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JUDUL: TILES DECISION SYSTEM (TDS)

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Kaw. Perpindahan Tok Adis,
20400, Kuala Terengganu
Terengganu Darul Iman

Tarikh :



(TANDATANGAN PENYELIA)

Nama Penyelia : Puan Azlianor
Abdul Aziz

Tarikh : 25/6/2008

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TILE'S DECISION SYSTEM (TDS)

NIK SAKINAH BINTI NIK AB AZIZ

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

**FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2008**

DECLARATION

I hereby declare that this project report entitled

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is written by me and my own effort and that no part has been plagiarized without citations.

STUDENT : _____ Date: _____
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DEDICATION

This dedication is for my family, friends, and others that always help me in finishing my project.

ACKNOWLEDGEMENT

Praise to Allah Almighty for giving a chance to complete my final year project entitles “Tiles Decision System” and successfully complete this report. First of all, I would like to thankful to my beloved parents for their full support in my progress finishing this system.

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Special thanks to all my friends who always support and cooperation in helping me finished this project. Also thanks to anyone who is involve in process to finish this project.

ABSTRACT

The title of this project is Tiles Decision System. The procedure involves are interview, distributing questionnaires and also some brainstorming to find out user requirements of this topic. All the information of the vendor I get from internet and some of them form their own company. Through this system, most important thing have found in choosing tiles which is size, color, prize, type and target room. Purpose of this system is to help users to make a decision in buying tiles. They just have to enter their requirements then this system will help them to make a decision by generate some lists refer to user's requirements. Besides, company also can use this system to list their tile that they have. This system has some modules which are login that will used by administrator and company that have been registered to enter the system, administrator part: registration module, delete company, company part: edit company detail, add tiles, edit tiles, add news, edit news, delete tiles and delete news. While, common user do not have to login to used the decision module and promotion module. Company has benefit by using this system because they can list out their tile to the customer and they also can announce some promotion via this system. It is also easier to the customer to know whether there is a promotion from any company or not. In conclusion, this system may help both side; company and customer to communicate more effectively.

ABSTRACT

The title of this project is Tiles Decision System. The procedure involves are interview, distributing questionnaires and also some brainstorming to find out user requirements of this topic. All the information of the vendor I get from internet and some of them form their own company. Through this system, most important thing have found in choosing tiles which is size, color, prize, type and target room. Purpose of this system is to help users to make a decision in buying tiles. They just have to enter their requirements then this system will help them to make a decision by generate some lists refer to user's requirements. Besides, company also can use this system to list their tile that they have. This system has some modules which are login that will used by administrator and company that have been registered to enter the system, administrator part: registration module, delete company, company part: edit company detail, add tiles, edit tiles, add news, edit news, delete tiles and delete news. While, common user do not have to login to used the decision module and promotion module. Company has benefit by using this system because they can list out their tile to the customer and they also can announce some promotion via this system. It is also easier to the customer to know whether there is a promotion from any company or not. In conclusion, this system may help both side; company and customer to communicate more effectively.

ABSTRAK

Tajuk system ini ialah “Tiles Decision” system. Prosedur yang terlibat dalam menyiapkan tajuk ini ialah temuramah, mengedarkan kertas soalan dan perbincangan untuk mengetahui keperluan pengguna dalam memilih kemasan lantai. Kesemua maklumat pengedar diperolehi daripada Internet dan juga daripada pengeluar itu sendiri. Sepanjang kajian, beberapa ciri-ciri penting telah ditemui dalam memilih kemasan lantai iaitu saiz, harga, warna, corak dan juga ruangan yang ingin dipilih untuk memasang kemasan lantai tersebut. Tujuan sistem ini dibangunkan adalah untuk membantu pengguna dalam membuat keputusan dalam proses pembelian kemasan lantai. Mereka hanya perlu memasukkan maklumat yang diperlukan ke dalam sistem dan sistem akan mengeluarkan senarai-senarai yang berkaitan dengan kreatirea yang telah dipilih. Pihak syarikat pula boleh menyenaraikan semua jenis kemasan lantai yang dijual di syarikat mereka ke dalam sistem ini. Sistem ini mempunyai beberapa modul iaitu modul *Login* yang akan digunakan oleh *Administrator* dan juga pihak syarikat yang berdaftar. Modul *Register* dan *Delete Company* yang digunakan oleh admin, modul *Edit Company Detail*, *Add Tiles*, *Edit Tiles*, *Delete Tiles*, *Add News*, *Edit News*, dan *Delete News* digunakan oleh pihak syarikat. Manakala pengguna biasa, tidak perlu log masuk, namun pengguna biasa boleh menggunakan modul *Decision Module* dan *Promotion*. Faedah yang diperolehi oleh pihak syarikat, mereka boleh mempromosikan kemasan lantai yang mereka jual dan juga menyebarkan promosi-promosi yang dilakukan oleh syarikat mereka menerusi sistem ini. Pengguna pula boleh mengetahui promosi yang ada dengan lebih mudah. Kesimpulannya, sistem ini dapat membantu kedua-dua belah pihak; syarikat dan pengguna untuk berkomunikasi dengan lebih berkesan.

