

FACULTY OF COMPUTING

UNIT TITLE	Unit 22: Application Development		
UNIT CODE	Y/618/7436	LEVEL	5 (Core)
STUDENT NAME		CREDIT VALUE	15
ASSIGNMENT TITLE	Elevate Workforce Solutions	WORD COUNT	
ASSESSOR	Bhuwan Subedi	I.V.	
ASSIGNMENT ISSUE DATE	January 03, 2025	ASSIGNMENT SUBMISSION DATE	March 08, 2025
ORIGINAL SUBMISSION		ASSIGNMENT NO.	1/1

ASSESSMENT CRITERIA TO BE ASSESSED IN THIS ASSIGNMENT

(Identify all criteria to be assessed in this assignment)

Assignment Criteria	P1	P2	P3	P4	P5	P6			
Achieved									
	Merit Criteria						Distinction Criteria		
Assignment Criteria	M1	M2	M3	M4	M5		D1	D2	D3
Achieved									

Important:

- Read the plagiarism notice and requirements at **Page 7**
- **Accepted Sources: Research Papers** (Journal Articles, Conference Proceedings, Thesis), Text Books, Governmental Data, Websites (only a registered organization, an educational institution, government agency)
- **Information taken from unreliable sources will not be accepted**
- **Must follow Harvard Reference Style**
- **Assignment must be submitted through the Plagiarism Detection Tool**

Assignment Submission Format

Each student has to submit their assignment as guided in the assignment brief. The students are guided what sort of information is to produce to meet the criteria targeted. You are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system.

Unit Learning Outcomes

- **LO1** Produce a software design document for a business-related problem based on requirements
- **LO2** Research design and development tools and methodologies for the creation of a business application
- **LO3** Plan and produce a functional business application with support documentation
- **LO4** Evaluate the performance of a business application against its software design document and initial requirements.

Assignment Scenario

You've been just hired as a web developer by a reputed IT company, Code Art Web Technologies. The company helps build the online presence of local organizations through sophisticated, innovative and easy to use websites.

Your first job in the company is to design and build a job portal for a new client, Elevate Workforce Solutions, to digitize their current processes and promote the company.

Elevate Workforce Solutions is a well-established employment agency based in Nepal, providing better employment opportunities. The company wants to grow with the help of technology and make their services available to broader demographics. The company wants to promote equal opportunities, provide transparency and easy access to more jobs, which they believe is possible through a well-designed website.

The company is looking for the following features, but not limited to:

- Secure and effective authentication system with registration, login, logout, functionality
- Display all the job listings with proper pagination

- Ability to add/update/delete jobs by their respective logged in companies
- Job application listings on respective companies' dashboard page

Criteria:

This assignment should include the following things:

1. Documentation regarding the project and the solutions proposed.
2. UML diagrams for the classes required.
3. Implementation using any programming language.
4. Strictly follow the object-oriented paradigm.
5. Strictly follow MVC (Model, View, and Controller) design of software programming.

ASSIGNMENT TASKS

Assignment activity

Activity 1

Produce a software design document for a business-related problem based on requirements and Research design and development tools and methodologies for the creation of a business application

- **Explore a business-related problem** and produce a well-defined Problem Definition Statement supported by a set of user and system requirements.
- **Review areas of risk** related to the successful development of your application.
- **Research** the use of **software development tools** and **techniques** and **identify** any that have been selected for the **development** of this application.

For a higher grade

- **Analyze a business- related problem** using appropriate **methods** and **produce** a well-structured **Software Design Document** that defines a proposed solution and includes relevant details on requirements, system analysis, system design, coding, testing and implementation.
- **Compare** the differences between the various **software**

development tools and **techniques** researched and **justify** your **preferred selection** as well as your preferred **software development methodology**.

- **Evaluate** the solution to a business-related problem and the preferred software development methodology by comparing the various software development tools and techniques researched.

Activity 2

Produce Presentation slides to show plan and produce a functional business application with support documentation:

- Effectively **review** your plan for the business **application, problem** definition statement, **proposed** solution and development **strategy**. *Use this presentation as part of a peer-review and document any feedback given.* Interpret your peer review feedback and identify opportunities not previously considered
- **Develop** a **functional business application** based on a specified business problem.

For a higher grade:

- **Develop** a **functional business application** based on a specific Software Design Document with **supportive evidence** of using the *preferred tools, techniques and methodologies*.

Activity 3

Evaluate the performance of a business application against its software design document and initial requirements.

- **Review the performance** of your **business** application against the Problem Definition Statement and initial requirements.

For a higher grade:

- **Critically review** the design, development and testing stages of the application development process including risks.
- **Justify improvements** to the business application system made because of feedback and also feedback which was not acted upon, including opportunities for improvement and further development.

Learning Outcomes and Assessment Criteria

Pass		Merit	Distinction
LO1 Produce a software design document for a business-related problem based on requirements			D1 Evaluate the solution to a business-related problem and the preferred software development methodology by comparing the various software development tools and techniques researched.
P1 Produce a well-defined problem definition statement, supported by a set of user and system requirements for a business problem.		M1 Analyze a business-related problem using appropriate methods to produce a well-structured software design document.	
P2 Review areas of risk related to the successful development of a proposed application.			
LO2 Research design and development tools and methodologies for the creation of a business application			
P3 Research the use of software development tools and techniques for the development of a proposed application.		M2 Justify the software development tools and development methodology selected	

Pass		Merit	Distinction
LO3 Plan and produce a functional business application with support documentation			D2 Justify improvements to the business application system made because of feedback and also feedback, which was not acted upon, including opportunities for improvement and further development.
P4 Conduct a peer review of the problem definition statement, proposed solution and development strategy, documenting any feedback given.		M3 Interpret peer-review feedback and identify opportunities not previously considered.	
P5 Develop a functional business application with support documentation based on a specified business problem.		M4 Develop a functional business application based on a specific software design document, with supportive evidence of using the preferred tools, techniques and methodologies.	
LO4 Evaluate the performance of a business application against its software design document and initial requirements.			
P6 Review the performance of the business application against the problem definition statement and initial requirements.		M5 Critically reviews the design, development and testing stages of the application development process including risks.	

Plagiarism Notice

You are reminded that there exists **Academic Misconduct Policy and Regulation** concerning **Cheating and Plagiarism**.

Extracts from the Policy:

Section 3.4.1: Allowing others to do assignments / Copying others assignment is an offense

Section 3.4.2: Plagiarism, using the views, opinion or insights / paraphrasing of another person's original phraseology without acknowledgement

Requirements

- It should be the student's own work – **Plagiarism is unacceptable.**
- Clarity of expression and structure are important features.
- Your work should be submitted as a **well presented**, word-processed document with headers and footers, and headings and subheadings.
- You are expected to undertake research on this subject using books from the library, and resources available on the Internet.
- Any sources of information should be **listed as references** at the end of your document and these sources should be referenced within the text of your document using **Harvard Referencing** style
- Your report should be illustrated with screen-prints, images, tables, charts and/or graphics.
- All assignments must be typed in **Times New Roman, font size 12, 1.5 spacing.**

The center policy is that you must submit your work within the due date to achieve “Merit” and “Distinction”. Late submission automatically eliminates your chance of achieving “Merit and Distinction”. Also, 80% attendance is required to validate this assignment.

Assignment Prepared By Sheela Paudyal	Signature: 	Date: December 19, 2024
Brief Checked By	Signature:	Date:

Dhruba Babu Joshi	7321	December 26, 2024
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