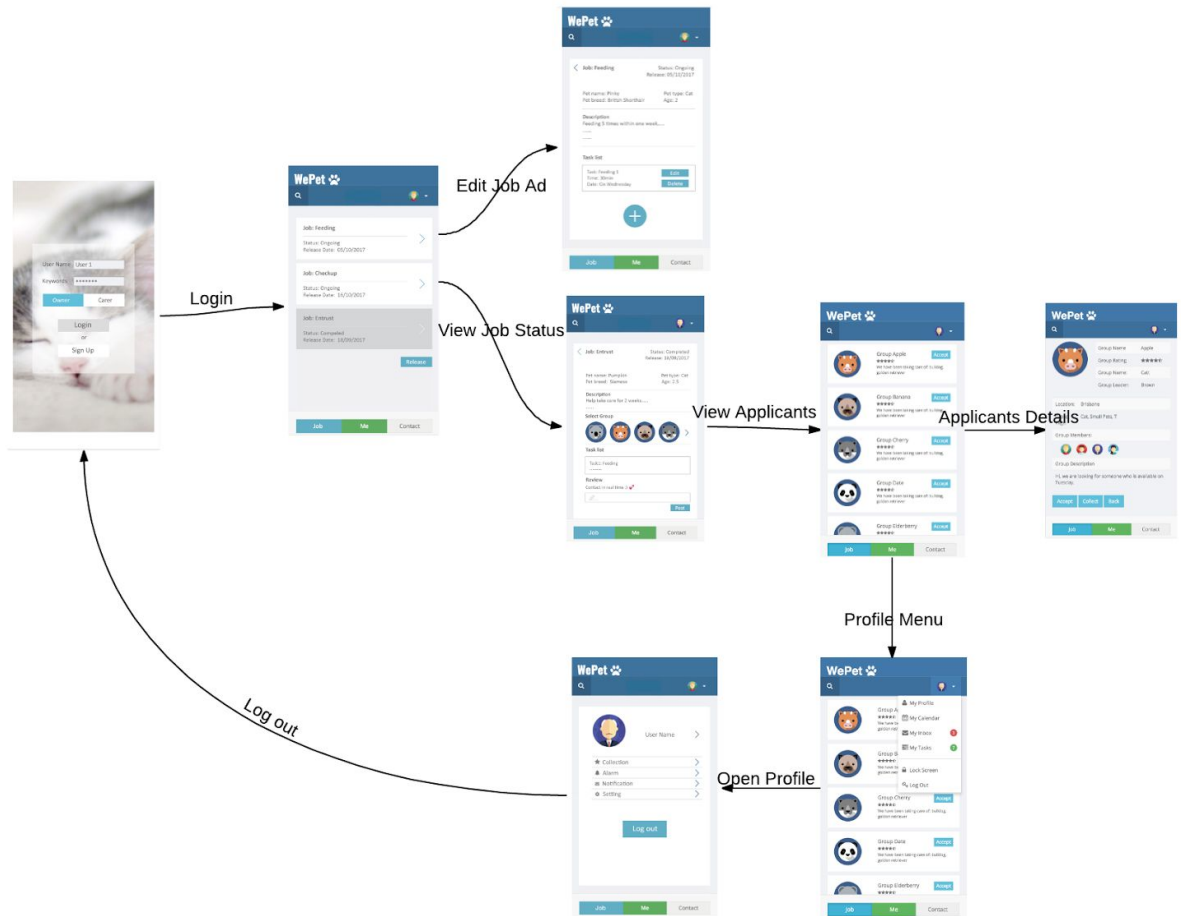
- **For Pet Owners:**

Figure 4 Task Flow for Pet Owner

View clear pictures at GitHub:
https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/ProcessCharts/Prototype%20Guide.pdf

The final prototype is build based on HTML, CSS and Javascript. The interface is modified based on the template from http://madmin.swlabs.co/.

