DCM Integrated Solutions Inc.

Software Development

Phase 1

Prepared by L7 Tech and Mediashaker May 2021

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# Project Overview

The purpose of this project is to create a cloud software suite that allows users to review “projects” in industries such as Oil and Gas. Users will be able to review the project details, make personal adjustments, add contact data, favorite, and comment on projects.

This is the first in several phases of development and includes the option for automated website scraping alongside the manual entry method.

This will be a cloud-based application, meaning it will run inside of a web browser and does not include any desktop software or mobile apps.

This project will be completed and supported by L7 Tech and Mediashaker.

## Development Overview

When developing custom software we use the newest stable technologies that are supported across all major browsers, at the time of development, this ensures maximum cross platform support while offering the best and newest technologies.

## Development Standards

All of our custom software is designed using our S4 Standard, meaning that we ensure our applications are Simple, Secure, Stable, and Scalable.

## Development Technologies

It is common in web application development to use several code types Based on the type of application, we typically use a combination of the following technologies:

* PHP 7+
* MySQL 5+
* Linux-based Servers *(LAMP)*
* Basic design standards *(HTML, CSS, Javascript)*

# Project Screens

The following is a breakdown, by user type, of the various screens that users will interact with.

## Public Screens

These screens can be seen by anyone, the user is not required to be logged in to the software to view them.

### Login Screen

This screen allows all users to log into the software. Logging in will require a username and a password.

* Username and Password are required to log in.
* Option to add 2-step authentication if required.
* Option to add Google Re-Captcha to limit brute force attacks by bots.
* Links to the “Forgot Password” screen.

### Forgot Password

This screen will allow a registered user to start the process of resetting their password. They will need to provide their account's email address and will receive an email with a link to reset their password, assuming the email provided was associated with a user's account.

* Option to add Google Re-Captcha to limit brute force attacks by bots.

### Homepage/Public Search (new)

This screen will allow guests to do a quick search of the publicly available projects in the system. Guests will be required to log in before they are able to fully interact with the project data.

Website Scraper *(optional, quoted separately)*

This component is an automated website scraping tool, it will run periodically and look for new pages *(new projects)* as well as changes to pages that have already been scraped.

When a new page or an update is detected they will be brought into the “Staging” section of your software. An administrator will be able to review the changes and approve or reject them. See the Administrative Screens below for more details.

If you would rather do this in a Phase 2 timeline your team would still be able to manually add projects into the system. The manual process will be included in both scenarios.

#### Important Notes

* Automated scraping tools rely on defining where a specific data point *(title, description, cost, etc...)* exists on a page. Should that data points position on the page be changed we would need to update the scraper to look for the new position.
* Each website that needs to be scraped will require its own scraping script.
* We can also offer a “scraper building tool” that will allow an administrator to build their own scraper based on the pages design parameters. This option is not included in this quote and would require additional discussion before a quote could be produced.

## Administrative Screens

These screens can only be seen by users with Administrative and Registered User accounts.

### Dashboard

The dashboard is where the user lands once they have logged into the software and is intended to be used as the ‘primary screen’ when searching for, and viewing, projects. The majority of the software’s functionality will be on these screens. Once a user has located the project they are interested in viewing they will be able to view the full details. Details will be overlaid on top the search results in a “popup”.

#### Important Notes

* The different user groups will have different search options and filters.
* Access to “unpublished projects” is restricted to Administrators.
* Administrators will be able to manually add a new project from this screen.

Search Filters

* Title
* Developer
* Location
* Sector/Type
* Stage
* Favorited

Projects will contain the following data

* Title
* Schedule *(Year Range)*
* Developer
* Stage
* Description
* Estimated Cost
* Sector *(ex. Oil and Gas)*
* Type *(Gas)*
* Municipality
* Coordinates
* Related Link
* Status *(published yes/no)*

### Project Details Screen

This screen will be overlaid on top of the project search results, thus ensuring the user does not lose their search criteria. Users will be able to do the following:

