### DEVELOPMENT OF AN ONLINE SHOPPING WEBSITE FOR CHILDREN

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### UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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SESI PENGAJIAN: SESI 2014/2015

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## DEVELOPMENT OF AN ONLINE SHOPPING WEBSITE FOR CHILDREN

TAN SZE JIE

This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Media Interactive)

# FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2015

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### DECLARATION

# I hereby declare that this project entitled DEVELOPMENT AN ONLINE SHOPPING WEBSITE FOR CHILDREN

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

DATE: <u>4 Sept 2015</u> STUDENT: (TAN SZE JIE) tumo ett SUPERVISOR: (EN. SHAHRIL BIN PARUMO)

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### DEDICATION

To my beloved family, thank you for your support and advice, give strengths and the important one is always pray for me to complete my final year project.

To my supervisor, thank you for a lot of ideas, suggestions and give me a chance to do this final year project perfectly. Thank you very much to En. Shahril bin Parumo.

To my friends and coursemates, thank you for help me and give me spirit from starting until finish my final year project.

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### ACKNOWLEDGEMENTS

First and foremost, I would like to express my very great appreciation to En. Shahril bin Parumo for his constructive suggestions during the planning and development of this project.

Next, I would like to thank my evaluator, Dr. Norasiken binti Bakar, for the criticism towards the weakness found in my project. I appreciate for your opinions and guidance for me to improve my project.

Besides, I am also particularly grateful for the assistance given by the lecturers from the Department of Interactive Media and my coursemates.

Last but not least, I wish to thank my beloved family and friends who have been giving me support and motivation throughout my project.

#### ABSTRACT

The purpose of this project is to develop an online shopping website for children. This project is aimed to provide users with a convenient online shopping website. The target user of the project are kids aged greater than three years old. They will be attracted by the incorporated multimedia elements when using this interactive online shopping website. This project provides a convenient platform so that user can buy products (toys) anywhere through their computers with just few clicks. The project possesses simple yet attractive design and provides a platform especially for kids to purchase their favourite products on their own. The objective of the project is to study the requirements of developing an online shopping website for kids and to design the online shopping website for kids with guidance of parents. Lastly, to evaluate the usability of this online shopping website. The project development methodology used in this project is Agile Methodology. The result of the testing show that the strengths of this project allows users to choose the category based on their age. Individual category contains different product list. This setting indirectly saves user time in filtering items/products. The use of attractive background and high quality visual experience icon in the website able to catch the attention of the user and increase their surfing time on this website. Besides, the promo video used in the website gives users a very good demonstration about the product and gives them a strong desire to buy the product. Additionally, the high quality of the picture of products, allow users to zoom in and zoom out of the picture, so that can let users see the picture clearly. Inversely, this project has found few weaknesses. The buttons of the website are found to be not obvious. Moreover, the website does not contains instructions for kids, therefore kids may feel lost during the surfing journey. Lastly, the products selling in the website are limited. From the perspective of business owner, this website able to attract more customers and without requiring any rental. It helps to expand the business by increasing the sales. This website is not limited to the Malaysians. Users from other countries to access this website as well. Therefore, it provides a chance for the business owner to go for global market.

Tujuan projek ini adalah untuk membangunkan sebuah laman web membeli-belah dalam talian untuk kegunaan kanak-kanak. Projek ini mensasarkan penyediaan sebuah laman web membeli-belah yang mudah digunapakai oleh pengguna. Sasaran pengguna bagi projek ini adalah kanak-kanak yang berumur tiga tahun ke atas. Mereka akan tertarik dengan unsurunsur multimedia yang ada apabila mereka menggunakan laman web ini. Projek ini menyediakan satu platform yang mudah diguna supaya pengguna dapat membeli produk (alat permainan) di mana-mana melalui komputer dan telefon pintar mereka dengan hanya beberapa klik. Projek ini mempunyai reka bentuk yang ringkas namun menarik dan menyediakan platform terutama bagi kanak-kanak untuk membeli produk kegemaran mereka sendiri. Objektif projek ini adalah untuk mengkaji keperluan membangunkan laman web membelibelah dalam talian untuk kanak-kanak dan membentuk laman web membeli-belah dalam talian untuk kanak-kanak dengan bimbingan ibu bapa. Objektif yang terakhir adalah menilai kebolehgunaan laman web membeli-belah dalam talian ini. Metodologi pembangunan projek yang digunakan dalam projek ini adalah Kaedah Agile. Hasil ujian menunjukkan bahawa kekuatan projek ini membolehkan pengguna memilih kategori berdasarkan umur mereka. Kategori individu mengandungi senarai produk yang berbeza. Ini dapat menjimatkan masa pengguna dalam menapis item / produk. Penggunaan tema laman web yang menarik dan ikon yang berkualiti tinggi dalam pengalaman visual dapat menarik perhatian pengguna dan meningkatkan masa mereka melayari laman web ini. Selain itu, video promo yang digunakan dalam laman web memberikan pengguna satu demonstrasi yang sangat baik tentang produk dan memberi mereka keinginan yang kuat untuk membeli produk. Selain itu, gambar produk yang berkualiti tinggi membolehkan pengguna untuk fokus kepada gambar supaya pengguna boleh melihat gambar dengan jelas. Walaubagaimanapun, hasil ujian juga menunjukkan projek ini turut mempunyai beberapa kelemahan. Butang laman web ini adalah didapati tidak jelas. Selain itu, laman web ini tidak mengandungi arahan untuk kanak-kanak, oleh itu kanak-kanak

mungkin merasa keliru ketika melayari laman web ini. Dari perspektif pemilik perniagaan, laman web ini dapat menarik lebih ramai pelanggan dan tanpa memerlukan sebarang sewaan. Ia membantu untuk mengembangkan perniagaan dengan meningkatkan jualan. Laman web ini tidak terhad kepada penduduk di Malaysia sahaja. Pengguna dari negara lain juga boleh melayari laman web ini juga. Oleh itu, memberi peluang kepada pemilik perniagaan untuk ke pasaran global.

