

requirements Document

Team Wellington



(Document finalized by LK)

# Business Requirements (JW)

## Introduction

This document outlines the requirements to be met for our IT6036 Web Application project. Our chosen idea, JunkHub, an application made for people who would like/need to buy and sell garage sale items. An application that everyone can benefit from and that will always be needed on the market.

This idea originally came from the saying “One man’s junk, is another man’s treasure.”

## Statement of Problem or Need

Out primary target audience is split up into two different groups.

The first group consists of people who need to get rid of items that have piled up in their home/ garage. This tends to happen a lot as people keep buying new items yet do not get rid of any of the items, they already own. This results in a build-up of items that they no longer need and is just taking up space.

The second group of people consist of people who are looking for a bargain or want to make money by upscaling and restoring items. The person selling an item has no use for that item, but it could greatly impact another person’s life who may need it. This proves the “One man’s junk, is another man’s treasure” saying.

There are people who have a lot of talent, who take a broken item and turn it into a masterpiece. This application could be very useful for people who are looking for old furniture, household items, outdoor items etc.

The stakeholders that are affected are the buyers and the sellers of garage type items. As this is a platform for people to get rid of items, we reduce waste. By reducing waste, we have an indirect impact on the environment.

The impact of our problem is getting rid of junk items or items we no longer have use for without creating extra waste in our environment. Just because we do not have use for it, does not mean that other people do not have any use for it. By getting people to sell items they no longer use and getting other people to buy them reduces waste. Instead of throwing out an item, someone else can use the item. This will also motivate buyers to buy cheaper items that can be restored, upcycled, or reused. This creates the motivation for people to be environmentally aware.

A successful solution to our problem is a web application that allows users to list their items they no longer use to enable other users to search through those items and buy the items they want to buy.

Problem statement:

* *The problem of unused items piling up in your garage/home affects homeowners who may need to use that space for more valuable items and as a result they will be tempted to throw their unused items in a landfill. That directly impacts the environment negatively as there is a lack of opportunity for items to be recycled. A successful solution would be to develop a website where junk garage items can be sold, and buyers can browse through the listings and can purchase items to upcycle or reuse themselves. The landfill is reduced marginally, and garage owners can make some extra money.*

## Business Requirements

### List of stakeholders

**Main stakeholders**

* Users (registered, guest, buyers, sellers,)
* Administration Team
* Development Team
* Company Owners. Shareholders
* Hosting platform (google play, apple store)
* Competitor Apps
* The Environment

### Client

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### List of business requirements

List of business processes:

A business process is a task and / or activity that produces an outcome.

For our app we will need several processes.

* **Development process** – Includes the hiring and project management involved in creating the application.
* **Marketing process** – This includes marketing campaigns for the app, mostly on social media.
* **User registration process** – The steps involved in onboarding a user and having them set up an account to buy or sell junk.
* **Users buying/selling process** – the steps involved in the users buying stuff from one another.
* **Commenting and questions process** – How users may leave comments like questions or feedback on other user's posts.
* **Security process** – The steps we take to ensure the security of user's personal data
* **Feedback process** – How the users can contact the administration team of the app to request their data or report bugs or file complaints.

### Quality requirements

* **Accessibility** – the website needs to be accessible to as many people as possible, a lot of the target audience is older than average.
* **Security** – the web application needs to be designed to stop unauthorised access.
* **Privacy** – users' data should be held safely and removed when no longer needed
* **Reliability –** Users should have consistent performance from the site
* **Availability** – Users should be able to always see updates on listings, comments, etc.
* **Mission statement** – the website should clearly show this somewhere
* **Performance** – the web app needs to respond to requests quickly given the amount of traffic.

# Business Solution

## Options considered

* Option 1: Mobile application
* Option 2: Pre-built software
* Option 3: Web application

**We have chosen option 3 – building a web application using Django.**

## Recommended Solution

### Solution statement

*“For [target audience] . . .” State the target user, market, or customer by naming its role or characterizing its group.*

* Our target audience is mainly for buyers and sells of garage/storage shed junk items.

*“. . . who [statement of the need or opportunity] . . .” Describe what the target is trying to achieve or do while* *it’s having the problem. Rather than state the problem directly, state the need your target audience will have the opportunity to meet.*

* For people and users who want to get rid of items they have no use for, purchase items they need at a cheaper price and most importantly get rid of items in your garage that accumulate over time in an environmentally friendly way.

