

Architectural Visualizer in Android

Satvik Agrasani¹, Abbas Ahmedabadwala², Manjiri Panchal³, Pramod Basa⁴

^{1,2,3,4}Department of Computer Technology, Maratha Mandir's Babasaheb Gawde Institute of Technology, Mumbai-400008, India

Abstract -An Interior design is the art and science of Enhancing the inter beauty or structure of a building to Achieve a healthier and more aesthetically pleasing Environment for the people using the space. An interior designer is someone who plans, researches, coordinates, and manages such projects. Interior design is a profession that includes conceptual development, site inspection, planning and execution of the design.

Key Words: Android programming, Canny edge detection, Image processing.

1. INTRODUCTION

Visualization or 3D visualization is defined as "any technique for creating images or animations so that one can communicate a message". Architectural rendering or visualization is the art of creating 2D and 3D images showing the attributes of a proposed architectural design. This technology is changing the way we design, in a way that simply wasn't possible some years ago. 3D rendering and architectural visualization software is a software that enables the architect to see how would the interiors of a place fit in the specified area designated. Also avail services like masonry, plumbing, tile fixing and tile grouting based on what you need. studious

2. DETAILED PROBLEM DEFINATION

A basic know on the classification of problems is that the designer induced problems can be either intentional or unintentional. In reviewing the literature we found mainly analyses of unintentional problems introduced by the designer. The Problem Definition Tool works both to open a problem upand to help define the wider context and associated issues involved. It examines the evidence and the assumptions underlying the problem. Such a detailed examination can sometimes lead to the problem being completely reframed.

A problem definition set out in one well-formulated sentence is very valuable: something that addresses the central elements of the issue.



3. EXISTING SYSTEM

There might exist a lot of similar applications, but, one of the best applications to achieve architecture visualization is Asian Paints - Wall Paint & Design App to design your home at one tap. Which provides entire Asian Paints Colour Spectra or you can say a colour palette to apply on the image of walls.

4. MARKET SURVEY

Visualization is a technique for creating images or animations to communicate a message. Visualization software are used for graphical user interfaces handled by software editors. The process of producing an image based on the three-dimensional data stored within a computer is called 3D rendering. Visualization and 3D rendering software are used to create graphical interfaces and displays for software solutions and convert 3D models into 2D images or videos.



5. ARCHITECTURE

The proposed system is implemented using requestresponse model. The system architecture is shown below:

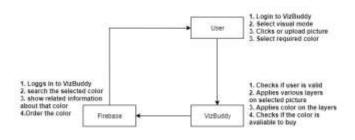


Fig-1

As shown above the system is divided into three Modules,

1. User: The user is allowed to login into the module or application. Also, he is allowed to select various modes viz. creative and visual mode. The user can click or upload pictures or also select required colors.

2. VizBuddy: The application checks if the user is a valid one, also makes various layers to the picture and allows to add colors to the layers.

3. Firebase: This is an online database. It contains information about the users, records of the orders and also keeps information about the suppliers address etc.

6. WORKING

The activity diagram given below shows the working of the System.

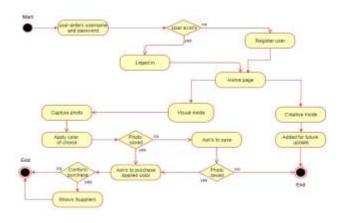


Fig-2

User enters his username and password. If the user is new, a new account will be created. After authentication home page will be displayed which consists two modes Visual and creative mode.

Visual mode will ask for capturing picture on which the application will apply color of choice.

The applied color will be shown to the user.

Applied color will be asked to purchase and if yes will provide list of suppliers nearby.

7. CONCLUSION

Architectural visualization is the computer graphic representation of the interior or exterior of a building project that showcases all its distinctively exotic features. This means that all the characteristics of a proposed building with its aesthetic value will be graphically presented by using the relevant computer programs. One will easily be able to design their homes or more specifically the walls based on their own choices.

8. REFERENCES

- [1] https://www.asianpaints.com/colour/mobileapp.html
- [2] https://www.alliedmarketresearch.com/visualizationand-3d-rendering-market
- [3] https://en.wikipedia.org/wiki/Interior_designKornack
- [4] https://opencv-java-tutorials.readthedocs.io