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CHAPTER I

INTRODUCTION

1.1 Project Background

Nowadays, Information Technology (IT) is widely used in various domains and has helped us in accomplishing and alleviating our daily routine. In business field, technology becomes the most important things to enlarge their market and to encounter their target customers.

In this project, the technology used to help customer to make a decision making in choosing a product. This project is about Development of Decision Support System for tiles, entitle Tiles Decision System (TDS). It will help customer to choose the best tile for their house according to their requirements. Requirements that provided in this system are state they are want, such as pattern of the tiles, color, size, target room and prize for each tile. After they enter the requirements, system will generate and find a list of answers for them to analyst. This system is not for make a decision for users but its help users to make a better decision by giving a list of details about the tile they wanted. Then users themselves need to make a decision according to the list given.

On the other hand, administrator used this system to add more info about tiles and the company that may produce or sell that tile. Admin needs to register their details before login. This is because to make sure that only person that is authenticated used this system. All data that have been insert, will be shown in users interface or modules.

This chapter describes about the introduction, project background, problem statements, objectives, scopes, project significance, expected output, and conclusion.

1.2 Problem Statement

Communication Problems: Communication problems may occur when staff does not listen carefully to what customer wants, or customer that are using different languages. This small mistake might become a big problem if it always happens. For example, customer request for a tile that are red in color but staff give them blue or orange tile. This miscommunication always occurs in daily life but if this happen in the business that company might be lost their customer forever.

Decision making problem: Some customer that come to the shop does not know what type of tile they want to buy actually. So they might takes lots of times to think and make a decision which one is the best. Staff may help, but not most of the time staff can be there. Sometimes, staff might give a suggestion that does not accomplish customer's requirements. There are lots of characteristics of each tiles that customer have to consider.

Difficult to find a perfect shop: This is another problem that always occurs when person wants to buy a tile. They do not know which shop is nearest to their house and they might go to the shop that is far from the house. They actually do not know if any shop that is fills their requirements exist in which area. Imagine that if someone that actually new residents in that place, it may waste their time or money to find a tile shop in that place.

Customer wasting time: Most customers need time to make a decision because there are no guidelines for them to choose the best tile. Some customers have another work to do in that time and does not have any time to make a decision, and the effect is they might choose any tile without thinking whether it is fill their requirements or not.

1.3 Project Objective

The objectives of developing this project are:

Provides more comprehensive and faster outcomes for decision making: Using this system, customer can have a better choice in making a decision to buy a tile. This system gives them a list of company and tile information refers to their requirements. There is no miscommunication happen again and customer may have their decision before they are going to the shop.

Reduce customer's time: When decision can be done faster, there is no wasting time for customer. They can contact the company in many ways while doing their job. This system gives company information to the users so that users can contact the company. Customer also can go to the nearest shop from their house because they already have the information which is the nearest shop in that place.

To provide a web-based application to the customer: It is because nowadays, all things are using an electronic-based. This system is one of the systems that may help customer to make a better decision to choose a tile anywhere that have an internet connection. They do not have to do a manual way by going to the shop to choose the tile.

1.4 Project Scope

Before the construction of the system commence, the scope of the project has to be determined in order to create the boundary of the system. This will keep the development of the system within a manageable scope. The scope is divided into two parts, which are target user and project module.

1.4.1 Target User

- Person who wants to buy a tile.

This system is basically created for a customer to help them to make a better decision in choosing a tile. It is an easy system that only required user to enter their needs.

- Tile's company.

This system also can be used by a company that sell and produce tiles to check customer requirements nowadays. So, they can use the information to improve their business strategy.

