BUILD PRO -BUILDING ESTIMATION TRACKER SYSTEM

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INTRODUCTION:-

Advanced cost estimation system for building construction (Build Pro) is a very useful application for common people who are zero level to intermediate level knowledge on building construction and cost estimation calculation. To some extend even a building contractor also use this application for calculating the cost for developing a new house or a building accurately.The final cost estimation result will give the estimated cost of the materials used for build a house or building .when the user gave the sq.ft of house or building the systen display the materials needed and its estimation cost also.Using the proposed application each user can create as many as building or home that they wanted to find out the estimated building cost.

                    The major purpose of BUILD PRO is to implement the computerization of estimation in building construction. The users can easily find their rate that is required for constructing a building. The website has a user-friendly environment, that everyone can use it easily. Also, it provides the user from fake estimation rates given by the contractors. There will be an administrative section, the role of administrator is configuring the expense for each material, and for each material there will be a cost range. This will help the user to get an idea of total cost variation by using priced materials. And also administrator will manage the basic building materials like sand, cement, metal chips, iron bar etc.The role of the user to select the material needed to build the house or building.when the user doesnot know the materials the user have the option to gave the sq.ft of the building ,then the user can show the material needed to build his house and the estimation cost.

Modules:-

1.ADMIN:-
* Login
*Add items and cost
*Mange items and their cost
* Manage Registered Users
*Viewing Registered User
*Upload items image

2.USER
* Register
* Login
* View the materials used for building construction
* Selection of essential materials needed to building construction
*View User Profile
*Edit User Profile
*Upload the sq.ft of Building
*View the Estimation Cost

3.COST ESTIMATION
Construction cost Estimation

HARDWARE SPECIFICATION: -

Processor : i3 or above
Speed : 2.2 GHz
Hard Disk : 1 TB
Key Board : standard Window key Board
RAM :2GB

SOFTWARE SPECIFICATION:-

OS : Os independent (javascript runtime)
Front End : React JS,css(Tailwind)
Back End : Node.js
Database : MongoDB
IDE : visual studio code

Product Backlog

ID	Priority	Hours	Sprint	Status	Name
1	Medium	10	1	Partially Completed	Form design
2	High	10	2	Partially Completed	Table design
3	High	10	3	planned	Coding
4	Medium	9	4	planned	Testing data
5	High	7	5	planned	Output generation

User Story

User story id	AS a <type of user>	I want to	So that I can
1	Admin	Login	Login successful with correct Username and password
2	Admin	Add item	Add the materials required to build a building
3	Admin	Manage Registered user	Manage the Registered user
4	Admin	View Registered User	View the users
5	Admin	Upload item images	Upload the items images
6	Admin	Add item cost	Add the materials coset
7	Admin	Manage items	Edit/remove the items
8	User	Register	New user login with name, email and password
9	User	Login	Login successful with correct Username and password

User story id	AS a <type of user>	I want to	So that I can
11	User	View the materials	User can view the materials name,image and price
12	User	Select the material	User can select the materials needed to build their buildinh
13	User	View user profile	View the profile
14	User	Edit user profile	Edit,change password
15	User	Upload the sq.ft	User can upload the sq.ft of building
16	user	Cost Estimation	View the Estimation cost

Project Plan

User strory ID	Task Name	Start Date	End Date	Days	Status
1,8,9	Sprint 1	15/09/2023	28/09/2023	14	Partially Completed
4,11,12,13	Sprint 2	30/09/2023	13/10/2023	14	planned
2,6,14	Sprint 3	15/10/2023	28/10/2023	14	planned
3,5,7,10	Sprint 4	01/11/2023	14/11/2023	14	Planned
15,16	Sprint 5	17/11/2023	30/11/2023	14	planned

Sprint plan

Backlog item	Status and Completion date	Original estimate in hours	Day 1 15/09	Day 2 16/09	Day 3 17/09	Day 4 18/09	Day 5 19/09	Day 6 20/09	Day 7 21/09	Day 8 22/09	Day 9 23/09	Day 10 24/09	Day 11 25/09	Day 12 26/09	Day 13 27/09	Day 14 28/09
Form Design	15/09/23	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Table Design	17/09/23	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Coding	26/09/23	7	0	0	0	0	1	1	1	1	1	1	0	1	0	0
Testing & Validation	28/09/23	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total		10	1	0	1	0	1	1	1	1	1	1	0	1	0	1

