# Sheltero (Team name)

Members: Hwai Saint Tan, Bingjie Zhu, Yifei Zhu, Wenyi Chen, Danlei Mou

# INFO30005 - Project Proposal

#### Overview

Nowadays, most modern day citizens have easy access to technology; this includes people who are homeless or do not have a stable income. On the other hand, there are companies that are looking to hire people for lower-skilled jobs. This meant that there are "job holes" in the market that could benefit both parties. However, there are currently no agencies that help connect and evaluate both unhomed job seekers and companies. We plan to design a web application which would act as an assistant platform for the homeless to find jobs by connecting them with job opportunities that are posted by companies; In addition, we would also implement a credit system as an ancillary service for employers to evaluate and hire homeless people. Users of the website would include staff members from different companies/employers as well as any person who requires more income.

#### **Problem**

Homelessness is a serious issue experienced not only in Australia, but all over the world. Based on the national report, about 1.6 billion, which is more than 20% of the world's population, are lacking adequate housing. Even for a developed country such as Australia, there are still 116,427 homeless in 2016, according to Australian Housing and Urban Research Institute.

People who live on the street only consist of a very small proportion of the homeless; in fact, people are categorized as a homeless if they are either moving between temporary shelters (including houses of friends, families or emergency accommodations), or living in private boarding houses but without a private bathroom or security of tenure. Surprisingly, studies that examine the causes of homelessness have found out that domestic violence is the leading cause of homelessness. Which means the many people who are considered homeless, are well educated and have access to some sort of communication device; studies have shown that 47% of the homeless people use their devices to look for jobs. Most of the homeless desire for a change in their current circumstances, look forward to a stable income, and yearn for a loving home.

## Effects of homelessness

Homelessness is a problem that affects many aspects in a society. Unlike the ideas we might have shaped about who experiences homelessness, and why they experience it, there is no "typical homeless person". There are seven main reasons for being a homeless person: family violence, a shortage of affordable housing, physical and/or mental health issues, unemployment or job loss, drug and alcohol abuse and addiction, family and

relationship breakdown, and not feeling safe at home and so on. The population of homelessness is remarkably diverse and there is a potential for anyone to be homeless.

Homelessness is a social issue since it has a ripple effect throughout the whole community. There exists stigmas from those who are not homeless to justify their inaction by claiming the people become homeless "because they chose to" without understanding the issue, which further contributed to the current problem and emphasised the division within the community.

From the economic perspective, a serious homeless issue is an indication of an unhealthy society as the distribution of income is given to a few people; long term effects could potentially lead to social instability. People without housing would affect the availability of healthcare resources, crime and safety, the workforce, and generate expense of tax dollars. It is reported by WNC's tourism, homelessness is bad for business and tourism.

## **Proposed Solution**

Sheltero is designed to provide job opportunities towards homeless people in Melbourne, which could reduce their financial inadequacy and the pressure on social support.

Our platform will involve both the employer and those homeless people who want to be employed. Considering that some of the homeless people may not have phone numbers or physical addresses, other forms of personal information could be used for registration, such as centrelink accounts, and email addresses might be mandatory for contacting and sending job lists. On the platform, the employer could post jobs that are suitable for homeless people to apply (day jobs, short-term, physical works, etc.), and once it is being completed by an employee up to a satisfied standard, the employee could get the salary and a credit for their work. If enough credit is being accumulated, the employee could be promoted to a higher level, which has the opportunity to get more well-paid jobs. The employee could rate their employer out of 5 with feedback, and regular checks will be undertaken to ensure the collaboration is secure and fair.

# **Existing Solutions**

Australian Government provides Centrelink and rent assistance to help with homeless people's housing issues. Housing Victoria provides homeless people with cheaper public sharing houses. Other existing approaches are mainly homelessness housing services, such as Housing All Australians, Housing First, Launch Housing and so on. However, there is a limited number of public housing. Although public housing is cheaper, homeless people who face difficulties in finding jobs still cannot afford. Providing job opportunities is as important as providing housing resources.

There is a lack of platforms that provide homeless people with job opportunities. Jobs Victoria corporate with Brotherhood of St Laurence (BSL), providing jobs and training opportunities for people struggling to find work. The list of jobs provided includes trade

apprenticeships, office work, labouring, cleaning, garden maintenance and security service. Jobs are classified by district so that people can find a workplace that they are easy to travel to. BSL also provides learning centres, helping them with resume preparation, interview techniques and skills required for specific works. This is a great feature to help unskilled people or people with no work experience. Moreover, Jobs Victoria and BSL are connected with other homelessness services. Therefore homeless people would be informed about the other helping services.

