Pearson
Higher Nationals in
Computing

Unit 30: Application Development

For use with the Higher National Certificate and Higher National Diploma in Computing

Assignment Brief Number: 1

Issue 1

Higher National Certificate/Diploma in Computing

Assignment Brief

Student Name/ID Number	
Unit Number and Title	**30: Application Development**
Academic Year	
Unit Tutor	
Assignment Title	**Digital Library on smartphone**
Issue Date	
Submission Date	
IV Name & Date	

Submission Format
The submission is in the form of five documents/files: 　　1. Task 01 – Software Design Document 　　2. Task 02 – Report 　　3. Task 03 – Documentation 　　4. Task 04 – Presentation and Screencast You are required to make use of appropriate structure, including headings, paragraphs, subsections and illustrations 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 by analysing a business-related problem and deduce an appropriate solution including a set of initial requirements.
LO2 Use design and development methodologies with tools and techniques associated with the creation of a business application.
LO3 Work individually and as part of a team to 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 Brief and Guidance

Establishing a digital library on smartphone

Another app belonging to ebook app development arena that lets you be engrossed in reading tons of free books accompanied by beautiful images and simple interface. Create a library of your own by choosing from a wide range of ebooks as well as audiobooks. Read them whenever you want, by having this handy app. Get ratings and reviews related to the audiobooks and ebooks you are interested to read. The app will tell you which are the top free books with the help of features such as top charts and featured audiobooks. Now speed-reading made easy by the successful ebook reading app that also provides audiobooks.

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Task 01
Produce a fully formed **Software Design Document** to above given case study. Your Software Design Document need to include the following:
1. Objective of the Application
2. Problem Declaration
3. Stakeholders
4. Research Similar Applications
5. Functionalities of the application
6. Flowcharts & Pseudocodes

7. Story Board
8. Gantt Chart

To do this you will need to analyse a business-related problem and identify an appropriate solution, including establishing a set of initial requirements.

Task 02

Part 01 - Report
Create a research based report including the different development methods, tools and techniques. To complete the report,
1. Research and compare different application development software tools, techniques, and methodologies.
2. Identify the various strengths & weaknesses of the each methodology.
3. Identify the advantages and disadvantage of different tools and techniques

Task 03 - **Group Work (Documentation)**
1. In a small group (3 – 5 Students) create a plan for develop the above business Application
2. Research technical challenges and issues related to the application development
3. Develop the suitable application according to the group plan.
4. Complete the various testing including test plan and test cases. (Do the testing according to the expected result & actual result.
5. Provide all the screenshots & program code which can prove the implementation

Task 4: Presentation & Screencast (Group work)

Create a presentation to demonstrate the functions of the above business application. This is your opportunity to really 'sell' your effort and all your hard work. Group should carefully plan and prepare for this presentation, consider what features you want to highlight and ensure that you tell the development story (e.g. what were your technical challenges, unexpected issues, successes, failures, etc.).
Once you have completed your presentation group will need to do a small screencast which explain the main functions of your application.

Learning Outcomes and Assessment Criteria		
Pass	**Merit**	**Distinction**
LO1 Produce a Software Design Document by analysing a business-related problem and deduce an appropriate solution including a set of initial requirements		**LO1 & 2** **D1** Justify the tools and techniques chosen to realise a custom built website. Justify your preferred selection of tools and techniques in deducing an appropriate solution to a business related problem.
P1 Explore a business-related problem and produce a well-defined Problem Definition Statement supported by a set of user and system requirements. **P2** Determine any areas of risk related to the successful completion of your application.	**M1** Analyse 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.	
LO2 Use design and development methodologies with tools and techniques associated with the creation of a business application		
P3 Research the use of software development tools and techniques and identify any that have been selected for the development of this application.	**M2** 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.	
LO3 Work individually and as part of a team to plan and produce a functional business application with support documentation		**D2** Evaluate any new insights, ideas or potential improvements to your system and justify the reasons why you have chosen to include (or not
P4 Create a formal presentation that effectively reviews your business application, problem definition statement, proposed solution and development strategy. Use this presentation	**M3** Interpret your peer-review feedback and identify opportunities not previously considered.	

as part of a peer-review and document any feedback given. **P5** Develop a functional business application 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.	to include) them as part of this business application.
LO4 Evaluate the performance of a business application against its Software Design Document and initial requirements		
P6 Review the performance of your business application against the Problem Definition Statement and initial requirements.	**M5** Analyse the factors that influence the performance of a business application and use them to undertake a critical review of the design, development and testing stages of your application. Conclude your review by reflectively discussing your previously identified risks.	**D3** Critically evaluate the strengths and weaknesses of your business application and fully justify opportunities for improvement and further development.