3. Project Summary

The initial problem space came from the acknowledgement of the important role of pets in our life. Therefore, the project aimed to provide a mobile application that could support both pet owners and pet carers with a virtual community where they could equally and efficiently share information, collaborate and keep track of their pets. The pet carers mentioned in the problem space are the type of target users who generally do not own any pets for many reasons, but they wish they could overcome the problems and build connection with small animals. While the pet owners are users who own one or more pets but are seeking help for pet caring services.

To address this problem, we have designed an application that has tailor-made interfaces and functionalities for the two types of target users, who are pet carers and pet owners. The main functionalities for pet owners are posting job requirements, selecting a pet carers group, joining the communication and tracking the job status. On the other hand, for pet carers, the main functionalities are forming groups, searching and applying jobs as a group, and sharing works as a group. The main purpose of the application is to form pet carer groups to support pet carers who have difficulties keeping pets but have strong interests in animals. In the meantime, it also aim to provide pet owner with high quality and reliable pet fostering and caring services.

4. Design Process

To tackle this problem, we have designed an application that is tailor made for the two types of target users, who are pet carers and pet owners. The design process of the application follows the user centered design lifecycle. Figure 5 contains a timeline for this project and each phase is color coded with the UCD lifecycle shown in Figure 6.
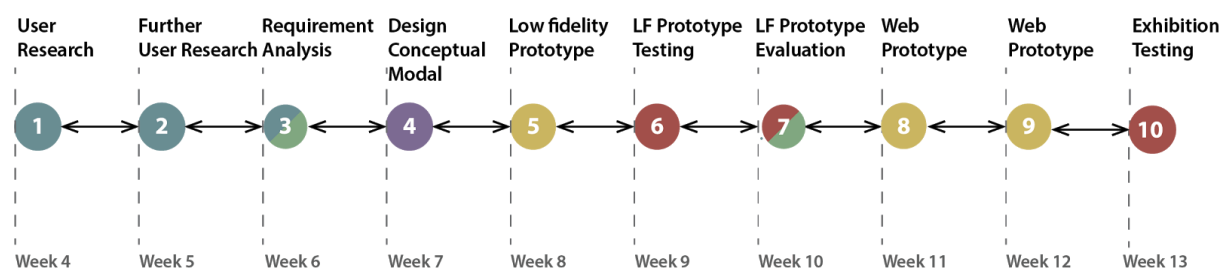

Figure 5 Project Timeline

View the clear picture at GitHub:
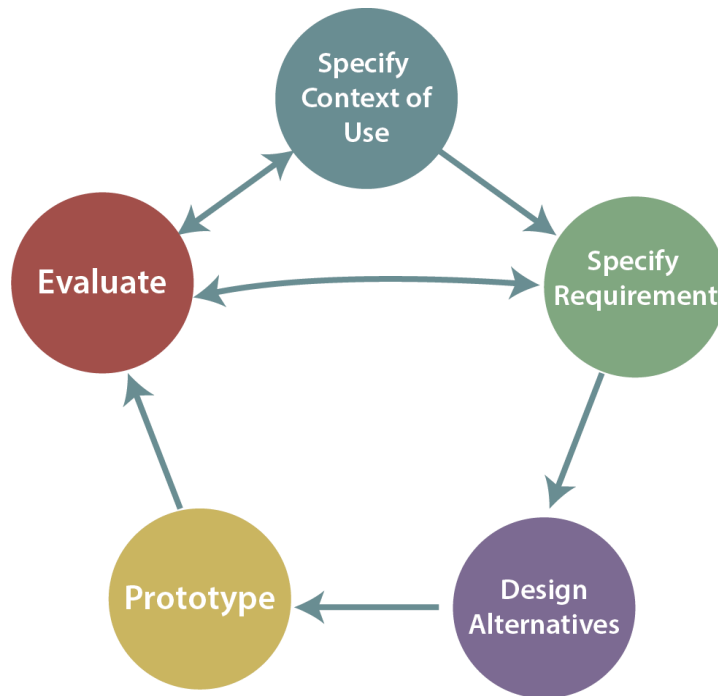https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/ProcessCharts/Timeline.png

