**LienCo Construction Website : LC1**

**A logo of a building

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# 

# Description

A website that provides its customers with various features for their construction needs.

A customer can

* Login to follow their on-going projects which are updated at the end of each work day. The customer can also make changes to the direction of the project.
* Request for a personnel to visit a site for assessment/quote.
* They can also get a rough estimate using the on-site calculator.
* Request an emergency repair via a one-click button.
* View information about the company
* Contact us page for queries .

# Who:

1. Client/Client representative

* The client or someone who represents the client which can identify and direct project needs.

1. Developer/Admin/Tech support

* Myself, Shaquille Neil will be responsible for all technical aspects of the website .

1. Stakeholder

* Will provide the guidance for front end features and also provide funding for the website.

1. Project Manager –

* Responsible for project updates at the end of day.
* Create project roadmap and direct planning
* Meet with client to ensure that project parameters are being met
* Monitor resource and funding allocation

# WHAT:

1. Emergency repair request based on location
2. Customer login platform for updating and managing projects
3. Quick and accurate quote generation based on information given
4. Node.js will be used to manage the backend
5. Oracle will be used to manage the website database
6. React.js will be used to manage the frontend

# WHY:

1. To increase efficiency with construction project management by providing a platform where a client can track, assess and make changes as needed.
2. To keep clients informed about the daily progress of their projects which helps to keep transparency and build trust.
3. To allow better resource and funding allocation, a client can actually see and keep track of where and what their resources are being spent.

# FUNCTIONAL REQUIREMENTS

* Client login/Project Management

1. The website must provide a secure login system for clients to access their accounts.
2. After logging in, clients must be able to view ongoing projects and view end of day updates.
3. Client should be able to request changes to the project direction through their account panel.
4. Client should be able to access their project’s history.
5. Client should have basic account modification controls, such as name changes and contact details updating.

* On-site Assessment Request

1. A form must be provided for an onsite assessment request. This form must contain the basic yet necessary information such as project type, site location and contact information.
2. A confirmation should be displayed to the client when their request has been received.
3. A notification should be sent to the client and the personnel chosen for the assessment. This notification should contain the time and date of the assessment.

* Estimate Calculation

1. Generate rough estimates based on specific input parameters
2. Accurate input validation
3. Client should be able to export / print estimates

* Emergency Request

1. Allows the user to request an emergency repair with one click.
2. Track the location of the emergency request to contact the closest person in the vicinity.

* Security

1. Client login and project information should be stored securely.
2. Ensure that clients can only access information that are pertinent to their account/projects.

# NON-FUNCTIONAL REQUIREMENTS

* Compatibility

1. The website should function across Chrome, Firefox, Safari and Edge.
2. The website should also be functional and responsive across laptops, phones and tablets.

* Scalability

1. The website should be able to scale easily with the increase in new clients

* Usability

1. A client should be able to navigate to any part of the website with just a simple click on the navigation bar.
2. Various “How to” instructions present on various pages to guide first time users
3. FAQ link available on each page that also answer any questions about the use of the website

ITERATION 1

|  |  |  |
| --- | --- | --- |
| ID | ITERATION 1 :Core Functionalities | USP |
| 1 | As a user I would like to register an account | 3 |
| 2 | As a user I would like to log in to my account | 2 |
| 3 | As a user I would like to view my dashboard | 2 |
| 4 | As a user i would like to be able to navigate to any other main website page from my dashboard | 3 |
| 5 | As a user I would like to log out of the website | 1 |
| 6 | As a user I would like to request a password reset and receive an email with that reset link | 5 |
| 7 | As a user I would like to use the reset link to sucessfully reset the password for my account | 5 |
| 8 | As a user I would like to request an on-site assessment using On-Site Assessment Request Form | 8 |
| 9 | As a user I would like to view Company Information | 2 |
| 10 | As a user I would like to contact the company via the Contact Form Page | 3 |
| 11 | As a developer I would like to store login and contact forms information in a database | 8 |

ITERATION 2

|  |  |  |
| --- | --- | --- |
| ID | ITERATION 2 | USP |
| 1 | As a user, I want to request changes to the project direction through my account panel. | 5 |
| 2 | As a user, I want to request an emergency repair with one click. | 13 |
| 3 | As a project manager, I want to update the project status at the end of each day so that clients are informed about the progress. | 2 |
| 4 | As a project manager, I want to allocate resources efficiently to ensure project timelines are met. | 8 |
| 5 | As a project manager, I want to update project budget and material amount | 5 |
| 6 | As a user I want to view my resources and view my budget | 5 |
| 7 | As a stakeholder, I want to review project progress reports to ensure the project is on track. | 5 |
| 8 | As a Project manager, I want to create and add projects | 5 |

