

A
Project Report
on
“SMART CONSTRUCTOR”

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ABSTRACT

Nowadays there are so many contractors out there and we know nothing about them when it comes to repairing our home, renovating a home, or building a home from scratch. We don't know which things are currently running in the market and what materials contractors use or which contractor to hire.

To solve the mentioned problem, we came up with a proposal of the Application/Website. It provides a wide variety of features to help to build your home and to choose the best contractors near you in your budget.

The goal of our Application/Website is to give proper information to the user about contractors, save the time of users, provide reach user experience, this project also provides trending section which will help users to select best designs for home renovation which are currently trending in the market. Users can give ratings to contractors according to their work.

SUMMARY / DESCRIPTION

The main perspective of **Smart Construction** with visualization can be achieved by Mobile App. It resolves the matter of the size-related problem of materials that are used in construction and renovations, for example: - when someone wants to set some furniture in some empty place then using available options one can easily visualize and find out how much space that furniture acquires and how it looks. The overall implementation is mainly based on Augmented Reality (AR) and Image Processing (if needed)

Smart Constructor provides a bunch of useful features that minimize the Manpower of Customer and amount of time that everyone put while discussing needs and looks. The mentioned problem is solved by Smart Constructor by reviewing every contractor out there near your location based on Rating, Materials, Trends, and many more features which makes an easy environment for users.

List of similar systems/existing system studied and their limitation

There exist different kinds of AR-based apps but they have their particular feature like some provides visualization only for furniture (IKEA app) and some provides the only visualization for lenses (lens kart app)

Smart Constructor gives ideas to visualize not only furniture but also for renovations like POP ceiling, lightning, window curtains, and many more for renovation event this app also provides trending styles from which one can also get help to construct houses from scratch.

One system called Just Dial is out there which provides information on whatever you need but you have to put much time in that and review whatever information system provides. While Smart Constructor provides the bulk of features that solve the mentioned problem completely. Users can see every detail of what their constructors use, top trends in the market, and one can also give/review ratings of Builders and Constructors.







EXPECTED OUTCOME

This system allows a user to visualize objects through walls, and virtual objects may unintentionally overlap with other virtual or real furniture.

Sophisticated database search, which enables search by color, style, size, price, and other properties. The users mentioned that often people want, for example, a couch of a certain size (defined by size available), or they may have a limited budget and are interested in the prices.

Time is the most important factor in this busy era. By using this system, lots of time is saved and the second important factor is manpower. We have to select different providers for different tasks but this can be solved by using this system which reduces manpower into almost nothing.

Tools & Technology

-  React-Native
-  MySql
-  ASP.NET with C#
-  Augmented Reality
-  Visual Studio Code
-  Git and Github