Figure 6 UCD Process

View the clear picture at GitHub:
https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/ProcessCharts/UCD.png

As the problem space is new, we have conducted two rounds of user research to understand the requirements and concerns of our end users. The first one targeted both user types to identify the possibility of pet caring in a group. With a positive feedback, we started the next investigation on pet owners' concerns while using pet fostering or other caring services. Based on the background research, we generated two personas:
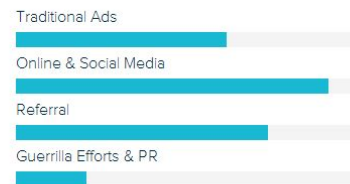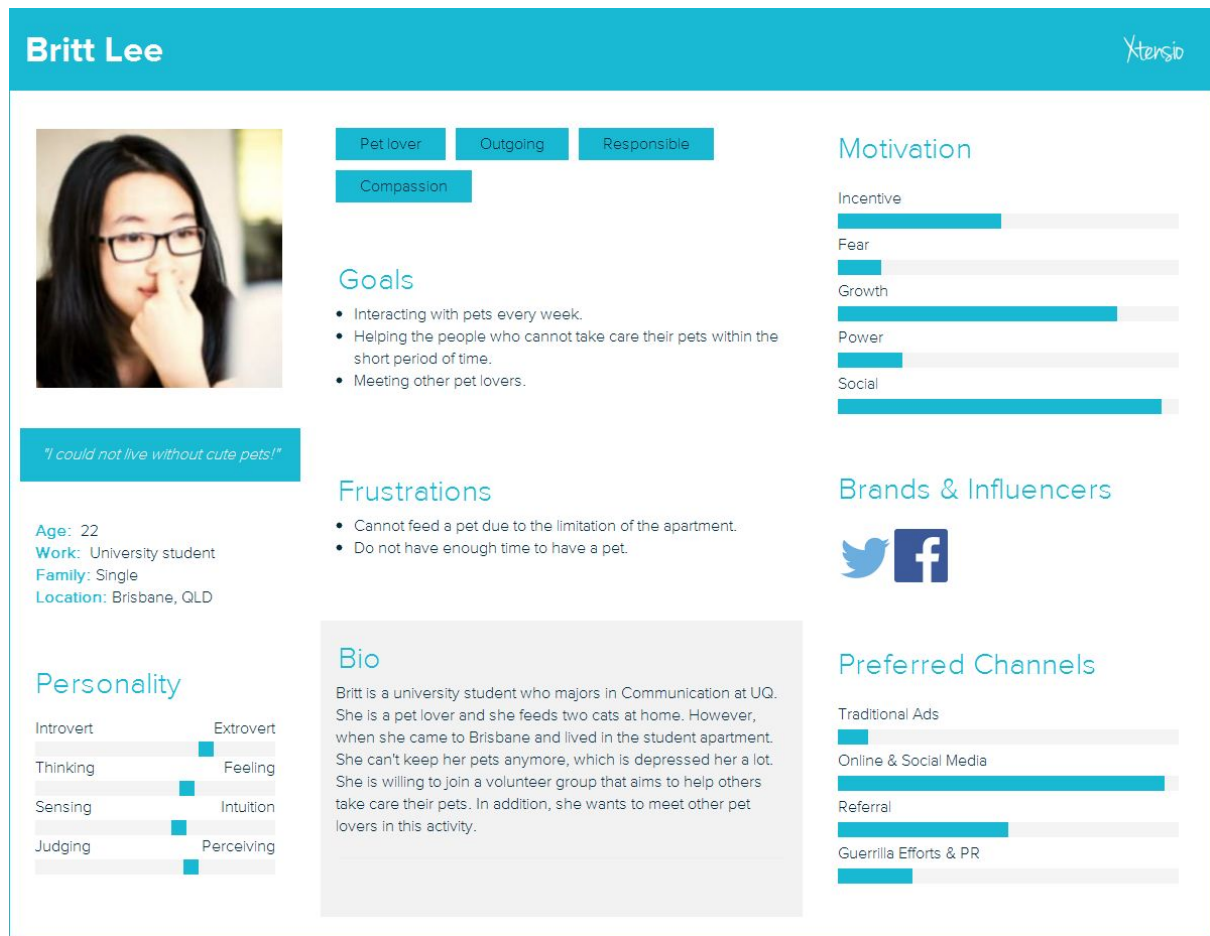
Figure 7 The Persona for Pet Owner