* View the full project details
* Make an adjustment on a specific data point *(visible only to that user and administrators)*
* Add a “Contact” to the project *(visible only to that user and administrators)*
* Add a comment/discussion to the project *(visible to all users)*
* Favorite the project *(used in search filters as “My Favorites”)*
* My Scope Section (*users record the work they will be doing on a project*) (new)
* Add a Task (new)

**Example Spreadsheet *(provided by client)***

<https://drive.google.com/file/d/1jxun96f3bcIq20WeLTrO3pMd_NLXZRTn/view?usp=sharing>

### Revenue Report (new)

This screen will allow registered users to track the data they have added to the “My Scope” section of the Project Details page. This is intended to work as a spreadsheet~esq screen to track all the aspects of “their” project scopes.

Project Staging Manager *(quoted with website scraper)*

This screen will allow an Administrator to review all of the new projects and make changes to existing projects before they are set live into the system.

### Tasks (new)

This screen will allow a user to add, edit, and manage their “tasks”. Tasks are created by the user and are assigned:

* Date *(single date for now)*
* Title/Subject
* Description
* Attached Project

### My Contacts (new)

This section will act as an address book and will allow users to add, edit, and manage their contacts.

Notes

* Contacts can be added and reused when adding a contact to a Project.
* Contacts can be assigned to multiple “Organizations”.

### User Management

These screens will allow an Administrator to search for, add, and edit registered and administrative users and will include the following information:

* First Name
* Last Name
* Contact Information (*address, phone, email, etc.)*
* Login Credentials
* Role
* Account Status *(allowed to login, on/off)*

When searching for a user you will be able to filter by the following data points:

* Name
* Email
* Phone Number
* Role

### Homepage Editor (new)

This will be a simple page editor with a content editor.

## Other Items

The following items are for your consideration.

### Video Tutorials

While we will be designing your software to be simple to use there are always users who are not comfortable with new software, with this in mind we suggest creating video tutorials on the more complex pages that users can view to learn the system.

### Mapping

There are online mapping suites such as Open Maps that do not charge for displaying a map, most robust mapping tools *(Google, Bing, Map Quest, etc)* do charge for the use of their software.

Our experience has been that “free” mapping tools often come with severe limitations of design and functionality and we do suggest using Google Maps.

### Web Hosting

Your software will be hosted on a trusted web hosting platform owned by either the client or the developer. Hosting fees are billed yearly at a minimum cost of $200 per month plus GST.

Hosting prices are subject to change based on hard disk and bandwidth usage.

### Backups

We can also offer daily backups of your software suite at a cost of $100 per month plus GST. Note - Daily backups with 1 month of history.

# Ownership Agreement

L7 Tech (1657512 Alberta Inc.) agrees that the Client (DCM Integrated Solutions Inc.) has full ownership of the software that L7 Tech will be building on their behalf. This ownership extends to the specific components described in this document and includes a full, transferable license for Apt at no additional charge.

The Client, may, at any time, choose to change development companies and move their software to another hosting platform.

# Proposed Investment

While we strive for efficiency and cost-effectiveness with every project, we acknowledge that there is a propensity for custom development projects to experience scope and/or functionality creep during development. We also place a high value on our client partnerships and billing transparency. Keeping this in mind, we have provided an additional high and low budget range to account for discrepancies and changes to the initial scope of work as stated in this document.

|  |  |
| --- | --- |
| Project Discovery | 2,800.00 |
| Design Wireframes | 2,500.00 |
| Database Design and Implementation | 2,000.00 |
| Web Software Development - No Scraping | 38,000.00 |
| Scraping Component *(max 3 websites) (optional)* | 14,500.00 |

This proposal does not include pricing for domain names, web hosting, server management, or other third party fees.

## Payment Schedule

|  |  |  |
| --- | --- | --- |
| Milestone *(estimated)* | % of Total | Total |
| Project Deposit (April 2021) | 50 | 29,900.00 |
| Mid-way (June 01 2021) | 25 | 14,950.00 |
| Launch (September 2021) | 25 | 14,950.00 |

Prices do not include GST

Low Budget Range: 57,500.00

### Estimated Total | 59,800.00

High Budget Range: 62,500.00