

CONSTRUCTION AND BUILDING MONITORING SYSTEM

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Abstract - 'Construction and building monitoring system' is a website In which we can get online help of the designers, engineers and Vaasthu experts for the construction of our new houses or buildings etc... In this site we will get the list of contractors, engineers and hardware dealers in our locality. There is a form for entering our ideas or concepts like three bed rooms and facilities which we want for our home or our offices and we will get an estimate to our plan from different Engineers. A user can register in this site and if he is a premium user he can view and download different plans for the house or similar constructions. We get the plan and estimate through email. We can apply for the hard copy also. There is a opportunity to contact the desired engineers as per our budget.

There is an option for get the help from the Vaasthu experts. We will get information through email about the exhibitions. There is a chance to view and check the cost of the building materials like marbles, cements, bricks, etc and also user can check the dealers of the building materials and articles from the famous engineers and Vaasthu experts.

1. INTRODUCTION

PURPOSE OF THE SYSTEM

Using these system citizens can get online help of the designers, engineers and Vaasthu experts for the construction of our new houses or buildings etc... This system will reduce the time and risk to the citizens compare with manual system. The project performs intended function with required precision. A user can register in this site and if he is a premium user he can view and download different plans for the house or similar constructions. And In this site we will get the list of contractors, engineers and hardware dealers in our locality. They will get help from the Vaasthu experts. There is a chance to view and check the cost of the building materials like marbles, cements, bricks, etc and also user can check the dealers of the building materials and articles from the famous engineers and Vaasthu experts. The Citizens, Houses information can be stored in centralized database which can be maintained by the system. Authentication is provided for this application only registered users can access.

PROBLEMS IN EXISTING SYSTEM

Through the existing system process which is purely manual process and time taking process. If Citizen wants to buy new house plans/Designs he must consult broker, he will give Engineers and Contractors information this process is done by manually, this is time taking process, if citizens wants to buy plans, he directly meet Engineers buy plans similarly designs also, citizens contacts the Contractors and buy designs. If User wants vaasthu information, he directly meets and asks details for Houses, Factories, lands, bathrooms etc... If citizen wants information about raw materials (like cement, bricks, iron, pipes.....) here also directly meets and ask information.....This Entirely Time taking process and manual process.

SOLUTION OF THESE PROBLEMS

The development of this new system contains the following activities, which try to automate the entire process keeping in the view of database integration approach. The system makes the overall project management much easier and flexible. The user information files can be stored in centralized database which can be maintained by the system. This can give the good security for user information because data is not in client machine. Authentication is provided for this application only registered members can access. Members can share is data to others, and also he can get data from others. There is no risk of data management at any level while the project development is under process. Report generation features is provided using crystal reports to

generate different kind of reports. The system has an interface of grievance handling and status reporting to citizen.

2. OVERVIEW OF THE SYSTEM

PROPOSED SYSTEM

In this system citizen can view one/two...bed room house details by opening the site. User Friendliness is provided in the application with various controls provided by system Rich User Interface. The system makes the overall project management much easier and flexible. It can be accessed over the Intranet. if he wants free house plans or designs directly he download in to his system. In this system contains different type of free houses and premium houses. If User wants free house plans or designs directly download but he wants Premium type houses plans/Designs first he consult the Engineer/Contractor through net and buy plans and designs. And in this site user can view vaasthu information. And also view raw materials information. Authentication is provided for this application only registered users can access.

FUNCTIONAL REQUIREMENTS

1. Manage house information
2. Maintain house plan types like free type house, premium type house
3. Manage interior and exterior design to the kitchen, bedroom, living room, etc
4. Maintain Exterior types front, rare, side elevations
5. Preserve extra plans to the house, if required

6. Manage companies for building construction materials like sand, iron, etc
7. Update plans for lower level(ground) and main level(upstairs)
8. Engineer only can add plans to premium type houses
9. Contractor will add extra designs to houses or add design to the new house
10. User can search by bed rooms and plan types to get Engineers, contractor's information only for premium type of houses
11. Maintain Status for Plans or Interior or Exterior designs like Sanction or reject
12. Down load Plans or Interiors or Exteriors designs
13. Maintain vastu information

NO. OF MODULES

1. Administrator
2. Engineer
3. Contractor
4. Vaasthu Expert
5. Users
6. Search
7. Authentication
8. Registration

MODULES DESCRIPTION

1. Administrator:

Administrator is owner of the site. He can Manage the address and he can add free and premium type of houses (House name, no of rooms, garbage bays...etc), he can add interior, exterior and plan types. He can add plans, interior,

exterior designs to free houses. And he manage plans, interior, exterior designs. And he can add companies (like cement, iron, marbles...etc).

