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# **United States International University-Africa**

**Fall Semester 2022**

##### APT/IST 4900 FINAL-TERM PROJECT

## Vipuri online car spare parts market system

**BY**

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This final project report is submitted in partial fulfillment of the requirements of the IST /Applied Information Technology (APT)

## Declaration

I declare that this is my original work through my own effort and that it has not been presented in any form for academic or any other reason, to the best of my knowledge. Contributions to this work by any other person or literature have been duly cited.

Student

Aisha Mwaura Gideon Kibet Reg No 6245682

Signature………………… Date…………………

Aisha Mwaura Gideon Kibet Reg No 6245682

Signature………………… Date…………………

**Supervisor**

I confirm that this research project report was carried out by the student under my supervision

Signature……………………. Date…………………

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## 

## Acknowledgement

First and foremost, I would like to thank God for giving me the gift of life, health and being with me every step of the way throughout this academic journey, my parents for being there when I needed them, for giving me spiritual, moral and financial support, my friends for their academic and also moral support and all my lecturers especially Mr. Amos Koech for guiding me through this unit.

## Definition of central terms

**Products:** In this case they are car spare parts.

**Supplier:** Is a person who owns and sells the products.

**Client:** Is a person who buys the products.

**Nairobi online car spare parts shop:** Is a computerized system where car spare parts can be bought through the internet.

**Nairobi**: Derived from a Swahili word meaning ‘spare part’.

## **Abstract**

**Summary of back ground, problem statement, objectives, LR, Methodology, Results and Conclusion and Recommendation] –one page maximum**

Table of Contents

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List of Abbreviations

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CHAPTER ONE

INTRODUCTION

1.0 Introduction

3-4 lines

1.1 Background of the study 1-2 pages

Explain how to topic has been implemented in the following

1. Any three developed countries the world
2. Two Africa countries
3. Your local country eg kenya

1.2 Problem Statement

½ page

State and explain at least four **problem**s you are going to solve

1.3 Project Objectives

1.3.1 Overal Goal

To design and develop (add the title)

1.3.2 Systems design and development objectives

List any four developer Unique system features ie

Geolocation,

shopping cart,

tracking

1.3.3 Specific Research Objectives

1.3.3.1 To find out the traditional challenges with the old systems

1.3.3.2 To determine the benefits of the new system(as in your title)

1.4 Project Questions

What are the traditional challenges with the old systems?

What are the benefits of the new system (as in your title)?

1.5 Scope of the Project

Fully describe how your new systems will work and also include the stakeholders and proposed location for implementation

1.6 Limitations of the study

The personal and/or institutional challenges you foresee to complete the project in 14 weeks and the solutions

1.7 Significance of the study

* **This paper is relevant to Sustainable Development Goal (SDG) 4, specifically, to** 
  + **“substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship”**
* **This can be achieved when teaching and understanding of learning materials are presented interestingly**
* **An effective way of achieving this is by gamifying the learning environment**
* **This study contributes to achieving SDG 4 within the Kenyan context by attempting to improve the learning approaches through gamification**

CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

(Brief Introduction 3-4 lines)

2.1 Analysis, comparison and criticism of existing projects with an assessment of strengths and weaknesses of existing projects

2.1.1 System One Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ country\_\_\_\_\_\_\_\_\_

2.1.2 System Two Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ country\_\_\_\_\_\_\_\_\_

2.1.3 System Three Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ country\_\_\_\_\_\_\_\_\_

2.1.4 Summary of comparison of the systems

|  |  |  |  |
| --- | --- | --- | --- |
| **Features** | **Name and country of systems 1** | **Name and country of systems 2** | **Name and country of systems 3** |
| Cost | X | X | X |
| Easy to Install | X | X | X |
| Easy to use | X | X | X |
| Efficient Database | X | X | X |
| Good Security | Tick | Tick | Tick |
| Vulnerability assessment | tick | tick | tick |

2.2 Literraure revew on based on the specific research objectives

2.2.1 challenges of the old sytems

(State and explain (8))

2.2.2 Benefits of the new systems(Title)

State and explain (8)

2.3 Conclusion

CHAPTER THREE:

RESEARCH DESIGN AND METHODOLOGY

3.0 Introduction

3.1 Locality of the project and Beneficiaries to the project

3.2 Research Design approach –DESCRIPTIVE

3.3 Population of the study(Target group) and Sampling method

3.4 Data collection methods and Primary Data collection methods

3.5 Data analysis methods

3.6 Testing plan for the system

3.7 Ethical clearance considerations

CHAPTER FOUR

SYSTEMS ANALYSIS AND SYSTEM DESIGN

4.0 Introduction

4.1 System Requirements

4.1.1 Functional Requirements

4.1.2 Non - Functional Requirements

4.3 Stakeholders

4.4 System Models

4.4.1 Systems Architecture

4.4.2 Use Case Diagram

4.4.3 Flow chart

4.4.4 Class Diagrams

4.4.5 Data Flow Diagram

4.4.5.1 Context Diagram 0

4.4.5.2 Level 1 Diagram

4.4.5.3 Level 2 Diagram

4.4.6 Entity Relationship Diagram

4.4.7 Sequence Diagram

4.4.7.1 Admin Sequence Diagram

4.4.7.2 User Sequence Diagram

**CHAPTER FIVE**

**RESEARCH FINDINGS AND ANALYSIS**

5.1 Response rate

5.2 Demographics results

5.3 Results of Specific Research Objective 1

5.4 Results of Specific Research Objective 2

**CHAPTER SIX**

**DISCUSSION CONCULSION AND RECOMMENDATIONS**

6.1 Discussion

6.2 Conlcusion

6.3 Recommedations

6.4 Furture work

CHAPTER SEVEN

IMPLEMENTATION (PROTOTYPE FRAMEWORK)

[7.1 System Implementation](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168356)

[7.2 Technologies Used](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168357)

[7.2.1 Hardware Platform**.**](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168358)

[7.2.2 Programming Language](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168359)

[7.2.3 Programming Tools](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168360)

[7.2.4 Software Platform](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168361)

[7.3 Features of the Prototype](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168362)

[7.3.1 Technical Manual Screenshots](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168363) 1.3.2

7.3.2 User Manual Screenshots:- main activtoty step by step

[7.4 Database Management System](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168364)

8.0 [References](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168366)

APA Format

9.0 [Appendix**.**](file:///C:\Users\Collins\Desktop\JAN%202020\USIU\APT%203065%20%20MID%20-TERM%20PROJECT\APT%203065%20PROJECT%20DOCUMENTATION%20FORMAT.docx#_Toc384168367)

9.1 Questionnaire/Interview schedule

Section A-Respondents bio data

Gender male [ ] female[ ]

Education level primary [ ] high [ ] university [ ]

SECTION B

2.2.2

9.2 Work plan in Grant Chart format

9.3 Budget