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### LIST OF ABBREVIATION

ERD – Entity-relationship diagram DFD – Data Flow Diagram PS – Adobe PhotoShop

### CHAPTER I

#### INTRODUCTION

#### 1.1 Introduction

With the development of technology, the quality of people's life has been improved. Technology changes our life in many area and for sure technology brings benefits. The lifestyle is different from years ago. As people now are fully immersed in the technology, the way people receives information and transmit information has changed.

Nowadays, people tends to sell their products and services through the internet. This is because they may couldn't afford the monthly rental of shop, salary of workers and other expenses. Lower cost is required to start and manage an online store since platform like Facebook is free-of-charge and free Wi-Fi is becoming common in city.

The online shopping website is basically an online shopping store which sell toys. It will be designed based on certain criteria which obtained through research. Besides, the website is made especially for kids. The website will have simple yet attractive interface to catch the interest of viewers. The significance of the website will be discussed in later section.

#### 1.2 Problem Statement

Parents always do not know which products their children like and in the end they might buy wrongly for their children. There is a need to design a website that allows kids to have full control in purchasing products. It is also a must to find out how parents involve in online shopping for their kids especially during the payment process. Besides that, if kids over spent by using online shopping will cause financial burden to their parents.

### 1.3 Objective

This project embarks on the following objectives:

- To study the requirements of developing an online shopping website for kids.
- ii. To design an online shopping website for kids with guidance of parents.
- iii. To evaluate the usability of online shopping website for kids.

### 1.4 Scope

This web based application engages one level on the following scope:

- RC KING MALAYSIA is a company that mainly sells remote control toys and kid's toys. Therefore, an online shopping website that focuses on kid's toys is important for the company.
- ii. The target user of the website is kids. (age >3)

#### 1.5 Project Significance

The project is highly productive and provide a solution to a widespread problem. The output of this project enable users to buy products everywhere through their laptops and smartphones in few clicks. Besides, the output of the project also serves as a platform especially for kids to purchase their favourite products on their own. Another important aspect of this project is to make sure that kids will not spend over the purchase limit that set by the system.

#### 1.6 Conclusion

The website is not merely a project for academic purpose. This website possess commercial value that can be used by a real company. The primary purpose of doing this project is to study the requirements of developing an online shopping website for kids. Besides, it has a great potential to be improved in the future.

This section discussed the project background as well as the problem statement. Besides, the objectives of this project are stated and the scope is outlined. The primary objective of this project is to study the requirements of developing an online shopping website for kids. Project significances are also discussed in this chapter as well. The last section of this chapter is the expected output of this project. Next chapter will highlight and discusses several concerns which are facts and findings, project requirements, project methodology and project schedule and milestones.

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### **CHAPTER II**

### LITERATURE REVIEW AND PROJECT METHODOLOGY

#### 2.1. Introduction

The first section of this chapter discusses the facts and findings. There are three sub-sections in the first section which are domain, existing system and technique. Next, the agile methodology used in developing this project is discussed as well. Advantages of the agile methodology are mentioned. This chapter also includes the software and hardware requirements of project. Last but not least, the final section presents the project schedule.

### 2.2. Domain

The domain of this project is web development. Web development simply refers to building website and deploying on the web. The proposed website is an online shopping website that sell toys and it is especially for the kids. RC KING MALAYSIA do not owns any website now. Besides, there is no any online shopping website that is especially made for kids available currently. Most of all are designed for the adults.

#### 2.3.1 Comparison of Existing System

It is important to use appropriate technique to do some fact finding before entering the designing phase or coding phase. Several research will be conducted to gather necessary information. Necessary information such as characteristics of user interfaces favor by the children, design criteria of children website etc.

### 2.4 Project Methodology

The approach used in developing this project is agile approach. Agile approach is an iterative method. The project will be developed in incremental, and rapid cycles. This approach promote a disciplined project management process that encourages frequent inspection and adaptation, a set of best practices intended to allow for rapid delivery of high quality product, an approach that aligns development with customer needs.

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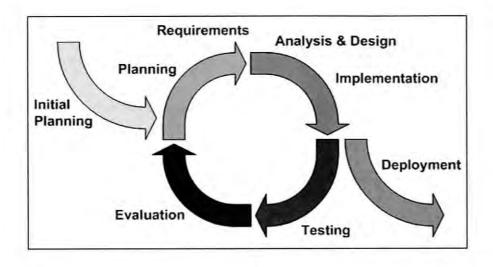


Figure 2.1: Development cycle of Agile approach

There are several benefits of using agile methodology. First, it allows for changes to be made after the initial planning. Since agile methodology allows changes to be made, it's easier to add features that will keep up to date with the latest requirements. Next, project priorities are evaluated at the end of each sprint. This allows customer to add their feedback so that they can get the product they desire. Because it allows customer involvement during development, the product would be more user-focused. Lastly, agile approach can more quickly product a basic version of project.

#### 2.5 Project Requirement

Every project has their own requirements. For web development, the requirements are mainly divided into two group: software requirement and hardware requirement.

### 2.5.1. Software Requirement

- Adobe Dreamweaver CS5
- Adobe Photoshop CC

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