2. Engineer:

Engineer can enter into site with his credentials. He can add plans to premium houses. He can manage the plans. He can view the citizen requests for plans, if bank details are valid he can send the plans to citizen. Finally he can view his profile and update the profile. And he can update his password also.

3. Contractor:

Contractor can enter into site with his credentials. He can add Interior and exterior designs to premium houses. He can manage the designs. He can view the citizen requests for designs, if bank details are valid he can send the designs to citizen. Finally he can view his profile and update the profile. And he can update his password also.

4. Vaasthu expert:

Vaasthu expert can enter into site with his credentials. He can add vaasthu questions and answers. He can view his profile and update the profile. And he can update his password also.

5. User:

User can enter in the site with his credentials. He can search for houses, houses are two types one is free type houses another one is premium type of houses, free type houses user can view and download the plans, interior and exterior designs directly. But premium type of houses user

can buy plans, interior, exterior designs from engineer / contractor. And he can view the vaasthu shastra about houses.

6. Search:

General user can search for houses, houses are two types one is free type houses another one is premium type of houses, free type houses General user can view and download the plans, interior and exterior designs directly, if he want premium type of houses plans, interior, exterior designs, he must register the site.

7. Authentication:

Authentications process of granting or denying access to a Web based Application. It is the process of determining whether someone or something is, in fact, who or what it is declared to be. Authentication is commonly done through the use of credentials i.e. user name and passwords

8.Registration:

The system has a process of registration. Every user need to submit their complete details including user name and password in the form of registration. Whenever a user registration completed then only a user can get log in into the system by using his user id and password.

NO. OF USERS

1. Administrator
2. Engineer
3. Contractor
4. Vaastu Experts
5. Users

INPUT AND OUTPUT

The major inputs and outputs and major functions of the system are follows:

Inputs:

- Administrator enter his user id and password for login to authenticate in this system
- Administrator enters house details (like house type, No of rooms, garbage bays etc...).
- Administrator can enter plans (lower level and main level), interior, exterior types.
- Administrator can manage plans, interior, exterior designs to free houses.
- Administrator can enter company details (like company name, type etc...).
- Engineer adds plans to premium type of houses.
- Engineer update plans.
- Engineer sends plans to citizen.
- Engineer can update his profile.
- Contractor adds interior, exterior designs to premium type of houses.
- Contractor sends interior, exterior designs to citizen.
- Contractor manages interior, exterior designs.
- Contractor can update his profile.

- User can send a request for plans to engineer.
- User can send a request for interior/exterior designs to contractor.
- User updates his profile.

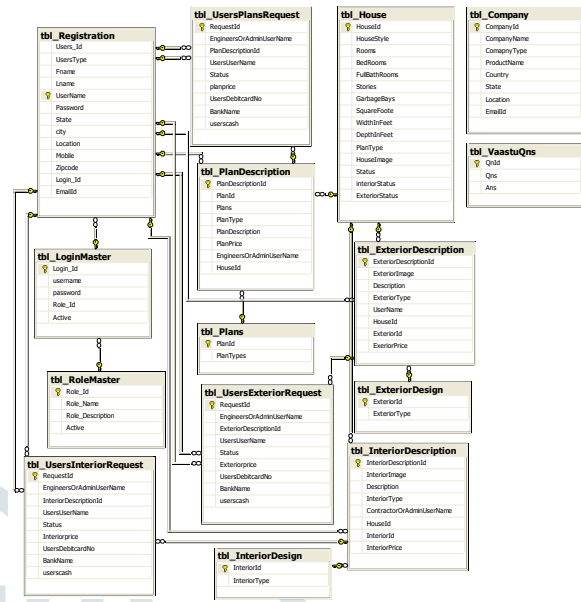


Fig 3.1: ER Diagram

Outputs:

- Administrator can have his own home page.
- Administrator view free and premium type of houses.
- Engineer can view citizen requests.
- Engineers view profile.
- Contractor view citizen requests.
- Contractors view profile.
- Vaasthu experts view profile.
- User view free /premium type of houses.
- User view plans, interior, exterior status.
- Users view profile.

