

Initial Project

Site: [Eduvos LMS](#)

Course: Web Development and e-Commerce Assessments

Book: Initial Project

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1. Project

Faculty:	Information Technology
Module Code:	ITECA3-12
Module Name:	Web Development and E-Commerce
Content Writer:	Mr Marc Kishinkwa
Internal Moderation:	Community of Practice
Copy Editor:	Mr Kevin Levy
Total Marks:	100

Submission Week:

Deliverable 1:
Deliverable 2:
Deliverable 3:
Project Resubmission:

This module is presented on NQF level 7.

5% will be deducted from the student's project mark for each calendar day the project is submitted late, up to a maximum of three calendar days. The penalty will be based on the official campus submission date.

Projects submitted later than three calendar days after the deadline or not submitted will get 0%.
[\[1\]](#)

This is an individual project.

This project contributes 70% towards the final mark.

[1] Under no circumstances will projects be accepted for marking after the projects of other students have been marked and returned to the students.

2. AI Checklist and Declaration

Before you submit an assignment, you should be able to confidently and honestly make all the below statements. For group work, you can also review the list, together, to hold one another accountable.

- I confirm that my submission reflects my personal learning, knowledge, skills, and understanding.
- If AI tools were employed for generating any part of this assignment (even in the drafting/research phase), I have referenced the use of AI in the text and/or declared the use of AI. I am willing to discuss the process and its contribution to my learning.
- I am aware that the lecturer may request a demonstration of my learning, such as explaining choices in approach, research, and the content I am submitting.
- I am aware that, if I did use AI in any phase of preparing this submitted work, it is recommended that I save a copy of the relevant chat history (prompts and answers), as this will help me demonstrate my writing/work process to my lecturer, if I am asked to do so.
- I have read the assignment instructions on whether AI tools are prohibited for this assignment, and if they are prohibited, I can confirm that I did not use AI tools.
- I understand that failure to agree to these terms may be deemed unethical, potentially leading to disciplinary action. I understand my responsibility for the integrity of my work, including seeking clarification from academic staff and adhering to instructions.

It is essential to acknowledge your use of ChatGPT or other generative AI in your learning. If you use ChatGPT or other generative AI to help you generate ideas or plan your process, you should still acknowledge how you used the tool, even if you don't include any AI-generated content in the assignment.

Please note: The following guiding questions that you will be asked in an AI declaration questionnaire below this assignment brief.

AI Declaration

It is compulsory to complete this AI declaration for each of your assignment submissions.

I carefully read the assignment instructions, and the extent to which AI may be used for the assignment.

I used the following AI system(s)/tool(s):
I used it for the following:
If I quoted or paraphrased an AI output, I have referenced the relevant tool, version, and the date I used the tool.
I still consider this work my own. (i.e., I have not outsourced the final product, or significant portions of it, to AI tools/systems).
If required, I can defend my argument/perspective, explain my choices and approach, and can show that I am knowledgeable about the details of my work.

For further guidance on the use of AI at Eduvos, please refer to the AI FAQ glossary. You will locate the FAQs in the Artificial Intelligence tile on the myDocuments page of myLMS.

3. Instructions to Students

1. Please ensure that your answer file (where applicable) is named as follows before submission: **Module Code – Assessment Type – Campus Name – Student Number.**
2. Remember to keep a copy of all submitted projects.
3. All work must be typed.
4. Please note that you will be evaluated on your writing skills in all your projects.
5. All work must be submitted through Turnitin. The full originality report will be automatically generated and available for the lecturer to assess. Negative marking will be applied if you are found guilty of plagiarism, poor writing skills, or if you have applied incorrect or insufficient referencing. (See the "instructions to students" book activity before this activity where the application of negative marking is explained.)
6. You are not allowed to offer your work for sale or to purchase the work of other students. This includes the use of professional assignment writers and websites, such as Essay Box. You are also not allowed to make use of artificial intelligence tools, such as ChatGPT, to create content and submit it as your own work. If this should happen, Eduvos reserves the right not to accept future submissions from you.

4. Section A

Section A

Learning Objective

This project focuses on key web technologies and tools for web application development and the essentials of e-commerce. Instead of giving students a specific project to replicate, students are given the freedom to decide on a project idea or choose what they would like to build or develop.

Students are also expected to conduct requirement analysis, gather all information related to the platform the aim to build, and formulate a project proposal. Thereafter, build a database-driven C-2-C e-commerce website, utilizing HTML, CSS, JavaScript, PHP, and MySQL to meet the client's needs or requirements.

Project Topic

C-2-C e-Commerce platform development.

Scope

In this project, students are required design and develop a C-2-C e-commerce platform used to facilitate the selling and buying of various goods between customers (through the use of various information-gathering methodologies). Students are also required to complete and submit each project deliverable using the provided Deliverable template to the lecturer (for marking) and develop the e-commerce website using HTML, CSS, JavaScript, PHP, MySQL, etc.

5. Scenario

Scenario

Study the scenario and complete the question that follow:

C-2-C E-Commerce in South Africa

Since the breakout of the COVID-19 pandemic, the demand for online activities in South Africa has risen drastically. Retailers have had to turn to online platforms to start or continue serving their customers. In turn, customers have looked to online platforms to buy goods and services. This has accelerated the digitisation process for many retailers and sellers, forcing a digital culture despite the level of preparedness for this new way of living. This has encouraged stores to enhance their online appearance and services to promote consumer activity and sales.

The e-commerce landscape in Africa has been shown to have great potential for development, which attracts many investors and entrepreneurs. Researchers estimated that Africa's e-commerce market would reach 50 billion United States Dollars (USD) in 2018. Nigeria was found to have reached a 70% Internet penetration rate in 2018, as one of the few African countries to have the most e-commerce sites. By contrast, Kenya was found to have a 79% internet penetration rate. Mobile communication is quickly developing in Africa, where the African e-commerce market is mainly mobile-based.

