Assignment specification

Qualification	Faculty of Accounting & Informatics B-Tech		
Module code	SWED401	Module name	Software Engineering 4 Research
Semester	2/2019	Total mark allocation	50
Issue date	05 August, 2019	Submission date	03 October, 2019

Instructions to the student
- Remember to keep a copy of all submitted assignments.
- All work must be typed.
- Please note that you will be evaluated on your writing skills in all your assignments.
- Negative marking will be applied if you are found guilty of plagiarism or if you have applied incorrect or insufficient referencing
- There should be a minimum of four and maximum of six in a group

Assignment format
- Students must follow the generic requirements when writing and submitting assignments as follows:
- Use standard Time New Roman, font size 12.
- Include page numbers.
- Include a title page.
- Include a table of contents.
- Include a bibliography based on the Harvard Referencing System at the end of the assignment.

Essential embedded knowledge and skills required of students
- Report-writing skills
- Ability to analyse case studies
- Understanding of subject field concepts and definitions
- Ability to apply theoretical knowledge to propose solutions to real-world problems
- Referencing skills (Harvard Referencing Method)

Resource requirements
- A device with Internet access for research
- A desktop or PC for typing assignments
- Access to a library or resource centre
- Prescribed reading resources

Minimum reference requirements
- At least fifteen reference

Assignment Topics

You are required to conduct research and produce a written report on any one of the four topics. This is a research assignment and as such, your skills developed in Research Methodology have to be applied here. That is, introduce your topic, brief literature survey to show the contemporary challenges, propose a solution and showcase your model, framework and/or application. It is beneficial to use a case study or develop a software application to showcase your work. Choose any *one* of the following topics.

Topic A:
Augmented reality to enhance the University lecture room/laboratory.

Topic B:
Cloud computing for Small and medium-sized enterprises (SMEs).

Topic C:
Fingerprint Based ATM System.

Topic D:
Vehicle Tracking Using Driver Mobile Gps Tracking.

Topic E:
Ambient Intelligence.

Presentation

Your research and crafted framework must be presented in the form of a technical report. Please pay careful attention to the structure and supporting references.

Submission

This assignment may be attempted as an individual or as a group of maximum three students. The report must be submitted to the lecturer in hardcopy format. The report must also be submitted via Turnitin. Ensure that signed plagiarism forms are attached after the cover page. Late submissions will be penalized 5% for every day late.

Students are strongly urged to consult with the lecturer throughout the assignment development. This will prevent disappointment with the eventual mark due to not fully understanding the expectations.

Referencing hints:

Please use the DUT/Harvard referencing technique. This is available free from the DUT Library website in PDF format. No marks are awarded for direct quotations. Instead marks are awarded for *your* elaboration of the authors statements. "Sweeping statements" are those that are not supported by references. No marks are awarded for these. A research assignment is a report containing *your views* on what authors are saying about a certain issue.

Addendum:

Report structure and mark allocation:

		Est. size (pgs)	Mark	
	Introduction to report	½	10	
	Mini literature review of the topic	2	10	
	Concisely describe your model, framework or design	1½	10	
	Implementation in a case study or software application OR clearly demonstrate how model, framework or design addresses the shortcomings described in the literature	1½	10	
	Shortcomings of your model, framework or application and future work	1	10	
	Total mark		**50**	
	negative marking:			
	Formatting and structure of report		-10	
	At least 15 references with a minimum of 6 journal articles		-15	

Marking Rubric for each section of the report:

Mark	Nature of response
0	No attempt made.
1-2	Inadequate effort, last minute attempt, poor understanding hence improper or imprecise write-up and/or design thereof.
3-4	Rushed effort, shallow write-up, understanding of components not convincingly demonstrated hence write-up and/or design could be clearer or improved.
5-6	Good effort, easy to read and understand logical flow of descriptions, application demonstrated adequately.
7-8	Excellent effort, insightful, innovative and highly detailed write-up and/or design. This response could be used as a memo.
8-10	Demonstrate a profound knowledge of aspects; write-up embodies writer's views supported by recent and relevant literature and the quality of write-up and/or design is sufficient for publication in journal. The response goes beyond requirements of assessment.