1.4.2 Project Module

The project will be focused in the development of Tiles decision making. The scopes of the projects are:

a) Resource Planning

- Adding new resources.

In this part, Company can add a new information or resources and details into the database. Company also can delete or edit the information in the database. System may check the authentication whether the user is allowed to enter the module. Company need to register first before using this system.

- Deleting Company

This part will be manage by administrator to delete Company that no more available in that system. Company needs to contact administrator to delete their profile in the system.

b) Report

- This function will auto generate report that will support in making decision according to user needs.

c) Registration

This section required user to register as Company, so that they will manage to enter the Company module. To register, user just need to inform administrator and they will get password and username.

d) Decision Module

This module is used by customer. They do not need to login because this system is capable for everyone. This module is used to generate the list of decision that user may choose after entering the requirements.

e) Tile Module

This module has three parts; add tile, edit tile and delete tile. This session will be used by company.

f) Promotion Module

- This module has three parts; add promotion, edit promotion and delete promotion. This session will be used by company to announce their promotion to the customer.

1.5 Project Significance

TDS is an online application that has many advantages to the customer and also tile's company. By using this system, they can make a decision in choosing a tile and check the most users' needs nowadays. Using this system, they can save their time and cost. They can access any time from their place. In other hand, customer needs to go to the shop to make a choice and to know the tiles details. It will take a long time to make a decision while using this system, customer do not have to waste their time at the shop to choose a tile anymore.

Besides, tile's company may use this system to see the report that has been provided to analyst. That report might help them a lot in making a new strategy to sell their tiles and to produce tiles. Compare with current system, each company does not know the customer requirement for overall which means they just analyst according to their company report only.

For the administrator, they can update all information about tiles and the company to make sure that customer get the correct information. Administrator also can view reports, so they can generate any new report if it is needed.

Nevertheless, this application is secured with password. This will make sure that only authorize user can access their module because the data can not be change by every users. This system will be displayed in a very friendly graphical user interface to ease the users.

1.6 Expected Output

In TDS, the results will appear according to the user requirements. User can enter the list of requirement given in the system so that they don't have to search tile detail because the requirements part is a dropdown list. They just have to choose are their requirements to generate the results in the system.

For administrator, they can manage all information about company details and tile details. They can add data, delete or edit data in the database. The data is secure and save because administrator will be authenticating before they can access the module.

1.7 Conclusion

In this chapter, the main idea of developing this system is to help customer to make a decision. The system is built for helping decision making with effective, efficient and less time. This system will solve the entire problems that have been state above.

Next chapter is literature review and project methodology will be continued. This part will review the previous project and make a comparison with project that has been proposed. Besides that, this chapter also explains about the methodology that will be used in this project.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction

In this chapter, it will describe about the literature review and project methodology that use in developing Tiles Decision System (TDS). This chapter will be focus on the fact and finding, project methodology that is Object Oriented Analysis and Design (OOAD) methodology, and project requirements.

Literature review is searching, collecting, analyzing and drawing conclusion from all debates raised in relevant body of literature. It is important to give the explanations of choosing the project. In project methodology section, selected approach or methodology will be described and explain the activities that may do in every stage. The requirements that are requisite in this system will be explained in high-level project requirements and followed with project schedule and milestones.

The purpose in writing the literature review is to convey to your reader what knowledge and ideas have been established on a topic, and what their strengths and weaknesses are. A literature review must be organized around and related directly to the thesis or research question that being developed, synthesize results into summary and formulate questions that need further research.

2.2 Facts and findings

The role of the DSS is to provide support to maker on the “Structurable” portion the decision. This section contains domain that relates with project, review on journals, existing system and technique applied in project development.

2.2.1 Domain

Decision Support System will be used to accomplish this project, which gives a suggestion decision to the user on ceramic’s design. As a result, it is a stand alone system and explanations the step of process in this DSS for ceramic’s system project with domain, which is list as below:

- i) Users open the website, login the system as users.
- ii) Then they insert any requirement that they need into the system. Staff also can use that module if the users do not know how to use a computer.
- iii) The requirements are; state, prize, color, pattern, target room, and size.
- iv) The system will automatically generate list of decision that user may choose.
- v) Users can make a booking using the link or address given in the website if they satisfy with design listed.

2.2.2 Existing System

I) Research and references

DSS systems are not entirely different to other systems and require a structured approach. A framework was provided by Sprague and Watson (1993). The framework has three main levels. The levels are technology levels, people involved and the developmental approach.