Sprint 2:-

Backlog item	Status and Completion date	Original estimate in hours	Day 1 30/09	Day 2 01/10	Day 3 02/10	Day 4 03/10	Day 5 04/10	Day 6 05/10	Day 7 06/10	Day 8 07/10	Day 9 08/10	Day 10 09/10	Day 11 10/10	Day 12 11/10	Day 13 12/10	Day 14 13/10
Form Design	02/10/23	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0
Table Design	03/10/23	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Coding	11/10/23	6	0	0	0	0	1	1	0	1	0	2	1	0	0	0
Testing & Validation	12/10/23	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Total		10	1	0	1	1	1	1	0	1	0	2	1	0	1	0

Sprint 3:-

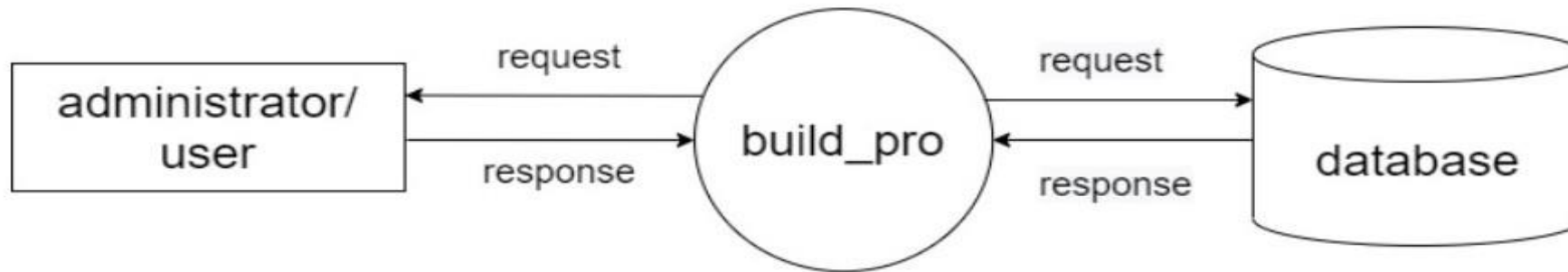| Backlog item	Status and Completion date	Original estimate in hours	Day 1 15/10	Day 2 16/10	Day 3 17/10	Day 4 18/10	Day 5 19/10	Day 6 20/10	Day 7 21/10	Day 8 22/10	Day 9 23/10	Day 10 24/10	Day 11 25/10	Day 12 26/10	Day 13 27/10	Day 14 28/10
Form Design	18/10/23	3	1	0	1	1	0	0	0	0	0	0	0	0	0	0
Table Design	19/10/23	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0
Coding	23/10/23	4	0	0	0	0	0	1	1	1	1	0	0	0	0	0
Testing & Validation	28/10/23	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Total		10	1	0	1	1	0	1	1	1	1	0	0	0	0	1

Sprint 4:-

Backlog item	Status and Completion date	Original estimate in hours	Day 1 01/11	Day 2 02/11	Day 3 03/11	Day 4 04/11	Day 5 05/11	Day 6 06/11	Day 7 07/11	Day 8 08/11	Day 9 09/11	Day 10 10/11	Day 11 11/11	Day 12 12/11	Day 13 13/11	Day 14 14/11
Coding	12/11/23	7	1	1	0	2	1	1	0	0	1	0	0	1	0	0
Testing & Validation	14/11/23	2	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Total		10	1	1	0	2	1	1	0	0	1	0	0	1	1	1

