Feasibility Report:

1.Introduction:

1. Overview of project:

This project intent to the auto-generation of 3D models from 2D imported floor plans. It can be operated by importing a 2D floor plan in an image format. The techniques of image processing and model mapping used to generate the 3d computer graphics model according to the imported 2D floor plan. The 3D modification function provides ability to change the texture of floor and walls; moreover, it also enables users to add furniture in 3D constructed model. User can look at 3D model from different viewpoints i.e. top-view, walk-through, front-view and side-view.

1. Background
2. Motivation

A common user or an artist who does not know how their home look after construction and proper adjustment of their accessories, it’s a big platform for them to see their house in 3D more than their imagination. We move towards this project because many artists, civil constructors and common house owners which want houses according to their own designs, so to help them that their floor plan will look good or not after implementation, we are making this software. Already existing such systems can only used by technical users because a lot of manual work is required to construct 3D model from 2D file format. So, this motivates us to automatically generate 3D model from an imported 2D floor plan image by just clicking a button.

2.Objectives of the project:

1. Industry Objectives
2. Research Objectives
3. Academic Objectives

3.Scope of the project

4.Target Audience

5.Possible Applications of work

6.Existing System

1. Comparison of Existing Systems
2. Drawbacks of Existing Systems

7.Problem Statement

When anyone plans to construct a new flat/house and can only see its floor plan. So it’s hard for anyone to imagine the actual environment by just seeing 2-D floor plan. So, our system will enable the users to see this 2-D floor plan into 3-D. Sometimes users also get curious how to design the interior of house. So, this system will also enable users to modify or add furniture in 3-D generated model.

8.Proposed System

9.Feasibility Study

1. Technical feasibility
2. Operational feasibility
3. Economical feasibility

10.System Requirements

1. Hardware Requirements
2. Software Requirements

11.Limitations and challenges in implementation of project

12.References