Figure 8 The Persona for Pet Carer

View clear pictures at GitHub:
https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Requirements/Folio.png

Based on the gained knowledge, we entered the prototyping phase and made our first low fidelity prototype from scratch. We first meant to make a single application for both pet owners and carers while the pilot test results shown that task flows were over complicated and disordered. Therefore, we redesigned the concept and tested with target user groups. At this stage we have tested the system concepts of making two separate applications for carers and owners, including posting jobs and selecting groups for owners, and searching jobs, making decisions as a group.
https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Low-fidelity%20Prototype/test_prototype.bmpr
https://docs.google.com/document/d/1Gb0z-hN_U2lLxLBtM5_gSGnhC7PWpl1fekGZ91NX-ZE/edit

The important feedback we received from the testing was that the original system was over-complicated, and the application making and approving procedures were unclear.

The limitation of this prototype testing was the low fidelity prototype can not simulate the real interaction of the group communication and voting system which are important part of the system.

Therefore, we made our second prototype which is a web based application mockup system. Due to the limited developing resource of the team, we have only implemented the sections of job searching, sharing and decision making for pet carers[shown in Figure]. The other parts such as carers' profile management, group administration and contacts were not included.

The following diagram shows the features that have been designed for the project. The application was divided into pet owner ends and pet carer ends. The block's colors are the features implementation stage. The main features have been grouped into three major functions for each user type. The crossed out features are feature eliminated after first user testing session. The pet owner's functions are 'Job', 'Me' and 'Contact' while the pet carers functions are 'Community', 'Me' and Contact'.
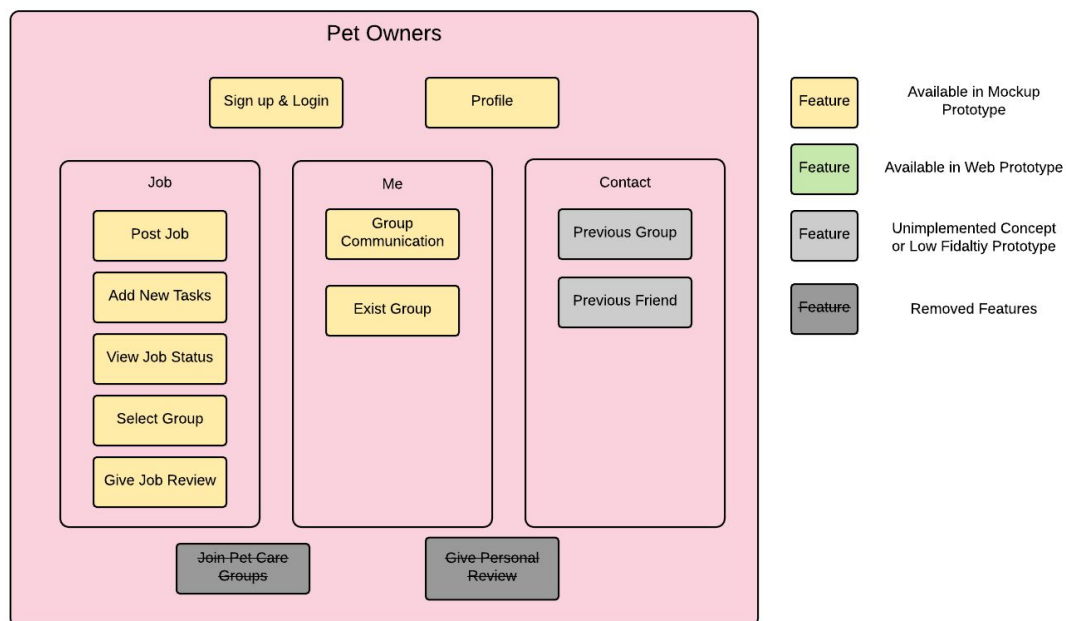

