Comprehensive Review of Real Estate Monitoring Systems in the Digital Era

Aman Tiwari*, Priya Verma, Sakshi Soni, Deepak Choudhary
* Department of Computer Science & Engineering, Institute of Engineering and Technology, DAVV, Indore, India

ABSTRACT
Today we are living in the world of internet. Everything surrounded us will be covered by internet whether we talk about shopping, buying movie ticket, buying railway or flight ticket; we are somehow dependent on the internet. The real estate market is one of the concerning field while tracking the records of the material or making the salary of the employees an engineering needs to traverse on the site where construction is going on. In this research paper we are providing the concern and our work that make the real estate management and monitoring in the efficient manner.

KEYWORDS: real estate, construction, time, maintenance, efficiency.

INTRODUCTION
Our proposed system's objective is to automate the manual logs maintained at a construction site. Automating these logs will enable the user to save time which was needed in manual handling. Our system would help the user to automate the consumption logs of material which presently requires a lot of human effort. Also, as the user would be able to view all the entries simultaneously, there is absolutely no chance of the database being apocryphal and hence lead to an authentic database. This authenticity will minimize the misuse or theft of material by the workers working at the construction site. Therefore, our proposed system guarantees a perfect end-to-end communication between the user and his employee. The main objectives of developing the application are:

- Creating an online system to monitor all the progress at a construction site.
- Monitor daily consumption of construction materials.
- Generate reports.
- Reducing manual updating.
- Reducing the overall loss.

LITERATURE SURVEY
The focus of developers is to appoint independent project monitoring firms, to implement leading practices for project schedule, cost management, Management Information System (MIS) reporting and greater level of coordination. Firms such as MACE, Parson Brinkerhoff, Louisberger, etc. have ventured in India in recent past.[1]
The focus of developers is gradually shifting from cost towards quality. Developers are increasingly looking out for suppliers/vendors who can provide high quality material which results in operational or efficiency improvement. In addition to supplying materials, firms are also getting into the asset management business to provide post-sale services. Foreign material suppliers and AMC active in India are Otis, PERI, Hilti, etc.[2]
A thorough literature review has been conducted in preparation for the following project methods and to inform findings and recommendations. In this field, there are a few works available. These are:

- **Concrete Calculator**: Application used to calculate the amount of concrete required in constructing a particular structure of fixed dimensions.
- **Brick Calculator**: Application used to calculates number of bricks required to construct a structure based on a few assumptions like ratio of mortar mix.
- **Wall plaster Calculator**: Application used to calculate amount of cement mix required to construct a structure based on few assumptions like the thickness of plaster for wall.
- **Flooring/Tile Calculator**: Application used to calculate the number of tiles required to cover an area.
- **SJS.com**: It is a multinational company that provides construction supervision through inspection, verification, testing and certification.

HARDWARE & SOFTWARE REQUIREMENTS
This section describes about pre-requisite for systems of our project.

HARDWARE REQUIREMENTS
Here are the pre-requisites of our project. This is the hardware specifications that are required for our project. Any modern computer system with:

- Processor – Pentium 2.4 GHz at least.
- Primary memory – 512 MB at least.

SOFTWARE REQUIREMENTS

DEVELOPER SIDE

- Operating system – Windows XP or higher.
- JDK and JRE.
- Web browser – Internet Explorer 4.0 or higher.
- MySQL and SQLyog

SERVER SIDE

- MySQL.

CLIENT SIDE

- Operating system – Windows XP or higher.
- JRE.
- Web browser – Internet Explorer 4.0 or higher.

CONCLUSION

Keeping in mind all the constraints that the intended users face currently, we have made efforts to create a system that would help its users greatly and reduce the efforts and stress required. The design is kept simple and user-friendly. The number of pages being generated is kept minimal so that everything can be done on a single page. For example, all the tasks that the supervisor (or owner) has to perform can be done within a single html page. The user just needs to scroll (or navigate through the navigation bar) to different tasks that he is intended to perform. Overall, the system performance is accurate and the objectives are met. However, there are a few areas of improvement which we would have very much liked to implement but couldn't due to initial unsolvable errors. One such feature was a system of online ordering of materials. That would have brought automation to a greater extent.

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