

BORANG PENGESAHAN STATUS TESIS

JUDUL: HOME TILES PLANNING AND RECOMMENDATION SYSTEM

SESI PENGAJIAN: 2009/2010

Saya LIM LIK CHING

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(LIM LIK CHING)

Alamat Tetap: 28, JALAN BAWAL,
TAMAN MUTIARA, 42800
TANJUNG SEPAT, SELANGOR.

Tarikh: 18 - 06 - 2010



(PN. KASTURI)

KASTURI KANCHYMALAY
Pensyarah
Jabatan Kejuruteraan Perisian
Fakulti Teknologi Maklumat Dan Komunikasi
Universiti Teknikal Malaysia Melaka
Tarikh: 18 - 06 - 2010

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HOME TILES PLANNING AND RECOMMENDATION SYSTEM

LIM LIK CHING

**This report is submitted in partial fulfillment of the requirements for the
Bachelor of Computer Science (Software Development)**

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITY TEKNIKAL MALAYSIA MELAKA**

2007

DEDICATION

**This thesis is dedicated to
my beloved parent,
who taught me that
even the largest task can be accomplished
if it is done one step at a time.**

ACKNOWLEDGEMENTS

I would like to thanks to my supervisor, Pn.Kasturi for her helpful guidance and support. I am deeply appreciated her sage advice and patient encouragement aided the writing of this thesis, and also her insightful criticism on the development of Home Tiles Planning and Recommendation System. Thanks for her devoted time and effort to lead me to complete the report.

I would also like to thank my beloved parents who have always giving me support and motivation throughout my project.

At last but not least, I would like to thanks all my friends who always contributed their useful idea and suggestion on help me completing my project. I am very thanks to them on sharing their knowledge with me too.

ABSTRACT

Home Tiles Planning and Recommendation System is a web application. Since there is have no any website providing customer visualization and customization using home tiles, so that there might giving customer not enough satisfaction. Home Tiles Planning and Recommendation System provide customers tiles searching service, tiles ordering service. Other than that, customers can design wall or floor using home tiles by dragging the tiles to virtual wall or floor. Customers also can get to know how many tiles needed by using this web application. Customer can get recommendation on order tiles by this web application too. On the other hand, this application can use by admin to manage the company tiles and customer orders with a more convenient way.

ABSTRAK

Sistem Home Tiles Planning and Recommendation adalah sebuah aplikasi web. Sejak tidak ada sebarang laman web yang memberikan pengguna visualisasi dengan menggunakan ubin rumah, sehingga mungkin ada memberikan kepuasan pelanggan tidak cukup. Sistem ini memberikan pengguna perkhidmatan pencarian ubin dan tempahan ubin. Selain itu, pengguna boleh mereka dinding atau lantai dengan menggunakan ubin rumah secara 'drag' dan 'drop' ke dalam dinding atau lantai yang disediakan. Pengguna juga dapat mengetahui berapa banyak ubin yang diperlukan dengan menggunakan aplikasi web. Pengguna boleh mendapatkan cadangan untuk tempahan ubin oleh aplikasi web ini juga. Di samping itu, aplikasi ini boleh digunakan oleh pentadbir untuk menguruskan ubin syarikat dan tempahan pelanggan dengan cara yang lebih senang.

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LIST OF ABBREVIATIONS

HTPRS	-	Home Tiles Planning and Recommendation System
SDLC	-	Software Development Life Cycle
IC	-	Identity Card
AJAX	-	Asynchronous JavaScript and XML
HTTP	-	Hypertext Transfer Protocol
XML	-	Extensible Markup Language
ERD	-	Entity Relationship Diagram
UML	-	Unified Modeling Language
GUI	-	Graphic User Interface

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CHAPTER I

INTRODUCTION

1.1 Project Background

Home Tiles Planning and Recommendation system is a web application which is designed for admin and customer uses. Given some user preferences such as the size of the house, expected price, the system would then comes out with a list of suggestion that most buy by other user. From there, the user may do further customization on their own to suits their final needs.

The system would also suggest the user with most buy tiles, along with the tiles details, price and so on. Of course, user might then design the floor or wall based on their thinking to ease making a deal on ordering the tiles.

There are similar systems that exist in the market for the tiles supplying company. However, these systems are only able to provide a view on the single tile, without allowing the user to make a custom design on their own. Furthermore, these systems are not capable of providing useful tools to let user implement their design using the tiles. Usually, those systems just will provide ready design for user to choose but not let user order based on their own preferred design. Lacking these features would potentially means that the tiles supplying company are not able to

give enough satisfactions to user.

1.2 Problem Statements

1. Existing system is using for purchase or searching.
2. Users only can purchase based on their decision making, do not have any suggestion for them to have suitable purchase within their needs or even budget.
3. Users cannot have a visualize version of their dream design.
4. Users hard to imagine their dream design and cannot estimate the total of tiles needed for their design.
5. Users not satisfied with the design of their home tiles after purchased.

