

# Property management

## Objective

The client required the system which can provide a management for different properties of an area, a society, where the user can inspect the property as per their property areas and elements of it. The client needed to generate the review reports of the inspection and calculate the total cost of the repairing. The client also wanted to include the contractor to as another user which will take the contract of the repairing. This requirement also needed to fulfill for the client with large information to be stored in the database, consistent relocation of old data, and simple versatility. The prerequisite additionally included the diagnostic reports of the information translation in light of done by the user with authentication and authorization.

## 1. Business Needs

- This system needed to build because the client had to go each and every site of the properties and had to do so much of paperwork with huge data. Thus, this system needed to develop an automatic inspection with one screen and generate reports as a result.
- The client wanted to reduce the paperwork and reduce the manpower for such maintenance inspection.
- The basic need was to have the easy accessibility of the data and the navigation of the particular data for the inspection.
- The user must get the relevant details about each property elements and costing details with easier navigation.

## 2. Strategy/Approach

To provide a required web solution as per the client's requirement our team has developed the solution to manage maintenance and inspection of different types of Property like the cottage, house etc. Where each property has its property areas like the bedroom, bathroom etc. Each Property area has its elements like the door, window etc. Each element has different types of schedule of the rate for various types of repairs available for it as per condition of that element during the inspection.

The user can manage the property, property area, property area elements, schedule of the rate in the system. The team has provided the system where it can manage whole flow dynamically during inspection and display associated repair options to Inspector and generate a scope of work as per that. At the time of the Inspection, Inspector can record its data in the system directly. The system has developed with the functionality to manage cyclic the maintenance property for its next cycle to remind Inspector.

Along with this, a variety of reports are developed to facilitate it like Scope of work, Cyclic report. Reports can be generated/downloaded in CSV format too. Third party tool spreadsheetlight has been used to generate excel file for reporting in a specific format. In this project jQuery and bootstrap has been used extensively to create Dynamic property area and its elements at runtime.

## 3. Challenges

- The database management was also one of the constraints which we had to manage with the huge data for each property, items and the elements. As well as their costing for the repairing. These all information was supposed to be stored as well as synchronized with it, whenever the user updates the data.

- Offline transaction data capture and synchronization.
- The client needed to display such a huge amount of data on one screen on certain conditions, which was a constraint for us to do.
- The client also required to manage the workflow with revert back of each step functionalities, which was also a challenge to manage the rollback functionality.
- Also, the costing calculations display on one click based on specific conditions was also a challenge to do so. Where the whole property calculations were supposed to be considered.

#### **4. Business Benefits**

- Improvement for legitimate preparing and archive administration document management.
- Extended agent resolve, efficiency, and commitment of the client.
- Better client involvement with moderate route structure
- Real-time data availability
- Digitalization of the whole procedure; paperless methodology.

#### **5. Difficulties Before Requirements**

- The client had to create reports physically and make passages utilizing exceed expectations sheets.
- The client needed to maintain and manage the huge amount of data manually.

#### **6. Timeline With Man Hours**

- Month : 4
- Hours : 1400+

#### **7. Tool And Technologies**

- Third Party Application
  - Itextsharp, SpreadsheetLight
- Front End
  - Bootstrap, CSS, HTML, jQuery
- Technology
  - Asp.Net MVC
- Operating System
  - Windows, Apple
- Database
  - SQL Server
- Browser
  - Mozilla, Chrome, IE, Safari