# Potential Features

## Web-based system

1. Create a web-based system

* Using python to create a web based system

## Users

1. Existing users have the ability to log in
2. New users are able to create user accounts
3. Username and Password authentication system
4. New users have to input:

* *Name*
* *A unique username (Have to check DB if there is a similar username already taken)*
* *Password*
* *Select a user type (Student, Tourist, or Businessman)*
* *The account will be saved into the system*
* *Capable of storing additional information*
* *Number, email address, residential address (Optional)*

**Uniqueness for ID**:

* When creating a new user account, the form must be filled out. (Python form)
* Then afterwards, after a username is entered, it will then check with the database to see if the username has been taken (Use of Regex would be needed)
* Number, Email address will have regex form, thus, input of valid names would be needed. E.g. Emails must have a @ in it.
* 3 different categories; Students, Tourists or Businessmen. When signing up or using the python GUI/ Form, the chosen class out of the 3 will give it a unique ID, thus it can be identified in categories.
* Using If statements to have each one to have separate pages to view, OR, having their ID only having the ability to access certain pages. (E.g. Access will be denied if a tourist will try find colleges)

## Administrator

1. Administrator account created on a separate page. Can only be created by another administrator only (Thus, on the user page of the administrator will have an option to create an administration account)
2. For creating and modifying all the data for the city
3. Data for colleges, industries, libraries and hotels separated from city information
4. City Information includes:

* Parks
* Zoos
* Museums
* Malls
* Restaurants
* City Maps

1. Administrator should be able to provide; Name of chosen area, address, departments or email address and number.



1. Able to upload map of the city to the system

**Administration ID**:

* The administration ID will have a separate ID which allows them to edit. When someone presses edit, only an administration ID is allowed to have an authority to edit
* This is the same for adding extended information

## System

**Tourists:** View only hotels and city information

**Students:** View only colleges, libraries and city information

**Businessman:** View only hotels, industries and city information

*Note: Thus, each account must have a unique ID (Must be an option to tick if you’re a tourist, student or businessman during registration).*

In addition,

1. The system should be able to able to provide information for other cities as well.
2. Sydney, Melbourne, Adelaide, Perth Canberra, Hobart, Darwin
3. Must be created where extended information can be added.

(E.g. City Bus services, metro rail, government offices, courier services, travel services, education services, health services, business services, etc.)