Solent University

Coursework Assessment Brief

Assessment Details

Module Title:	**Advanced Database Systems**
Module Code:	COM519
Module Leader:	Joe Appleton
Level:	5
Assessment Title:	1. Project with Report
Assessment Number:	1
Assessment Type:	Individual written report
Restrictions on Time/Word Count:	2,000 Words
Consequence of not meeting time/word count limit:	There is no penalty for submitting below the word/count limit, but students should be aware that there is a risk they may not maximise their potential mark.
Individual/Group:	Individual
Assessment Weighting:	100%
Issue Date:	October
Hand In Date:	4pm, Friday, 15th January, 2021
Mode of Submission:	On the course SOL page
Number of copies to be submitted:	1

Assessment Task

This assessment requires you to create, test, and deploy, a production quality data-driven full stack web application. The application should either help make sense of existing data set(s) or solve a problem in your work or social life. If you choose the former, you could scrape data, use data from a society or work place, or find one or more data sets from Kaggle. If you are solving a life/work problem, you may have noticed an

ineffective process that needs to be improved or digitised.

You have the freedom to develop an application of your choice; however, you should ensure the following:

- The application should be full stack. While most will use node for the back end, you are free to use any technology stack. However, regardless of the technology you use, you should have a web-based front facing interface.

- Your application should expose create, read, update and delete (CRUD) operations on one or more databases. The type of database(s) you use, is a free choice. Further to this, you may combine more than one database. You will need to justify your choices in your documentation, this is very important.

Deliverables

The deliverables for this assessment will be a single pdf document containing a 2000-word report. It is not academic in style, and you should use markdown to create the document. I consider 2000 words to be a rough estimate, and your report may be anything from between 1000 to 2000 words in length.

The document should, roughly, be structure as follows:

Title and Cover Page

- Link to your hosted web application.
- Link to your hosted Git Repository (ensure it is public, or if on GitHub you can add me - joeappleton18), which should include a:
    - Professional README.md file. This file should contain information on how to run the project in development and production.
    - Your project's, version-controlled, source files

Introduction

This should pull together, and summarise, the entire project. You should also include the background and inspiration that lead you to undertake this project. You may, at this point, want to pull in statistics to underpin your argument as to why this project was required.

System Overview

A high-level overview of how the system functions, you can use screen shots if it helps. You should consider aspects such as:

- Briefly describing all datastores including databases, file systems and media data stores
- Key views and interfaces
- Including a diagram of the key system components and how they are linked

Key Design Decisions

You should rationalise the choices you made in designing your application.

Database Design

This section will document the different database entities and how they are related. If you are using a relational database you may want to include an entity relationship diagram.

Security and Scalability

Identify in what ways your application is secure and scalable.

Conclusion and Reflection

Bring the document to a close by tying together the process, and provide me with a brief reflective account of the entire project.

Assessment Criteria

You will be assessed on the quality of your solution. The documentation, however, is important, as it allows me to understand how your solution functions.

A1-A4	B1-B3	C1-C3	D1-D3	F1-F3
System Design				
Your design applies and refines appropriate methods to address/solve complex, unfamiliar and unpredictable problems.	Your design applies appropriate methods to address/solve complex issues/problems, some unfamiliar/unpredictable.	Your design uses appropriate (largely given) methods to analyse unfamiliar/unpredictable and complex issues/problems, with some evaluation and reformatting of information.	Your design uses appropriate given methods to analyse unfamiliar/unpredictable issues/problems, with limited evaluation.	Does not meet threshold
Conclusion and Reflection				
You have shown critical reflection and self-	You have shown sustained reflection and	You have shown satisfactory self-	Your reflection contains	Does not

evaluation sustained and generated many critical insights.	self-evaluation and generated a number of critical insights.	evaluation and reflection with some critical insights.	limited incites and seems incomplete.	meet threshold
Quality of Proposed Solution				
You have shown an understanding of current industry practice. Your solution, in many aspects, has followed a professional workflow and you have selected and applied appropriate methods to solve complex, unfamiliar problems.	You have show awareness of of current industry practice. Your workflow in, some aspects, is professional and you have selected and applied appropriate methods to solve some complex, unfamiliar problems.	You have shown a basic level of competence in all creating your application and it is fully functional. You have used appropriate (largely given) methods to analyse unfamiliar/unpredictable and complex issues/problems.	You have shown a basic level of competence in all creating your application and it mostly fully functional. You have used appropriate (largely given) methods to analyse unfamiliar/unpredictable and complex issues/problems.	Does not meet threshold

Learning Outcomes

This assessment will enable students to demonstrate in full or in part the learning outcomes identified in the Module descriptors.

Late Submissions

Students are reminded that:

i. If this assessment is submitted late i.e. within 5 working days of the submission deadline, the mark will be capped at 40% if a pass mark is achieved;

ii. If this assessment is submitted <u>later</u> than 5 working days after the submission deadline, the work will be regarded as a non-submission and will be awarded a zero;

iii. If this assessment is being submitted as a referred piece of work then it must be submitted by the deadline date; <u>any</u> Refer assessment submitted late will be regarded as a non-submission and will be awarded a zero.

https://students.solent.ac.uk/official-documents/quality-management/academic-handbook/2o-assessment-principles-regulations-temporary-amendments-for-covid-19-contingency-plans.pdf

Extenuating Circumstances

The University's Extenuating Circumstances procedure is in place if there are genuine circumstances that may prevent a student submitting an assessment. If students are not 'fit to study', they can either request an extension to the submission deadline of 5 working days or they can request to submit the assessment at the next opportunity (Defer). In both instances students must submit an EC application with relevant evidence. If accepted by the EC Panel there will be no academic penalty for late submission or non-submission dependent on what is requested. Students are reminded that EC covers only short term issues (20 working days) and that if they experience longer term matters that impact on learning then they must contact the Student Hub for advice.

Please find a link to the EC policy below:

https://students.solent.ac.uk/official-documents/quality-management/academic-handbook/2p-extenuating-circumstances.pdf

Academic Misconduct

Any submission must be students' own work and, where facts or ideas have been used from other sources, these sources must be appropriately referenced. The University's Academic Handbook includes the definitions of all practices that will be deemed to constitute academic misconduct. Students should check this link before submitting their work.

Procedures relating to student academic misconduct are given below:

http://portal.solent.ac.uk/support/official-documents/information-for-students/complaints-conduct/student-academic-misconduct.aspx

Ethics Policy

The work being carried out by students must be in compliance with the Ethics Policy. Where there is an ethical issue, as specified within the Ethics Policy, then students will need an ethics release or an ethical approval prior to the start of the project.

The Ethics Policy is contained within Section 2S of the Academic Handbook:

http://portal.solent.ac.uk/documents/academic-services/academic-handbook/section-2/2s-university-ethics-policy.pdf

Grade marking

The University uses a letter grade scale for the marking of assessments. Unless students have been specifically informed otherwise their marked assignment will be awarded a letter grade. More detailed information on grade marking and the grade scale can be found on the portal and in the Student Handbook

https://students.solent.ac.uk/official-documents/quality-management/academic-handbook/2o-annex-3-assessment-regulations-grade-marking-scale.docx