1.3 Objective

A web application that is able to let users to design home floor or wall using preferred tiles is currently not available. Therefore, a suitable logic is necessary to support the feature.

Besides that, to further improve the user experience, the user interface is a very important element in the system. Therefore, the use of AJAX technology is necessary.

This system is tends to:

- To enable user to create an account to further use this system.
- To interpret customer preferences into a list of suggestion of tiles which are most buy by other customer.

- To enable customer have a better decision making on choosing their home tiles.
- To enable customer to customize their design through virtual wall or floor.
- To enable customer has satisfactory and realistic feeling on viewing their design through real time visualization.
- To enable customer to make order for purchase tiles.
- To calculate the total payment of the customer's order.
- To estimate the amount of tiles needed for customer's design.
- To enable company generate extra income while customer satisfied with their order.
- To ease admin to manage company tiles.
- To ease admin to manage customer's orders.

1.4 Scope

Four (4) significant modules will be developed accordingly to the system.

They are as follows:

1. User suggestion/recommendation module

This module consists of the parts where user enters the preferences and the system generates the appropriate list of suggestion of tiles.

2. User customization module

This module handles the customization that the customer wants to do. Customer can use this module to do a customized layout by selecting the item and pasting in on the virtual wall. This module provides real time

visualization of the design.

3. User management module

This module handles the user information. Users needed to create an account to use the system. User can manage their account information themselves.

4. Sales module

This is the module where customer confirms the tiles which are suggested to the customer. Customer can choose to purchase tiles by deals the orders and makes ready for total payment calculated and amount of tiles estimated.

After all, out of this system, sales admin will get back to the customer to deal with payment and even delivery matters.

1.5 Project Significance

This system can help those family or individuals makes good decision when purchase home tiles for their house. So that, they will not confuse when choosing and purchase home tiles for their house. This is because this system will be developed for them to use for customize their dream design home tiles style for their house and also will give out a suggestion list of suitable home tiles based on their budget. Besides, this system also provided calculation on the amount of home tiles needed to fill-up their house or room based on the size.

1.6 Expected Output

Below are the functions which my system will be developed:

1. User account registration form
 - a) Require user information to register user account to fully access the system.
 - b) A unique user name and password will be created by user which is used to login to the system.

2. User customization page.
 - a) User can choose the same tiles size design or different tiles size design to proceed with customization.
 - b) User can drag the tiles have been chosen and drop it on virtual wall or floor to design by their own idea or style.

3. Recommendation list results in user preference.
 - a) User can enter their preference like tiles size, tiles color preferred or others to get a suggestion list to make a good decision making and ordering.
 - b) User can get to know number of tiles needed for their room space by just enter their room space size.

4. Order form.
 - a) User can get the total price of tiles ordered to make ready for payment later on.

5. Tiles Search form
 - a) User can enter preferences to search tiles for view or order.

1.7 Conclusion

In this chapter, the project background has been introduced. The project objective and scope also have been discussed and stated in this chapter. In order to solve the problems within the existing system, Home Tiles Planning and Recommendation System is developed. Hence, the literature review will be discussed in the next chapter.

CHAPTER II

LITERATURE REVIEW

2.1 Introduction

In this chapter, includes the literature review of existing system and also developed system methodology. To be further going on for developing system, there is some research have been done on few home tiles online system. For current existing home tiles online system, there are still do not have any application and function provided for customer to design their home virtually but visualized and also let customer get recommendation from the system to get better decision making on purchasing home tiles. For this document, there are some comparisons of existing system especially from the function of the system. Methodology used and requirement for system also included in this chapter too. At last, the project schedule and milestones also have been provided in this document.

2.2 Facts and findings

2.2.1 Domain

The domain of home tiles system is Intelligent System. Its discipline is includes Software Technology, Database Technology, and Computer System Technology.

“We need services that are able to actively assist and support users in solving their problems, rather than passively wait for the users to express their intentions in a language that is reminiscent of programming,” explains Dr Els den Os, project coordinator of COMIC at the German and Dutch Max-Planck Institute for Psycholinguistics. (Els den Os, 2004)

As word as above, in the field such as tiles, the concept also will be the same. Usually, users are hard to express their thinks by appropriate words. There may happen some misunderstanding or unsatisfying between user and related department of business. In manufacturing, product is one of the important issues, so that it must be guaranteed that the product meets the standard, quality and customer needs. In ICT, it can be used to ensure the product meets the customer needs by express or translate their need or requirements into a form which all related side can understand.

When customer choose home tiles in manually, usually is choosing from the catalogue or walk-in into the show house of the company to have a view on tiles; but, they do not have any idea on tiles combination. Nowadays, there are many systems which are usually called as Intelligent System which is used to give idea to customer on purchase something or decide something or plan something.

In manufacturing, in the process of production, ICT can helps to accelerate time of production, increase product quality, ensure the product security, and increase product sales too. In home tiles system, usually it is tends to increase the product sales. In order to increase the sales of the product, must need to satisfy the customer needs. In this kind of system, it can be designed to be allowed user to express and translate their ‘design’ in their mind into a form which system can understand.