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ITPJA3-34 Assessments

Project Specification

1. Project Specification

Faculty: Information Technology Module Code: ITPJA3-34 **Module Name: Project Content Writer:** Kariboba Mpwampu **Internal Moderation:** Community of Practice **Copy Editor:** Mr Kyle Keens **Total Marks: Deliverable 1 Submission Week (60** First Block Week 3 Marks): Deliverable 2 Submission Week (172 First Block Week 7 Marks): **Deliverable 3 Submission Week:** Second Block Week 3 Second Block Week 7 **Final Project Submission Week:**

This module is presented on NQF level 7.

Final Project Re-Submission Week:

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

Second Block Week 8

Assignments submitted later than three calendar days after the deadline or not submitted will get 0%. [1]

This is a group project

Groups should consist of 5 members.

This project contributes 100% towards the final mark.

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

2. Instructions to Students

- 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 assignments.
- 3. All work must be typed.
- 4. Please note that you will be evaluated on your writing skills in all your assignments.
- 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.
- 7. One group member should be nominated to submit the assessment on behalf of the group. Multiple submissions by various group members will result in an inflated similarity index on Turnitin.

3. Section A

Section A

Learning Objective

This project focuses on the web technologies used mainly for internet programming. The students will be expected to gather information related to a specific client and come up with a project proposal guided by the template provided. Furthermore, the students will be expected to develop a database driven e-commerce website based on the requirements gathered from the client using, but not limited to PHP, MySQL, HTML, CSS and JavaScript.

Project Topic

Project

Scope

In this project, every student is expected to identify and schedule meetings with any registered local business or an individual in need of a database driven e-commerce website.

Using different information gathering methodologies, the students must have a clear understanding of what is expected by the client.

Complete the templates provided for each deliverable and submit to your lecturer for marking. Use at least PHP, MySQL, HTML, CSS and JavaScript for the development of the site.

Marking Criteria

Deliverables must be submitted on or before the due date to the lecturer in class or as per arrangement. Five percent (5%) will be deducted for every day that the deliverable is late. Deliverables that are more than a week late will be awarded a zero. Late submissions must be accompanied by a medical certificate.

3.1. Scenario

Scenario

Global e-commerce transactions predicted to hit \$8tn by 2027

A new study from Juniper Research estimates that e-commerce transactions globally will reach \$8tn by 2027, with emerging markets driving 51% of growth.

Today's \$5.3tn e-commerce market will continue to expand rapidly, fuelled by increased usage in developed markets and significant adoption in emerging markets, the company said.

As e-commerce continues to outperform brick-and-mortar retail, new and evolving payment systems will enable much greater access to the e-commerce landscape, creating significant vendor opportunities. An e-commerce payment system accepts online electronic payments, with the aim of providing the consumer with minimal fuss and maximal efficiency.

Getting payment methods right.

With an increasing variety of payment options available to consumers, e-commerce vendors must offer the most attractive payment methods for their customers. Given the cost and complexity of integrating a large number of payment options, merchants must strategically select which payment methods best support their objectives, such as 'buy now pay later' (BNPL), to increase average order value.

Research author Cara Malone remarked: "E-commerce providers must understand their customer bases to a greater extent, offering the payment options customers want and removing undesirable options. In practice, this means working with e-commerce payment platforms that do not only understand and support the most common payment types in each country, but also recognise how these vary by vertical and target demographic. Understanding this can substantially improve the payments experience."

Differentiation strategies for payment vendors.

The report urges e-commerce payment vendors to offer dashboards and data visualisations to their smaller SME customers. At present, SMEs lack access to good customer analytics, and this data could highlight consumer purchasing behaviours, as well as providing insights into payment method popularity and fraud.

By offering additional services to SMEs, e-commerce payment vendors can differentiate their portfolios in an increasingly competitive and commoditised market.

Source BizCommunity (2023). Global e-commerce transactions predicted to hit \$8tn by 2027. [online] Bizcommunity. Available at:

https://www.bizcommunity.com/Article/1/168/238589.html [Accessed 8 Jun. 2023].

End of Scenario

3.2. Deliverable 1 - Project Proposal

Deliverable 1

Identify and schedule meetings with any registered local business or an individual in need of a database driven e-commerce website and an optional complementary mobile application. Using the Deliverable 1 template provided, write a full project proposal and submit it to your lecturer on or before the due date.

Requirement
1.1 Introduction
Scope
Project value
Intended use
Definition and Acronyms
1.2 Needs / Problems
Existing Limitations
Market Analysis
User Feedback

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1.3 Goals/ Objectives	
Project Goals	
Objectives	
Success Criteria	
1.4 Procedure / Scope of work	
1.5 Requirements Analysis	
System Requirements	
Functional Requirements	
External interface requirements	
Non-functional requirements	
1.6 Timetable	
1.7 Budget	
1.8 Key personnel	
1.9 Conclusion	
1.10 Sign Off	

3.3. Deliverable 2 - Architectural Documentation

Deliverable 2 - Architectural Documentation

Design two prototypes of the e-commerce website and optional complementary mobile application you will be developing for the client selected in Deliverable 1 (Project Proposal). Your designs must be responsive on various gadgets such as smart phones, tablets and desktops. The client must select and approve one of the prototypes for the actual website development.