Figure 9 Pet Owner Functionality

View the clear picture at GitHub:
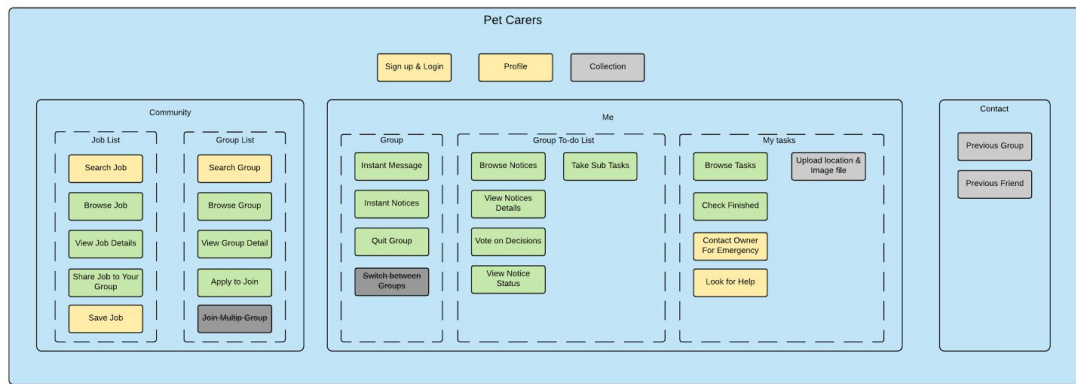https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/ProcessCharts/Pet%20Owner%20Functionality.pdf

Figure 9 Pet Carer Functionality

View the clear picture at GitHub:
https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/ProcessCharts/Pet%20Carer%20Functionality.pdf

From the final testing, we have collected opinions on how to tackle fringed scenarios, group conflicts and suggested opportunities of task sharing in other problem domains. https://docs.google.com/forms/d/14cmdjO3oMz8Vvr8ucW_IJ22uRbpVXGw3dhIlWhotUVA/edit?usp=sharing

For future works, we are planning to include single carers to increase the flexibility of the application so that it could attract more potential users. To enable the option, we will need to go back to low fidelity prototype to test the basic concept. In addition to the new option for pet carers, we also planning on enable more job and task report system so that pet owners would be able to know more about condition of their fostered pets.

5. Work Breakdown

This form describes the work breakdown within our team during the development process.

