

**DEVELOPMENT OF COMMERCIAL WEB PORTAL:  
XCELEARN ADVERTISEMENT MANAGEMENT  
SYSTEM (XAMS)**

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**2022**

DEVELOPMENT OF COMMERCIAL WEB PORTAL: XCELEARN  
ADVERTISEMENT MANAGEMENT SYSTEM

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FINAL YEAR PROJECT REPORT SUBMITTED TO MEET THE  
REQUIREMENTS FOR A BACHELOR OF SOFTWARE ENGINEERING  
(EDUCATIONAL SOFTWARE) WITH HONORS

FACULTY OF ARTS, COMPUTER AND CREATIVE INDUSTRY  
SULTAN IDRIS EDUCATION UNIVERSITY

2022



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20/2/2023

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Tandatangan Penyelia

(Prof Ts. Dr Muhammad Modi Bin Lakulu)

## ACKNOWLEDGEMENT

I would like to express my heartfelt appreciation to several people and organisations that helped me along the way to completing my final year project. First and foremost, I want to convey my heartfelt appreciation to my supervisor, Asso. Professor Ts. Dr. Muhammad Modi Bin Lakulu, for his dedication, patience, insightful remarks, useful information, practical guidance, and never-ending ideas that have greatly aided me during my study and writing of my thesis. His vast knowledge, extensive experience, and professional competence in web development helped me to effectively accomplish my research. This endeavour would not have been feasible without his help and supervision. Lastly, I would like to thank my parents and friends for helping me through financially and mentally.

## ABSTRAK

Platform pembelajaran atas talian atau dikenali sebagai e- learning semakin berkembang dalam dunia hari ini apatah lagi selepas impak daripada pandemic COVID-19. Xcelearn e-learning platform merupakan salah satu platform e-learning yang mula menempa nama dalam bidang pembelajaran atas talian ini namun platform ini tidak mendapat perhatian dari orang ramai. Bagi mengatasi masalah ini, sebuah Advertisement Module telah diperkenalkan. Fokus kajian ini adalah untuk membina sebuah advertisement managing system untuk Xcelearn Web Portal bagi mengawal iklan-iklan yang disiarkan dalam web portal. Metodologi yang digunakan dalam pembangunan sistem ini adalah Prototyping Model. Menurut soal selidik Sistem Kebolegunaan Skala (SUS), ia mendapat maklum balas positif daripada pengguna.

## **DEVELOPMENT OF COMMERCIAL WEB PORTAL: XCELEARN ADVERTISEMENT MANAGEMENT SYSTEM (XAMS)**

### **ABSTRACT**

Online learning systems, often known as e-learning, are becoming more popular in today's society, especially from the impact of COVID-19 pandemic. The Xcelearn e-learning platform was one of the first to make a reputation for itself in the field of online learning, but it failed to capture the public's interest. An Advertisement Module has been added to deal with this issue. The goal of this research is to create an advertisement management system for the Xcelearn Web Portal in order to manage the adverts that appear on the site. Prototyping Model was applied in the development of this system. According to the System Usability Scale (SUS) questionnaire, it scores positive feedback from users.

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## LIST OF ABBREVIATIONS

Ads	Advertisement
XAMS	Xcelearn Advertisement Management System

## ATTACHMENT LIST



## CHAPTER 1

### INTRODUCTION



Over the last decades, online learning has grown significantly as both the internet and education have combined to give individuals with the possibility to learn new skills. Since the COVID-19 epidemic, people's lives have been more centred on online learning. The epidemic has caused schools, colleges, and businesses to operate remotely, which has increased the use of online learning. Online learning is an educational approach delivered over the Internet. It is also known as "e-learning," among other things. Online learning, on the other hand, is only one sort of "distance learning" - the umbrella term for every learning throughout time and not in a classroom context.