Sprint 5:-

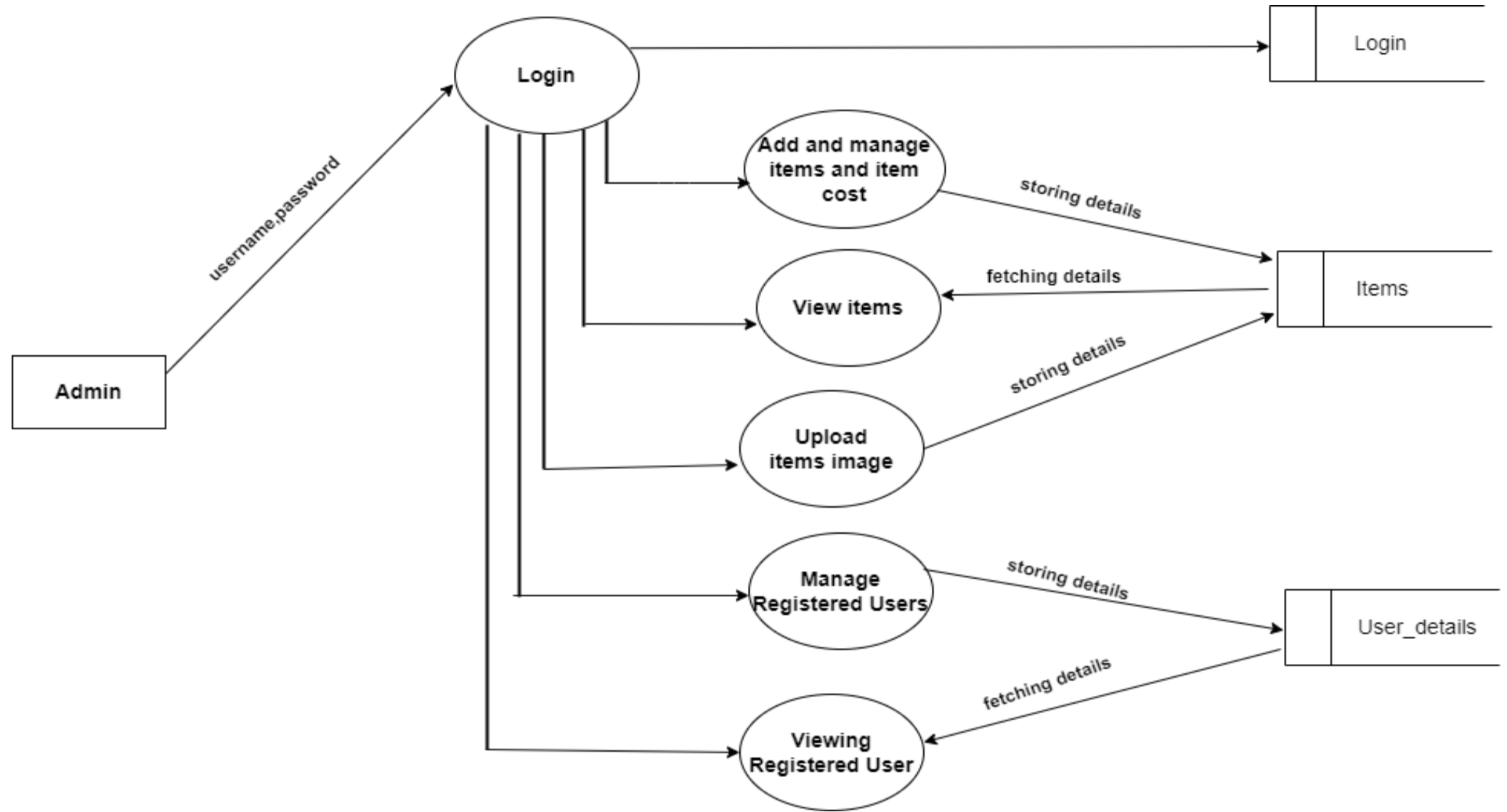| Backlog item	Status and Completion date	Original estimate in hours	Day 1 17/11	Day 2 18/11	Day 3 19/11	Day 4 20/11	Day 5 21/11	Day 6 22/11	Day 7 23/11	Day 8 24/11	Day 9 25/11	Day 10 26/11	Day 11 27/11	Day 12 28/11	Day 13 29/11	Day 14 31/11
Coding	21/11/23	5	1	1	0	1	2	0	0	0	0	0	0	0	0	0
Testing & Validation	23/11/23	2	0	0	0	0	0	0	2	0	0	0	0	0	0	0
Total		7	1	1	0	1	2	0	2	0	0	0	0	0	0	0

DATA FLOW DIAGRAM:-

LEVEL 0:-

Level 1:-

Level 2:-