*“. . . the [name of new product or business] is a [solution or business category] . . .” Set the context for the solution by portraying the kind of product, solution, or new business venture (if pursuing large opportunities) it is. State the category the solution belongs to, so the audience members understand its relevance and relationship to their needs.*

* *JunkHub is a place for exactly that. A platform where you can sell items you no longer have use for in an economic way, buy second hand items you need and get rid of you’re the junk in your garage!*

*“. . . that [statement of key benefit — the compelling reason to use the solution or do business with you].” Highlight what the solution offers that will motivate or most interest the audience. This piece is the must-have outcome of value — the persuasive benefit. Provide the* *reason why this solution is the right solution by stating how the solution meets the need.*

* *A buyer that is looking for an item to upcycle and a seller looking to clear unwanted items from their garage/home or their sheds.*

*“Unlike [primary competitive alternative] . . .” If the target* *didn’t have your solution, what solution(s) may it look for or consider instead? State the current environment or competitor products to beat, or internally, the unacceptable situation (what the company has now) to fix.*

* *Unlike other applications like Trade-Me, the aim of our solution is to reduce environmental waste and create a more environmentally friendly marketplace.*

*“. . . our product [statement of primary differentiation].” Distinguish and sell the solution. Besides the fact that it meets the most critical need, what other interesting or attractive features are included? List key marketing points or functionality that addresses the problem statement. Establish why stakeholders would want or need this function. What sets it apart? What are the key differentiators?*

*Source: McGoey 2013*

* Our product raises awareness of excess waste and brings people in contact with each other to reuse and upcycle products that may have been considered rubbish. Motivating people to live an eco-friendlier life and a more sustainable environment conditions.

### Main Features

* Users can post their own listings and sell their items.
* Users can view other listings and buy products.
* Users can comment on listings.

### Unique value proposition / Justification

What makes your recommended solution unique?

* Our solution is unique because of the company mission of reducing environmental waste, simplicity, accessibility, and ease of use. We target specifically a market of items that may be perceived as waste.

Why do you recommend this one?

* We recommend a web application over other software solutions to make it available on all platforms and appeal to a wider audience.

# Solution Requirements

## Context Diagram

Diagram

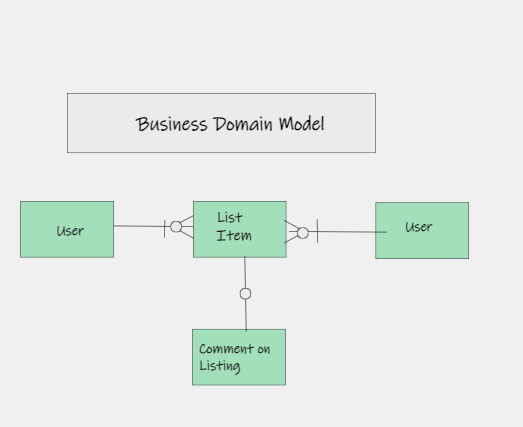
Description automatically generated

## User Roles

Diagram

Description automatically generated

## Business Domain Model



Description or Definition of each entity:

User – This entity will fall in to two categories, an unregistered user, and a registered user. The unregistered user is likely a site visitor and can view content but not comment or add any listings. Whereas the registered user will also be able to create their own account and have permission to list an item along with commenting on listings.

Item – The item or listing will be a model that a registered user can add to the website containing information about an item they are wishing to sell on the site.

Comment – The comment will be a model that a registered user can create and add to an Item or Listing to ask a question or propose an offer for the Item.

## User Stories

**User Stories:**

* “As a new user I need an account sign up page so that I can use all the features of the web application”
* “As a registered user I need a login page so that I can view my user page”
* “As a registered user I need a list of items page so that I can list my items for sale”
* “As a registered user I need a contact seller page so that I can contact the seller”
* “As a registered user I need a comments page so that I can comment on a seller's item (**comment on ‘sellers' item’ or just ‘item’?**)”
* “As a registered user I need a log out page so that I can log out of the web application”
* “As a regular user I need a home page so that I can navigate around the web application”
* “As an administrator I want an admin account so that I can change registered users' information (create, update, remove).”
* “As a developer I need to have access to the source code so that I can update the web application”
* “As a developer I need to have access to the database so that I can perform routine maintenance on the database”

**Out of scope:**

* “As a company owner I need to have access to web application statistics so that I can report the success and failures of the web application”

## Non-Functional Requirements

### Security requirements

* **Authentication** will be required for visitors to have full functionality of the application. They will only be able to view and browse content without being authenticated.
* **Authorisation** will be implemented by only allowing the administration team to edit and delete all added data. Along with restricting registered users to only being able to edit their own listings or personal details.
* **Encryption** on all data sent and received from the application via the use of HTTPS protocol.

### Other quality requirements

* **Account** page will be created for users to easily manage their personal details and listing details.
* **Contact Page** so that visitors to the site can contact administrators for any issue or questions they may have about the application.
* **Dark Mode** toggle so that visitors to the site can choose the UI (User Interface) theme.

# Scope

## Iteration 1

* During the first iteration, we make it so that users can post, edit and remove their own listings.

“As a registered user I need a list of items page so that I can list my items for sale”

## Iteration 2

* During the second iteration, we get users to be able to view all other listings

“As a user I would like to be able to view other people’s listings”

## Iteration 3

* During the third iteration, we implement the ability to comment on listings.

“As a user I would like to add comments on listings or ask questions”

## Backlog

We will not set up the following items:

* Private messaging between users
* In-app payment features

Wireframes:

Graphical user interface, application

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Decision:

Diagram

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Application Sign-in Details of users:

Graphical user interface, text, application, email

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Kanban Board 1st

A screenshot of a computer

Description automatically generated with low confidence

Kanban Board 2nd

A screenshot of a computer

Description automatically generated with medium confidence

Kanban Board 3rd