Xcelearn is one e-learning platform that highlights teaching and learning in contexts outside the classroom. This platform works to make it easier for students to learn at an individual level of understanding. Xcelearn offers learning at primary school, high school, postgraduate and university levels. Among the subjects available in this platform are science, mathematics, biology, physics, chemistry and many more. This platform focuses on users such as students, teachers and anyone who is interested in using this platform. The logo of this e-learning platform as shown in Diagram 1.1 :



Figure 1.1 : Xcelearn Logo

Therefore, a portal will be built to promote the Xcelearn platform so that more people can benefit from the use of this e-learning system. The development of this portal consists of several combinations of modules such as Chatting Robot (ChatBot) Module, Advertisement Management Module, Recommendation System Module, Learning Style Module and Comment Review Section Module. I am responsible for building the Advertisement Management Module and ensuring that the advertisements displayed in this portal can attract many people, especially students, to subscribe to the plans offered by Xcelearn.

## 1.2 Research Background

Ads are indeed a proven way to access a public. A notification or statement in a public media advertising a product, service, or event is known as an advertisement. Advertisements may have an instant impact on organization by developing an interesting ad and investing enough to reach a large number of users. Among many other measures, this impact might be visible in enhanced trade or increased brand awareness. Advertisements occur in a variety of forms, ranging from text to animated video, and have developed to become an important element of the application platform.

The Ads module focuses on how to attract visitors to this portal to subscribe to this Xcelearn plan and see the number of clicks on the displayed ads. In theory, an ad with a high number of clicks indicates that the portal's visitors are more interested in clicking on any type of ad whether in the form of text or poster.

According to my findings after visiting numerous websites, most websites present advertisements that do not match to the content displayed. This has an indirect impact on the website's ability to attract a large number of visitors. Visitors will quickly become annoyed and lose concentration on the information provided, resulting on the website being abandoned. As a result, the Ads Module must be built to correspond with the released e-learning material.





### 1.3 Problem Statement

The first issue I discovered is that many people are unaware of the existence of the Xcelearn e-learning platform. The presence of numerous e-learning systems presently encourages rivalry among them even in reaching the same goal, which is to assist students enhance their level of learning. Second, the user has less engagement with the online site. Ads should spark visitors' curiosity in learning more about Xcelearn. Finally, Xcelearn is not the e-learning platform that many assume it to be. The expanding e-learning platform now necessitates Xcelearn as one of the platforms with its own unique capabilities. This will help to improve Xcelearn's brand among Malaysians.



## 1.4 Research Objective

The objective of this research is to:

1.4.1 To identify proper advertisement design for Xcelearn Commercial Web Portal

1.4.2 Increase user engagement with shown advertising

1.4.3 Build and test the Ads Module prototype for Xcelearn Commercial Web Portal based on the problems identified

## 1.5 Research Questions

The following are the research questions:

1.5.1 What elements must be added in order to construct this Ads Module?

1.5.2 How will Xcelearn users engage with the displayed advertisements?

1.5.3 What sorts of advertisements do Xcelearn users like to interact with?

1.5.4 To what degree may this shown advertisement assist in attracting a large number of people to continue utilising this web portal?

## 1.6 Research Hypothesis

The hypothesis of this study is :

H01: Xcelearn Users are more interested in clicking ads that use images than text

H02: The advertisements displayed are highly relevant to the web portal's content.

## 1.7 Limitations of The Research

Scope is the constraint of the study undertaken to ensure that the evaluator understands the study's limitations. The Ads Module for Xcelearn e-learning is built in this project using PHP and Js. PHP is an open-source server-side scripting language which many web developers use, whereas Js allows developers to add dynamic behaviour to ads and special effects to the webpage. The framework that being used in this development is Laravel 8. It uses Model View Controller (MVC) architecture. Laravel utilizes existing framework components that assist in the development of a web application.

An Ads Manager will be built to monitor every advertisement posted. Among the monitored items are the number of views, the number of clicks, the create, delete and edit functions. This ads manager will be controlled by the Portal Admin. Through this method, the statistics of web visitors to this portal can be recorded as well as being able to see which aspects can be improved.



## 1.8 Significance of Study

The following are the findings of this project's development study:

1.8.1 Understanding the suitable form of advertisement to pique consumer interest

1.8.2 Emphasis on an easy-to-understand advertising idea

1.8.3 Understanding the proper use of ads for posted content

