

E-TECHIFY



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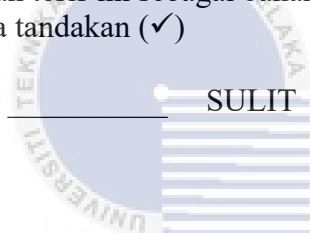
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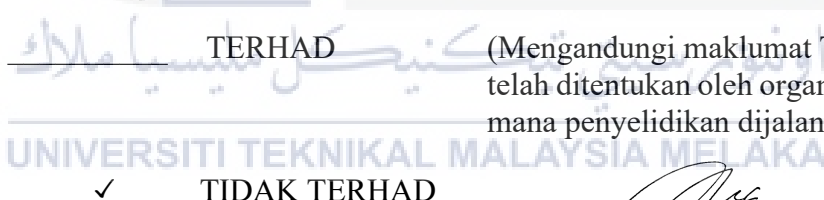


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This report is submitted in partial fulfillment of the requirements for the Bachelor of Computer Science (Software Development) with Honours.

UNIVERSITI TEKNIKAL MALAYSIA MELAKA

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA

2021

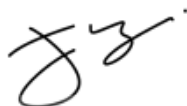
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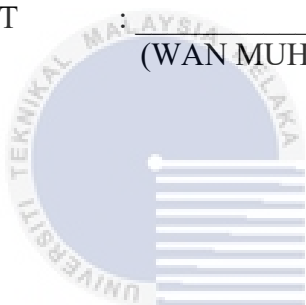
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DEDICATION

This is dedicated to my beloved parents and my supervisor, who have been our source of inspiration and gave me the strength when we thought of giving up, who continually provide their moral, spiritual, emotional, and financial support.

To my sisters, friends and anyone who shared their words of advice and encouragement to finish this project.



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ABSTRACT

e-Techify acts as an e-commerce, inventory management and a tracking system. This is a web-based system, which are the main focus is to develop a simple, and efficient system for end user. It is built with Laravel, jQuery and MySQL as its database. The people who involve in the system are customer, reseller, and distributor. Various functionalities and data are provided with ease of access to all the users involved. Problems such as loss of data due to unsystematic way of organizing, human error itself and stock count is not real-time that could be solve by developing this system. The system will be up and running regardless of time and it is accessible anytime and anywhere. Customer purchasing experience can improve and it is more efficient rather than having to risk themselves of being expose to public as we know that will prone to the deadly virus. The objective of this system is to produce a systematic system that can manage every automated process without any hiccups, open more side jobs opportunity and keep inventory updated in real-time. The methodology used for e-Techify is Waterfall model. In this model, typically, the outcome of one phase acts as the input for the next phase sequentially. After a vast discussion, data and requirements are collected from Xmiryna Technology as they wanted a solution for problems in the computer market from customer to distributor part. Efficiency, proper data management and communication could be the key to success. Each and every process that is automated will ease the burden and require less man power. Cost saving and increase of profit will occur automatically as a special platform is provided to each users of the system. All of the functions and system accessibility is at fingertips. This is one of the core subjects that must not be underestimated.

ABSTRAK

e-Techify bertindak sebagai e-commerce, pengurusan inventori dan sistem penjejakan. Ini adalah sistem berasaskan web, yang menjadi fokus utama adalah mengembangkan sistem yang mudah dan efisien untuk pengguna akhir. Ia dibina dengan Laravel, jQuery dan MySQL sebagai pangkalan data. Orang yang terlibat dalam sistem ini adalah pelanggan, penjual semula, dan pengedar. Pelbagai fungsi dan data disediakan dengan kemudahan akses kepada semua pengguna yang terlibat. Masalah seperti kehilangan data kerana cara mengatur yang tidak sistematik, kesalahan manusia itu sendiri dan jumlah stok bukan masa nyata yang dapat diselesaikan dengan mengembangkan sistem ini. Sistem ini akan berjalan lancar tanpa mengira masa dan boleh diakses bila-bila masa dan di mana sahaja. Pengalaman membeli pelanggan dapat bertambah baik dan lebih efisien daripada harus mengambil risiko untuk terdedah kepada umum kerana kita tahu bahawa ia akan terdedah kepada virus yang berbahaya. Objektif sistem ini adalah untuk menghasilkan sistem yang sistematik yang dapat menguruskan setiap proses automatik tanpa cegukan, membuka lebih banyak peluang pekerjaan sampingan dan memastikan inventori dikemas kini dalam masa nyata. Metodologi yang digunakan untuk e-Techify adalah model Waterfall. Dalam model ini, biasanya, hasil satu fasa bertindak sebagai input untuk fasa seterusnya secara berurutan. Setelah perbincangan yang luas, data dan keperluan dikumpulkan dari Xmiryna Technology kerana mereka mahukan penyelesaian untuk masalah di pasaran komputer dari pelanggan hingga bahagian pengedar. Kecekapan, pengurusan data dan komunikasi yang tepat dapat menjadi kunci kejayaan. Setiap proses yang automatik akan meringankan beban dan memerlukan tenaga manusia yang lebih sedikit. Penjimatan kos dan peningkatan keuntungan akan berlaku secara automatik kerana platform khas disediakan untuk setiap pengguna sistem. Semua fungsi dan kebolehaksesan sistem berada di hujung jari. Ini adalah salah satu perkara penting yang tidak boleh dipandang rendah.

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LIST OF ABBREVIATIONS

FYP	-	Final Year Project
RMA	-	Return Merchandise Authorization
IDE	-	Integrated Development Environment
COVID-19	-	Corona Virus Disease 2019
TC	-	Test Case
UCT	-	Use Case Testing



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CHAPTER 1: INTRODUCTION

1.1 Introduction

The e-Techify system will be developed using Laravel and MySQL. The purpose of this idea is to automate all the process and keeping it in a safe database without having to worry about loss of data. Every process is designed to help and ease every user in the system. All of the data or information will be precisely store as this involves important data such as money transaction history, stock information and etc. Possibilities like redundant data, miscount of stock, lost track of current parcel are commonly happened in the current system. In order to avoid these possibilities, validation will be done carefully for every process. Various implementation will be implemented and failure rate due to human errors can be reduce with the assistance of e-Techify. This system is 24 hours and 7 days online, regardless of system user's location and time. They can shop, manage and arrange anywhere, anytime without any restrictions. The main purpose of developing this system is to centralize all process intentionally for customer, reseller and distributor for computer parts. Some of the major additional functionality to make sure this system can give benefits to whom that wants to do a freelance job that could generate side income for themselves. The most important of all, this system existence will help the users of the system to ease their work without having to expose their own self to the outside whereas we know that the condition since Covid-19 pandemic might be very dangerous gives a big impact to everyone that face this situation. To some extent, this will also help the government reduce the current cases. We can no longer keep using the traditional method as it is a totally different condition right now. This system is the combination of e-commerce and inventory type of system exclusively for computer parts. Without having hesitation of going online during this pandemic, people on the internet almost most of the time.