# Project requirements Document- Smart city Project

## List of requirements: Overview of document

**1.0 Stakeholders:**

* Product Owner (Brandon Valera), Head Programmer (Joel Sanderson), Programmer/ Scrum Master (Xander O’Dempsey), Programmer (Nafisa Anzum).

**2.0 List of client requirements:**

* Web based system which stores information about Brisbane City
* The system should cater favour types of users; tourists, students, businessman and administrator
  + Every user should be able to log on and be able to view primarily relevant information based on their user type and this will be described later.
  + Any user should be able to view information related to other user types (eg. Tourist can view student information’s and etc.) but only temporarily while remaining logged in the system current session.
  + Anyone should be able to create a user account
    - An existing user should be able to log into the system via username and password.
  + The administrator account is a special account which can be created using a separate webpage
* The welcome page should be able to facilitate anybody and allow them to navigate easily and be able to create a new user account with the user types of; student, tourist or businessman.
* There must be a requirement where the new user creating an account must provide the following details:
  + A unique username
  + A password
* The database system must be capable of storing additional information such as:
  + Phone numbers
  + Email address
  + Residential address
    - Not an important requirement for the user during the registration. Can be done later.

**3.0 User Type Role requirements:**

* Administrator:
  + An administrator can only be created by another administrator.
  + The role of the administrator to be responsible for creating/ modifying all the data for the city. Data for colleges, industries, libraries and hotels is separate from city information. City information consists of data for parks, zoos, museums, malls, restaurants and city map.
  + Within the database system, the administrator should be able to create the following information in the system:
    - Colleges: college name, address, departments and email address
    - Libraries: library name, address, phone number and email address
    - Industries: industry name, address, industry type and email address
    - Hotels: hotel name, address, phone and email address
    - Parks: park name, address, phone and email address
    - Zoos: zoo name, address, phone and email address
    - Museums: museum name, address, phone and email address
    - Restaurants: restaurant name, address, phone and email address
    - Malls: mall name, address, phone and email address
  + The administrator must be able to upload a map of the city into the system
* Tourist:
  + When a tourist logs into the system, they should be able to view hotels and city information
* Student:
  + When a student logs into the system, he should be able to view, colleges, libraries and city information
* Businessman:
  + When a businessman logs into the system, they should be able to view hotels, industries and city information.

**3.1 Other requirements**

System:

* The system should provide similar information about popular Australian cities such as Sydney, Melbourne, Adelaide, Perth, Canberra, Hobart, Darwin and etc.
* It’s also required that the software team create a system which can be extended in the future to implement requirements such as:
  + Adding information on city bus services, metro rail, government offices, courier services, travel services, education services, health services, business services and etc.

The system should cater to four different types of users; tourists, students, businessmen, and the administrator

**User Requirements**

Every user should be able to access the webpage

Every user should be able to browse through the website, gathering information on the business

Every user should be able to create an account through the main webpage

The user should be able to create an account at any time.

Every user will be able to create a unique username and password, when creating an account.

Every user should be able to access their account 99% of the time.

**New Customer Requirements**

Every customer should be able to pick preferences on what information they would like to see.

Based on their preferences, the customer should be picked into a group; tourist, student, or businessmen.

The customer should receive an email confirming their account with the website, with their chosen user preference and login details, no longer than 5 minutes after creating their account.

**Tourist**

A tourist should be able to view hotels and city information when logged into the system

**Student**

A student should be able to view colleges, libraries and city information when logged into the system

**Businessmen**

A businessman should be able to view hotels, industries and city information when logged into the system.

Any password characters will not be shown when entered by any user, and instead asterisks will be shown.

**Administrator**

The administrator of the website should have a separate webpage.

The administrator will be able to create other admin accounts.

The administrator should be able to update/ modify information on the website > city information, maps

Only the administrator and the user will be able to view their personal details stored by the website.

**Solution**

The system should update within 2 seconds of the administrator edits.

The system should be affective 99% of the time.

The system should send notification to a user if their login details are incorrect.

The solution should store all the attraction information within a secure database, which is updated every 2 seconds.

The solution should store all user information within a secure database, which is only accessible to the administrator.

The system should only show information added by the administrator.

The system should show information tailored to each user and their preferences on location, and user type.

The system should be able to handle continuous updates, added by the administrator.

**Database**

The database should be accessible only by a user with username login credentials

The database should be able to withhold all data added by the administrator and users > personal and city information/maps.

The database should be available 99% of the time.

The database contents will be encrypted.