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Requirement Understanding Document-

Construction Management System

We Engineer Your Digital Success



Prepared by:

Verbat Technologies

Prepared for:

SOBHA GROUP



Table of Contents

[1. Introduction 3](#_Toc512245345)

[2. Functional Requirements 3](#_Toc512245346)

# Introduction

Sobha Limited is an Indian multinational [Real Estate](https://en.wikipedia.org/wiki/Real_estate) Developer headquartered in [Bangalore, India](https://en.wikipedia.org/wiki/Bangalore,_India) and works in the business of construction, development, sale, management & operation, townships, housing projects, commercial premises and other related activities.

Sobha Group (hereafter referred to as “Client”) has approached Verbanet Technologies LLC., trading as Verbat Technologies (hereafter referred as” Verbat”) to develop an application to track and monitor the progress of the project.

# Functional Requirements

The features of the application envisaged are as cited below:

Admin Module: Admin can manage the different features of the application which includes:

* Users (add/edit/delete)
* Manage Project Type (add/edit/delete) (e.g : Villa , Building etc)
* Manage Service Type (e.g Aluminum & glass facad, Exterior & Interior Work etc )
* Manage Companies (add Company Name and Contact Details )

Manage Project: User can manage a project by performing the below steps:

* Choose Company (customers)
* Enter Order Number
* Enter Project Name
* Select Project Type
* Select Service Type
* Enter/Upload other Project Parameters/Drawing (Building , Site etc)

Note : Uploaded document should be in PDF/JPEG

* Create 2D elevation Drawing

Note: All the raw materials data will be managed by clients inbuilt ERP. Using API’s necessary updates will be transferred to our application.

Design Department - Create Drawing:

1. Enter Building Data: Design department can enter the necessary aspect ratio of the building /facade, like height, length, width etc .System will create the grid based on the entered dimensions. Levels/ Floors can be defined in the Grid lines .
2. Add Windows: Design department can add the windows (as many) to the created 2D design and can position them in the design. Each window can be given a unique number/name. The windows will appear within the drawing and a unique color will be indicated e.g.: blue. The user can enter all the parameters of that particular window (design, shape, size, description, special notes if any etc.).
3. Design created by the design department will be send to the production department.

L2..

L1

* Define the parameters, size & shape (x & y)
* Description if any
* Notes if any
* Attachments(photo) if any

Windows ADD +

|  |  |  |  |
| --- | --- | --- | --- |
| S.No | Window code | Window Name | Define Grids (coordinates) |
| 1 | W1 | A |  |
| 2 | W2 | B |  |
| 3 | W3 | C |  |

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|  |  |  |  |  |  |  |  | x |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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|  |  |  |  | **W3** | | | | | | | | |  |  |
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Note: It is not possible to copy and paste to different cells. Either the grid definitions can be changed in side menu or can be drawn by touchpad/mouse. Windows can be edited by increasing/decreasing the dimensions in the side menu.

Production Department – Process Drawing:

1. Production department receives the design from the Design Department and will start processing the same.
2. Progress of work can be updated on the sheet by the concerned team. Related photos can be uploaded from time to time. Recently uploaded photo will appear first and the older versions can be viewed by just scrolling up/down.
3. Percentage of completion/progress can be viewed on clicking on each window.
4. Any changes done on the design will be indicated to other users as a system alert
5. Color changes from accordingly if the work is completed as indicated below.
6. Processes under Production and Installation department will be defined in the backend. Users’ needs to update the same as the work progresses and gets updated as below.

30 %

55 %

Installation

Production

Remarks if any

Windows ADD +

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| S.No | Window code | Window Name | Define Grids (coordinates) | View progress |
| 1 | W1 | A |  |  |
| 2 | W2 | B |  |  |
| 3 | W3 | C |  |  |

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|  |  |  |  | W3  **W3** | | | | | | | | |  |  |
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Note: On clicking on a particular window, it should move to a new page showing all the photos , Plan drawing and Quality Documents.

W1 Drawing

Quality Documents

Photos

Management Reports Dashboard:

1. Different types of management reports will be available in the dashboard for different parameters.

An example is depicted below:

Company: X

Project: Y

STATUS: IN PROGRESS

W1:

W2:

W3: 

W4:

W5:

Overall Progress: 70%

Click here to view the design

40

80

95

95

70

Each window defined here will have a grid reference as there can be many W1’s in different floors

Thank You!