BUILDNEST

CONSTRUCTION PROJECT MANAGEMENT SYSTEM

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**BUILDNEST**

TOPIC: Construction Project Management

**Abstract**

Modern Construction sector has evolved in a delicate expansion of project management through successful execution of projects and infrastructures. An efficient project management is required for the betterment of mainstream establishments and new ventures.

This abstract presents a comprehensive overview of a construction project management application designed to refine and enhance the project oversight included in building projects. The web application aims to address the challenges of communication, coordination and progress tracking faced by construction professionals. This system comprises four distinct modules Project Admin, Contractors, Clients and Purchase managers.

**Key Features**

* User Registration and Authentication
* Labor Management
* Progress Monitoring
* E-Commerce Capabilities
* Responsive User Interface
* Profile Updation

**Users**

* Admin
* Clients
* Contractors
* Purchase Manager

# Module-wise Functionalities

**Admin:**

* **User Management:**

User Registration and Login

Monitoring and managing other user accounts

* **Site Management**

Listing of Active Construction Sites

Uploading Building permits and sanctions

* **Authorization**

Manage reports from Contractors

Authorizing for Construction (Approval or Reject)

**Clients:**

* **User Management**

User Registration and Login Updating Profile

* **Setting up Preferences**

Choosing their interests about type of buildings

* **Dashboard and Analytics**

Progress of Tasks

Milestones Completed

Budget Calculation

**Contractors:**

* **User Management**

User Registration and Login Basic Details

* **Labor Management**

Details of Worker

Schedule Tasks and Instructions

* **Salary Distribution**

**Purchase Manager:**

* **User Management**

User Registration and Login

* **Inventory Control**

Ordering Raw materials

Check and Updates Inventory

* **Transactions**

Secure and timely Payments

# Mini Project: Construction Project Management

# Modules

**Admin**

* User Management
* Monitoring other user accounts

**Clients**

* User Management
* Updating Profile

**Contractors**

* User Management
* Labor Management

**Purchase Manager**

* User Management
* Check and Updates Inventory

# Main Project: Construction Project Management

# Modules

**Admin**

* Authorizing Requests
* Manage Reports

**Clients**

* Setting up Preferences
* Dashboard Analysis

**Contractors**

* Salary Distribution
* Weekly Report to Admin

**Purchase Manager**

* Ordering Raw Materials
* Payments

**Additional Technologies**

* Machine Learning
* Augmented Reality (prototype building)
* Chatbots
* Report Generator **Software Specification**
* Frontend: HTML, CSS, JavaScript
* Backend: Python Django