Provide the Class Responsibility Collaborator (CRC) cards, Database Design (showing the data to be stored and the relationship between different elements) as well as an Enhanced Entity Relationship Diagram (EERD) that elaborates on the Database Design, Activity Diagram, Context Diagram, Sequence Diagram, Data Flow Diagram (DFD), Use Case Diagram and Misuse Case Diagram. Illustrate with the aid of a table, the security risks associated with the intended website/mobile application as well as the associated remediation measures to be taken.

Note:

• Complete and submit the Deliverable 2 template(s) provided on or before the due date.

Requirement
2.1 Introduction
2.2 Diagrams
Class Responsibility Collaborator (CRC) cards
Database Design
Enhanced Entity Relationship Diagram (EERD)
Activity Diagram

Context Diagram
Sequence Diagram
Data Flow Diagram (DFD)
Use Case Diagram
Misuse Case Diagram
Security Risks
2.3 Conclusion
2.4 Sign Off

3.4. Deliverable 3 - Prototyping, User Manual & Testing

Deliverable 3 - Prototyping, User Manual & Testing

You are required to present your project to your lecturer(s). The project must have all the requirements specified in Deliverable 1 and a user manual must be hosted using any free hosting sites.

- Develop a data driven e-commerce website as well as an associated mobile application for your client following the selected prototype and the designs in the deliverables above.
- Design a corresponding user manual for the website and mobile application developed.
- Do not use any Content Management System (CMS).
- You must use at least the following technologies:
 - PHP and MySQL
 - HTML

- JavaScript (jQuery accepted)
- CSS
- Bootstrap can be used
- o Research on other tools you can use based on the nature of your projects

Requirement	
3.1 Introduction	
3.2 Accessing the website / application	
Accessing the website	
Accessing the admin portal	
3.3 Prototyping	
Prototype 1	
Prototype 2	
3.4 Coding	
PHP Code	
HTML Code	
JavaScript Code	
CSS Code	
MySQL Table	
3.5 User Manual	
3.6 Testing	
3.7 Conclusion	
3.8 Sign Off	

3.5. Deliverable 4 - Final Project Presentation

Deliverable 4 - Final Project Presentation

- You are required to present your final project to the panel of judges put together by your lecturer.
- The final submission must consist of updated submissions of:
 - all the requirements specified in Deliverable 1
 - o all the outcomes from Deliverables 2 and 3
- The website must be hosted using any free hosting site.

Note:

- The website must be externally hosted failure to host may result in a penalty of 10% of the deliverable 4 mark.
- A link to the completed and hosted website must be electronically submitted to the lecturer a week before the start of the Deliverable 4 presentations – failure to do so may result in a penalty of 10% of the deliverable 4 mark.
- Access to the backend of the completed and hosted website must be electronically submitted to the lecturer a week before the start of the Deliverable 4 presentations failure to do so may result in a penalty of 10% of the deliverable 4 mark.
- The code files for the completed and hosted website must be combined into one (1) pdf document with the different code files and sections appropriately labelled with the use of comments.
- The compiled pdf code file must be electronically submitted to the lecturer two days before the start of the Deliverable 4 presentations – failure to do so may result in a penalty of 10% of the deliverable 4 mark.
- No work must be done on the completed and hosted website after the submission of the compiled pdf code file - failure to do so may result in a penalty of 40% of the deliverable 4 mark.

Requirement
1.1 Introduction
1.2 A Clear User Manual
1.3 User Friendliness
1.4 Knowledge of the Website /
Application
1.5 Time Management
1.6 Dress Code (Formal)
1.7 Innovation
1.8 Change Management
1.9 Proof of Testing performed
1.10 Conclusion
1.11 Sign Off

4. Section B

Section B

Plagiarism and Referencing

Eduvos places high importance on honesty in academic work submitted by students and adopts a zero-tolerance policy on cheating and plagiarism. In academic writing, any source material, e.g. journal articles, books, magazines, newspapers, reference material (dictionaries), or online resources (websites, electronic journals, or online newspaper articles), must be properly acknowledged. Failure to acknowledge such material is considered plagiarism; this is deemed an attempt to mislead and deceive the reader and is unacceptable.

Eduvos adopts a zero-tolerance policy on plagiarism; therefore, any submitted assessment that has been plagiarised will be subject to severe penalties. Students who are found guilty of plagiarism may be subject to disciplinary procedures, and outcomes may include suspension from the institution or even expulsion. Therefore, students are strongly encouraged to familiarise themselves with referencing techniques for academic work. Students can access the Eduvos referencing guides on *my*LMS.

5. Negative Marking

Negative Marking

Third-year Students

- A minimum of 15 additional information sources must be consulted and correctly cited.
- If no additional information sources have been used, a full 15% must be deducted.
- Deduct 1% per missing resource of the required 15. For example:
 - If only five resources cited, deduct 10%.
 - If only three resources cited, deduct 12%.
- Markers to apply the penalties for Category A for insufficient sources and incorrect referencing style.
- To determine the actual overall similarity percentage and plagiarism, markers must interpret the Turnitin Originality Report with reference to credible sources used and then apply the penalties as per the scale in the Policy for Intellectual Property, Copyright and Plagiarism Infringement.
- The similarity report alone is not an assessment of whether work has or has not been plagiarised. Careful examination of both the submitted paper/assignment/project and the suspect sources must be done.

Category A

Minimum Reference Requirements	Deduction from Final Mark
No additional information sources have been used or referenced.	15%