QUAL 200 - Agile Sprint One Assignment
Eric Helferty
Lucius Bossio

By CitySoftware Overview:

The software can be accessed via a browser on mobile/desktop or a downloadable desktop client. The software is designed to give city planners the ability to compare the environmental impact against the economic viability of a proposed development. A map is generated by the software which indicates the most ideal locations for development based on the above criteria using layers on the map which can be toggled via a legend. Ideal locations for development have the least environmental impact combined with the highest viability. The economic viability of a particular development is established using data from past/existing developments, while environmental data is gathered from impact studies completed by the municipality.

Business Requirements - Features and Descriptions:

1. Registration/Log-in
    a. This will be the first page to open when the program starts.
    b. An account is required to use the program.
    c. Users login via government provided email addresses and a password created by the user during their account creation.
    d. Account setup requires: First and Last Name, email, employer, job position, building address, work number (cell number optional).

2. Search - Dashboard
    a. After login, this will be the main display page. The search page allows the user to search for a location by address which will be displayed via the map view.

3. New Project - Data Entry
    a. This page will allow the user to create a new development project which will then be saved to the user's profile. They can have multiple saved projects. It will include user submitted fields which will be the specs of the project and can be saved to be referred to and adjusted later. Will include project location, the project area (square kilometers), estimated population, and number of residential/commercial/industrial buildings to be built.

4. <u>Map Page</u>
    a. Whether partnered with Google maps, or Canadian government GIS programs, an interactive map of Canada will be used to display search results from the dashboard, as well as environmental and viability information.
    b. An <u>interactive legend</u> that allows the user to toggle layers on/off that will highlight areas with high/medium/low environmental impact and potential damages.
    c. More layers or indicators(map pins, icons, building markers, etc) will be used to display viability information. Where's the nearest electrical plant, water treatment centre, grocery store/shopping centres, etc. The further away the proposed development area is from these facilities will mean more expenses required to build at said location. Furthermore, will the development area be impacting privately owned farmland or other such property?
    d. There should also be a layer showing the proposed location and size of the currently selected user project. These layers will overlap to show where any proposed work stands in terms of environmental impact and viability.

5. <u>Report/Results Page</u>
    a. This will be where results will be shown via a screenshot of the map with all layers on (proposed project, environmental impact, viability) as well as a summary of possible costs that come with the proposed size and scope of the development as submitted in the data entry page.

6. <u>Profile Options Page</u>
    a. This will be a page that holds links to other pages as well as profile settings (logout, username/password changes, view/edit saved projects).

7. <u>Contact Us Page</u>
    a. Contact info to reach site support. Phone and email displayed, as well as a form to send an email straight from the page.

8. <u>Current Future Development Page</u>
    a. This will hold a list of all developments currently in progress. Categorized by Province and sub-categorized by Province Regions. Will include information like Location, Project Lead, contractors involved, government entities involved (MNR, MTO, Municipal Government, etc), a link to a map of the location that shows existing and proposed land layout.

b. Displays info for approved future development work to avoid overlap of project plans. Ideally shows all the same info as above, though some might not be available if the project is in early stages. Such as not having a list of contractors.

Priorities Rationale:

These features are ordered in a way so that a working product can be implemented as quickly as possible for testing purposes. Since having an account for the program is mandatory, registration and sign-in is the first feature that needs to be implemented. The search page and interactive map is the bulk of the program's purpose, therefore it needs to be ready as soon as the user logs in. Having the proper information on display and having a method to share or print off the program results are the next priority. Profile settings and the ability to log in or out should also be available in the first stages of design. The rest of the features can be added in after the initial setup. While they are important, they are not the basis of the program, and can be implemented after it is functional and running.