# Universiti Teknologi MARA

# Kitchen Design on Web

## Nur Firdaus Binti Abdul Kamal

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**Faculty of Computer Science And**

**Mathematic**

# KITCHEN DESIGN ON WEB

# FINAL YEAR PROJECT REPORT

## A 3rd Year Student

Project proposal submitted in part fulfillment of the
Bachelor of Computer Science (Hons.) with the supervision of
My supervisor Puan Norizan Mat Diah and
co-ordinated by PM Zaidah Ibrahim & Dr. Nasiroh

Computer Science Department

Faculty of Computer Science and Mathematic

**University Technology MARA**

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# CHAPTER 1


## INTRODUCTION


In this chapter, it will cover project background, problem statement, research purpose, objectives, scopes and significance of study. The overview of the project will be explained in detail.


## 1.1    Project Background


This project is based on knowledge-based system. Knowledge-based systems are systems based on the methods and techniques of Artificial Intelligence (AI). Their core components are the knowledge base and the inference mechanisms. It's an AI tool that working in a narrow domain to provide intelligent decisions with justification. Knowledge is acquired and represented using various knowledge representation techniques rules, frames and scripts. The basic advantages offered by such system are documentation of knowledge, intelligent decision support, self learning, reasoning and explanation. (http://en.wikipedia.org/wiki/Knowledge-based systems). Another definition of knowledge-based system is it integrates a database of expert knowledge with associated relate designed to easier retriever in response to specific questions, or to transfer expertise from one domain of knowledge to another. (http://www.businessdictionarv.com/definition/knowledge-based-svstem.html').

This project is similar to a recommendation system that has been developing to help user making decision in their life. Recommender systems or advisory system is system that recommends information items that are likely to be of interest to the user. Typically, a recommender system compares a user profile to some reference characteristics, and provides the result that matches the user's reference with the rules available in the knowledge base. In simple words, the system will

gather information from user by asking some questions, and then it will give a result based on user preferences (http://en.wikipedia.org/wiki/Recommender_system).

In recent years, there are some decorating applications that available through the Internet. Sweet Home 3D is a free interior design application that helps user to place their furniture on a 2D plan's house with a 3D preview. From http://www.sweethome3d.eu/. user can simply install the application. It's easy to use because the website also provides a user guide. The user may draw the walls of his rooms upon the image of an existing plan, change the color or the texture of the walls and import additional 3D models (created by him self or downloaded from Internet). User also can change the size, view the changes in the plan simultaneously in the 3D view, either from an aerial view point, or from a virtual visitor view point, and print the home plan and the 3D view. Examples of others online decorating websites are *http://www.designingonline.com*, *http://www. designmyroom. com* and *http://www. ico via. com.*

## 1.2 Problem Statement

Sometime, people got confuse to paint their kitchen area, because they have many ideas and choices. Debbie DeSpirt ("Choosing the Right Paint Color Kitchen", 2007) said that picking the perfect color for your kitchen is a difficult decision to make. Moreover, in this century people love to decorate their home with color, shape and pattern. Regarding to that, using wallpaper is the best idea because it gives the pattern, color and texture that cannot be making by using paint (senihias.com, 2009). Besides seeing an interior designer, using a recommender system may help user to get an idea in decorating their home easier and faster.