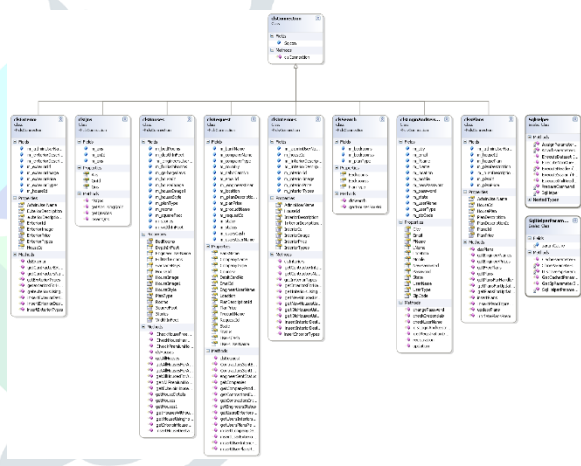


Fig 3.2: Class Diagram

3.SYSTEMDESIGN

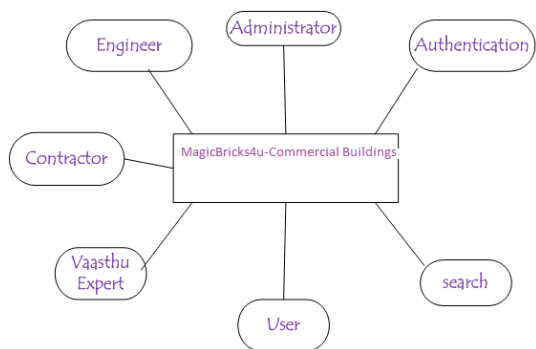


Fig 3.1: CONTEXT LEVEL DIAGRAM

4. CONCLUSION AND FUTURE ENHANCEMENT

It has been a great pleasure for me to work on this exciting and challenging Online application for the Online construction and Building Monitoring system project. It also provides knowledge about the latest technology used in developing web enabled application and client server technology that will be great demand in future. This will provide better opportunities and guidance in future

in developing projects independently.

BENEFITS:

The project is identified by the merits of the system offered to the user. The merits of this project are as follows: -

- It's a web-enabled project.
- This project offers user to enter the data through simple and interactive forms. This is very helpful for the client to enter the desired information through so much simplicity.
- The user is mainly more concerned about the validity of the data, whatever he is entering. There are checks on every stages of any new creation, data entry or updating so that the user cannot enter the invalid data, which can create problems at later date.
- Sometimes the user finds in the later stages of using project that he needs to update some of the information that he entered earlier. There are options for him by which he can update the records. Moreover there is restriction for his that he cannot change the primary data field. This keeps the validity of the data to longer extent.
- User is provided the option of monitoring the records he entered earlier. He can see the desired records with the variety of options provided by him.
- From every part of the project the user is provided with the links through framing so that he can go from one option of the project to other as per the requirement. This is bound to be simple and very friendly as per the user

is concerned. That is, we can sat that the project is user friendly which is one of the primary concerns of any good project.

- Data storage and retrieval will become faster and easier to maintain because data is stored in a systematic manner and in a single database.
- Decision making process would be greatly enhanced because of faster processing of information since data collection from information available on computer takes much less time then manual system.
- Allocating of sample results becomes much faster because at a time the user can see the records of last years.
- Easier and faster data transfer through latest technology associated with the computer and communication.
- Through these features it will increase the efficiency, accuracy and transparency,

LIMITATIONS:

The size of the database increases day-by-day, increasing the load on the database back up and data maintenance activity.

Training for simple computer operations is necessary for the users working on the system.

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