ITERATION 3

|  |  |  |
| --- | --- | --- |
| ID | ITERATION 3 | USP |
| 1 | As a user, I want to generate rough estimates using an on-site calculator. | 8 |
| 2 | As a project manager, I want to schedule and manage meetings with clients to ensure project parameters are being met. | 3 |
| 3 | As a project manager, I want to create and update the project roadmap to direct planning and execution. | 8 |
| 4 | As a project manager, I want to monitor the project budget to ensure it stays within the allocated funds. | 8 |
| 6 | As a project manager, I want to gather and review client feedback to improve project delivery. | 13 |
| 8 | As a stakeholder, I want to monitor the project budget and expenses to ensure financial resources are used efficiently. | 5 |
| 11 | As a user, I want to be able to speak to admins or project managers directly via a chat | 3 |
| 14 | As an admin, I want my website to be compatible with all browsers. | 3 |
| 17 | As a user, I want to receive notifications for things such as a project update | 2 |
| 18 | As an admin, I want my website to be supported on mobilephone browsers as well | 3 |
| 20 | As an admin, I want to assign roles and permissions to different users so that I can control access levels and responsibilities within the team. | 5 |

Activity Diagrams

User activity diagram

A diagram of a diagram

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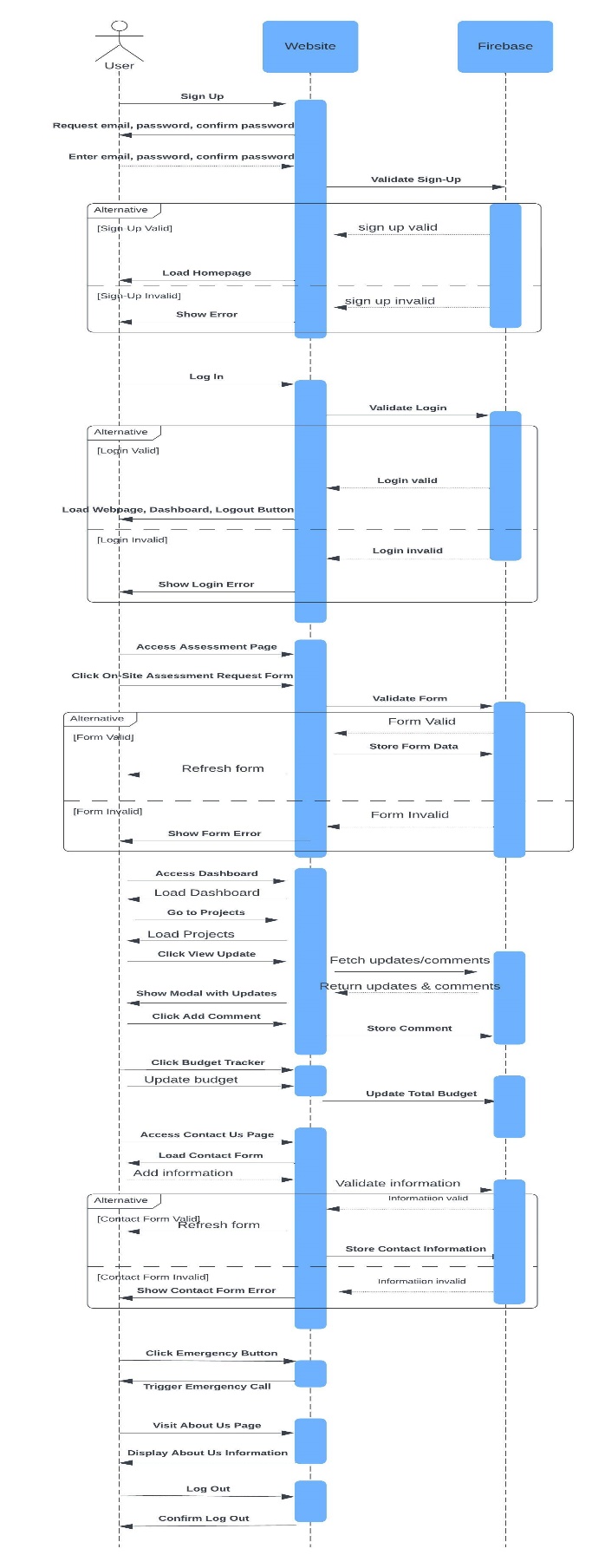
Project manager activity diagram

A diagram of a diagram

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SEQUENCE DIAGRAMS

User sequence diagram



Project manager sequence diagram

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