The consumer market landscape in South Africa is made up of formal retail chain stores e.g., Woolworths, Pick n Pay, and Checkers, which serve upper-income consumers, hybrid stores e.g., Makro, cash-and carry outlets, e.g. Boxer and Cambridge, and thousands of informal spaza shops which operate and serve communities in the townships. Many of the formal retail and hybrid stores in South Africa have a digital footprint providing their customers with an online shopping experience. As such, e-commerce is promising in South Africa.

From 2018, the South African Post Office recorded a 20% increase in parcels entering South Africa through their mail ports. It is found that 38% of South African e-commerce consumers shop domestically, and a further 50% also shop internationally. Apart from competing e-commerce factors such as product, price, quality, and variety, e-commerce platform providers also compete based on the quality of their interfaces and may focus on improving individual consumer (user) experience through features such as seamless navigation and product access. The quality of a system and product information encourages consumer purchase decisions using e-commerce platforms.

In order to increase traffic in domestic e-commerce, and also to attempt to combat rising poverty rates among South Africans, a large number of individuals have been engaging in Customer-to-Customer (C-2-C) e-commerce, preferring to sell and buy goods directly from each other. C-2-C e-commerce platforms such as Facebook Marketplace has seen a huge surge in popularity. However, a platform such as this is usually based outside of South Africa, with the majority of its revenues leaving the country. Due to the rising nature of online commerce in South Africa as well as the country's status one of the most technologically developed states in Africa, a need exists for the development of domestic C-2-C e-commerce platforms to not only generate income within individuals, but also to develop infrastructure that can boost the overall economy of South Africa.

Adapted From Source: Tsotesi, N. 2023, Factors Influencing Consumer Purchase Intentions: A Study of E-Commerce Platforms in South Africa. [Online]. [10 December 2024]

5.1. Deliverable 1

Deliverable 1

30 Marks

Research the current state of C-2-C e-commerce platforms in South Africa, particularly how it can be used to improve the informal economy of South Africa and identify ways of developing a platform that can be used enable C-2-C e-commerce. Write a full project proposal for the project you are undertaking using the template provided.

Mark Allocation

Criteria	Mark Allocated
1.1 Introduction	5
1.2 Needs/Problem	6
1.3 Goals/Objectives	6
1.4 Procedures/Scope of Work	5
1.5 Timetable	3
1.8 Conclusion	5
Total	30

End of Deliverable 1

5.2. Deliverable 2

Deliverable 2

50 Marks

Design a prototype for the e-commerce platform you intend to build as specified in Deliverable 1 (Project Proposal). The prototype website will be used to by customers to either buy or sell various goods. Your platform must also include a website used by administrators to manage the platform. The admin website should cater for all the various users within the organization. You should ensure that there are proper restrictions in place for the different roles within the organization, and that different types of users can be created, displayed, updated, and deleted. Your designs must be compatible with a variety of gadgets, such as smart phones, tablets, and desktops.

Provide the following diagrams as part of your documentation:

- Class Responsibility Collaborator (CRC) Cards
- The Enhanced Entity Relationship Diagram (EERD)
- Context Diagram
- Data Flow Diagram (DFD)
- Use Case Diagram

- Database Design (showing the data to be stored and the relationship between different elements).

Develop the database-driven e-commerce platform that you designed using the designs mentioned above (e.g., Context Diagram, Use Case Diagram, and Database Design). Your database must be designed in such a way that allows for reports to be generated based on aggregated data, and your admin site should allow various users to generate reports based on their different roles within the organization. You must include sufficient dummy data to demonstrate the full functionality of the system. If you decide to use any PHP framework, you must create your own templates that follow the chosen prototype. The web application must be hosted (no localhost submissions)

The following technologies must be utilized:

- HTML
 - CSS
 - JavaScript (jQuery accepted)
 - PHP
 - MySQL
 - Bootstrap (can be used)
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- Any other tools or web development technologies can also be explored and used, depending on the nature of your project.

Note 1: The link to the completed and hosted website and/or the GitHub repository and/or the zipped folder containing the code must be formally submitted and shared with your lecturer **ONE (1) week BEFORE** your Deliverable 3 presentation.

Note 2: The submission of localhost is **NOT** permitted for Deliverable 3 presentation and would result in a **50%** Presentation Mark penalty.

Note 3: The use of a Content Management System (CMS) is **NOT** permitted and would result in the non-marking of the Deliverables 2 & 3 as it would be regarded as a deliberate non-conformance to instructions.

Mark Allocation

Criteria		Mark Allocated
Introduction		2
2.1 Needs/Problem	C-2-C platform	6
	Organization admin website	6
2.2 Goals/Objectives	Class Responsibility Collaborator (CRC) cards	3
	Enhanced Entity Relationship Diagram (EERD)	3
	Context Diagram	3
	Data Flow Diagram (DFD)	3
	Use Case Diagram	3
	Database Design	3
2.3 Coding	Platform Screenshots	2
	Sample PHP Code	3
	Sample HTML Code	3
	Sample JavaScript Code	3
	Sample CSS Code	3
	Sample MySQL Table Screenshots	2

2.4	Conclusion	2
Total		50

End of Deliverable 2

5.3. Deliverable 3

Deliverable 3	20 Marks
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You are required to present your final project (the complete platform) to your lecturer. The web applications must be hosted using any free hosting sites. You must submit a user manual to instruct users on how to utilize the web applications. This must include the technologies used, as well as the different features of your application and how to use them.

Mark Allocation

Criteria	Mark Allocated
3.1 User Manual	5
3.2 Presentation	15
Total	20

End of Deliverable 3