Jobs Victoria and BSL provide most of the information about what people can do to deal with their homeless situations, for example, which service centre should they contact to find a work, which office they should go to apply for a learning centre and so on. Job lists are not directly shown to the applicants. They will be on a waiting list, with no information about the exact waiting time. It might cost a long time for homeless people to find work or jobs.

#### **Features**

## Registration

In order to verify our user's identity, and to build connections between employers and employees, a registration function is developed for users to sign up. Users are not required to sign up if they are browsing through the job listings. However, they have to sign up if they are looking to apply for jobs, as we have to be able to control the quality of our employees. In addition they would also be able to view the employer's contact details, or edit their own personal profiles.

#### Employee registration

In terms of the registration form for potential employees, the registration form will contain the most essential information we require from users. Employee registration form would include five mandatory fields: first name, last name, e-mail, password and confirm password. In order to verify our users they will be asked to complete their personal details in further steps after signing up. Personal details form could include fields such as gender, contact number, Centrelink number, emergency contact and so on. It is likely that our users would use public devices; Therefore, the account will automatically logout if they close the website, or have been inactive for more than 10 minutes.

#### Employer registration

On the other hand employer registration form would include: the company/employer's name, e-mail, password and a field to confirm password. Similar to the registration forms for employees, other detailed information is not required during registration but required for further actions. Before they release a new job, they are required to upload their enterprise authentication. After we have confirmed their identity, they will be able to post their required jobs on our webapp.

#### Resume Assistance

The other features that we plan on implementing is to allow employees to edit their work profile. The aim of this function is to help employees to create a structured resume. This form will show up after finishing the employee registration.

Other than signing up, employees need to fill in their user profile before applying for jobs.

This user profile is used as a simplified version of a personal resume. Since our target users might not have experience in writing resumes, we decided to provide them with a template. What they will need to do is to follow instructions and fill in the user profile form. After they save or submit the form, the information would be structured into resumes and presented to them. The form could include fields like education, interests, self-description and desired jobs; to make the process easier, we can pre-set some tags for them to choose from.

## Credit System

As mentioned before, we are also considering developing a credit point system. Credit points for each user will be shown as part of their profile to employees. In order to protect users' privacy, employers cannot see employees' profiles unless they receive particular applicants. Employees are not allowed to view others' employee profiles.

## Job Posting

As a job hunting web app, there must be a way for employees and employers to interact with each other, which is, the employers should be able to post jobs on our web application while employees could search and apply for those jobs they want. And, as an intermediate, our web application should send job notifications to employees to inform them they are approved or not.

#### Job notification

We bear in mind that not all of the homeless people have a device, and not all of them could check their device frequently (some of them may have to borrow the computer from the public library). Therefore, job notifications will come in the form of emails or an sms. By sending a timed email and sms (where this time is usually specified by the employer in the job detail), they are able to borrow the computer at the right time which makes them less likely to miss their job.

### Additional features

At this stage, these additional features would only be implemented if we have enough time and resources. As of now, finding a job and earning money is the prioritized goal for employees, these functions are not extremely important and could be held up for future development.

# Recommendation system

Tags they chose could be further used for the job recommendation system.

# Job Searching

There will be a search bar on our web application, with filter functionality inside. The user could adjust the filter to find the kind of jobs they are searching for. The filter may include the location, payment, age/gender requirements, workload, duration, etc. While an employer is posting a job on the web application, he/she would provide the details of that job (an extra brief description of the job is welcomed) including the features mentioned above for the filter. We also expect the employer to choose two to three tags for that job, such as "hand work", "heavy work" and "high paid".

#### **GPS**

A map specifying where the jobs are (using gps), which could enable employees to visualize locations, and thus, allow them to know the exact location of the job and to determine whether it is suitable for them.

## **Learning Modules**

Additionally, we also plan on implementing a section which could upskill our employees using learning modules (or cooperation with other online learning organizations); in the hopes of upskilling homeless people who do not have "advanced knowledge" for long-term jobs, and equipping them with skills that might permanently raise their living standards.

# Meeting schedule

Mar 14th - online meeting

Mar 14th - online meeting

Mar 20th - online meeting

Mar 22nd - online meeting

April 1st - online meeting

April 5th - online meeting

Every Saturday starting from April 11th

# Github Link

https://github.com/vivi7148/INFO30005.git