Group Member	Timeslot	Work Discription	Reference Link
Jiajing Sun	Week 4 & 5	Background Investigation & Target Audience	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Requirements/Proposal.pdf
		Design and Carry out Survey	https://docs.google.com/forms/d/14cmdjO3oMz8Vvr8ucW_IJ22uRbpVXGw3dhIlWhotUVA/edit?usp=sharing
	Week 6 & 7	Design Task flow	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Requirements/Use%20task%20flows.docx
		Define Pro foma test plan and task design	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Testing/Test%20Plan.pdf
	Week 8 & 9	Design and Build Web Pages	**https://github.com/deco3500-2017/Team-WeChat/blob/master/group_chat.html**
	Week 10 & 11	Redesign and Build Web Pages	**https://github.com/deco3500-2017/Team-WeChat/blob/master/grouplist_care.html**
			https://github.com/deco3500-2017/Team-WeChat/blob/master/joblist_care.html
	Week 12 & 13	Build and Test Web Pages	https://github.com/deco3500-2017/Team-WeChat/blob/master/owner_group_chat.html
		Deploy Final Prototype	https://github.com/deco3500-2017/Team-WeChat/blob/master/ownerjoblist.html
		Testing	https://s4443483-deco7180.uqcloud.net/deco7350/login_carer.html
		Final Document	
		Flyer and Promotion Material	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Promotion/Flyer.pdf
Sheng Jing	Week 4 & 5	Define Project Plan	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Requirements/Proposal.pdf
	Week 6 & 7	Lauch Survey	
	Week 8 & 9	Research for Technical Solution	**https://github.com/deco3500-2017/Team-WeChat/blob/master/group_chat.html**
		Design Testing Survey Question	https://docs.google.com/forms/d/1p5vLej_GFcCtl81-1PKS3BOEC-1DG4T9ZcSfLrR1z-0/edit?usp=sharing
	Week 10 & 11	Build Web Functions	**https://github.com/deco3500-2017/Team-WeChat/blob/master/group_chat.html**
			https://github.com/deco3500-2017/Team-WeChat/blob/master/grouplist_care.html
	Week 12 & 13	Build Mockup Prototype	**https://github.com/deco3500-2017/Team-WeChat/blob/master/login_carer.html**
			https://github.com/deco3500-2017/Team-WeChat/blob/master/owner_profile.html
Mengwei Lin	Week 4 & 5	Design and Carry out Survey	https://docs.google.com/forms/d/17vHHSlm-R1REG0rxZJMPtn4QwbgbNsbU-jOLD14RMEs/edit?usp=sharing
		Survey & Evaluation	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Requirements/Proposal.pdf
	Week 6 & 7	Design Application Wireframe (Owner)	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Interfaces
	Week 8 & 9	Implement Low Fadility Prototype	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Low-fidelity%20Prototype
		Facilitate Testing	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Testing
	Week 10 & 11	Redesign Software feature (add pages for wi	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Interfaces
		Design Icons for Prototype	https://github.com/deco3500-2017/Team-WeChat/tree/master/images
	Week 12 & 13	Design Mockup Interfaces	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Mockup
		Prototype testing	https://docs.google.com/forms/d/14cmdjO3oMz8Vvr8ucW_IJ22uRbpVXGw3dhIlWhotUVA/edit?usp=sharing
		Final Document	
Di Wang	Week 4 & 5	Concept Description	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Requirements/Proposal.pdf
	Week 6 & 7	Design Application Wireframe (Carer)	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Interfaces
		Build low fidality prototype	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Low-fidelity%20Prototype
	Week 8 & 9	Redesign testing procedure	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Testing/Tasks%20for%20TestR1.docx
	Week 10 & 11	Design Alternative	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Interfaces/Paper%20Prototype
	Week 12 & 13	Design Mockup Interfaces for Owners	https://github.com/deco3500-2017/Team-WeChat/tree/master/Documents/Mockup
Xiaoyu Shang	Week 4 & 5	Team Charter	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Requirements/Proposal.pdf
	Week 6 & 7	Define test purpose and specific questions	https://docs.google.com/document/d/1cKpL0mUK370W1T5aPwUoqG0V8qYtXYLmDsmVxs_FVLE/edit#heading=h.iqu0h3c
	Week 8 & 9	Interface prototype	https://drive.google.com/file/d/0BwilqVT1NDYIV0RrbG1HLWRoVmM/view?usp=sharing
	Week 10 & 11	Test evaluation	https://docs.google.com/document/d/1Gb0z-hN_U2lLxLBtM5_qSGnhC7PWpl1fekGZ91NX-ZE/edit?usp=sharing
	Week 12 & 13	Design final poster	https://github.com/deco3500-2017/Team-WeChat/blob/master/Documents/Project_poster.pdf

Figure 10 The work breakdown

View the form at Google Drive:
https://docs.google.com/spreadsheets/d/1JISN3H0sddwnnjsJ-kR00iTjnzrbdWtwyJYQSJyMoRA/edit?usp=sharing