

## Solent University Coursework Assessment Brief

### AE1 Assessment Details

Module Title:	DevOps (Development Operations)
Module Code:	COM619
Module Leader:	Daniel Olabanji
Level:	6
Assessment Title:	Project Documentation
Assessment Number:	AE1
Assessment Type:	2000 words
Restrictions on Time/Word Count:	<p>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.</p> <p>Assignments should be presented appropriately in line with the restrictions stated above; if an assignment exceeds the limit this will be taken in account in the marks given using the assessment criteria shown.</p>
Individual/Group:	Group
Assessment Weighting:	50%
Issue Date:	October 2024
Hand In Date:	Friday 13 <sup>th</sup> December 2024
Planned Feedback Date:	4 weeks after hand in
Mode of Submission:	<ul style="list-style-type: none"> <li>Online submission containing the application documentation that include the link to the code on GitHub and related links.</li> </ul>
Anonymous Marking	This assessment is exempt from anonymous marking.

### Assessment Task

Each team should submit a report demonstrating and justifying the work that has taken place to solve the assessment scenario. This is not an academic report, so no bibliography is required; however, you should link to external sources used to justify decisions.

You are required to select a team of 4 colleagues to develop and deploy your application. Functional details of the application will be discussed in class. The following are core nonfunctional requirements for the project.

### Development Practices

- You should plan to have a scrum session each week in class. You should use this opportunity to report progress, issues and if necessary, request help.
- Your project should be licenced using the Apache licence and the licence should be applied appropriately to the code.
- You should create a feature list and project plan (Kamban) allocating tasks for delivery within your team.
- You should adopt good agile practices and git workflow to contribute work to your project. You should document your agreed contribution process.
- You should organise your work in 3 sprints, each sprint demonstrating incremental functionality until the final presentation.
- You should create a single GitHub repository to be shared by the team members. You should organise your work using branches, pull requests and issues to document progress.
- You should adopt a git flow process which allows parallel development and merging of work. Pull requests should be reviewed and tested before merging.

### **Operations Practices**

- You should use Git actions to create an automated test framework which builds and tests at least every commit to the master branch (CI/CD).
- You should create a monitoring environment for testing and assuring the operation of your hosted application. This should demonstrate testing of web actions, api's and also record metrics and logs for the running application.

The report should be part of your solution. It could be created by either Markdown or Wiki or Google Docs or any tools that will show (e.g., code highlighting, images, links, appropriate headings).

### **Report Structure**

The report must be no longer than 2000 words and, as a minimum, include the following sections:

- Title Page
  - The names of each team member.
  - A link to the GitHub repository used (there should be evidence of logical commits and an ongoing project).
  - A link to the deployed version of your application.
- Introduction
  - A short overview of the project and the outcomes.
- Project management
  - An explanation and justification of project management decisions made.
- DevOps workflow
  - An explanation and justification of the DevOps workflow followed. You should consider:
    - Continuous delivery/deployment.
    - Communication and collaboration.

- Continuous Integration
- Reflection and future work
  - An honest, reflective account of the overall process.

**Submission**

There will be one submission per team. You should submit a one file that contain everything and links to all that pertain to the application and the documentation could be a PDF export of the documentation.md markdown file or Wiki or Google Docs.

## Assessment criteria

COM619 Coursework Assessment (100%)										
COM619 Level 6	0 (0-19) Fail	2 (20-29) Fail	3 (30-39) Fail	4 (40-49) Pass	5 (50-59) Pass	6 (60-69) Merit	7 (70-79) Distinction	8 (80-89) Distinction	9 (90-99) Distinction	10 (100) Distinction
Numerical Scale	No attempt, No submission, Absent	Poor, unsatisfactory, weak	Inadequate, incomplete, limited	Basic, satisfactory, acceptable	Reasonable, fair, appropriate	Competent, good, effective	Strong, proficient, very good	Articulated, highly impressive, excellent	Superb, outstanding, original	Extraordinary, flawless, publishable (or industry standard)
Knowledge & Understanding										
Given Grade ( )										
Knowledge and Understanding	No attempt.	Demonstrates a poor understanding of the main concepts, theories and/or practice.	Inappropriately or inadequately expression of the main concepts, theories and/or practice.	Basic understanding of the main concepts, theories and/or practice.	Reasonable and satisfactory understanding of the concepts, theories and/or practice that have been show in class.	Thorough understanding of abstract concepts, theories and/or cutting-edge practice and several of their implications and applications of DevOps.	Good understanding of abstract concepts, theories and/or cutting-edge practice, their implications, and applications of DevOps.	Very good of understanding of abstract concepts, theories and/or cutting-edge practice, their implications, and applications of DevOps.	Excellent understanding usage of abstract concepts, theories and/or cutting-edge practice, their implications, and applications. proposed approach.	Comprehensive and Extraordinary understanding and usage of abstract concepts, theories and/or cutting-edge practice, their implications, and applications of DevOps.
Design and Project managemet										
Weight (20%)										
Cognitive Skills										
Grade Given ( )										

<b>Assessment of cognitive skills</b>  DevOps Practices and rational  <b>Weight (40%)</b>	No attempt.	Poor quality techniques, mostly shown in class, have been applied.	Contains inaccuracies and omissions. techniques, mostly shown in class, have been applied.	Some techniques, mostly shown in class, have been applied.	Techniques, mostly shown in class, have been applied.	Good and effective usage of DevOps practices demonstrated.	Good, high-quality usage of justified DevOps practices demonstrated	Very good, high-quality usage of advanced, critically justified DevOps practices demonstrated	Excellent, high-quality usage of advanced, critically justified DevOps practices demonstrated.	Comprehensive, high-quality usage of advanced, critically justified DevOps practices demonstrated.
<b>Practical and Professional Skills, and Transferable Skills</b>										
<b>Given Grade ( )</b>										
<b>Practical and Professional Skills, and Transferable Skills</b>  Professionalism, Communication and Teamwork  <b>Weight (40%)</b>	No attempt.	Poorly evidence of practical understanding of team-working and leadership skills.	Inadequate evidence of practical understanding of team-working and leadership skills.	Limited evidence of practical understanding of team-working and leadership skills.	Evidence of good understanding of teamworking and leadership skills.	Evidence of a high level of understanding of teamworking and leadership skills and the consequences.	A very high-quality understanding of all aspects of working and leadership skills	Excellent evidence of understanding of all aspects of team-working and leadership skills.	Professional evidence of understanding all aspects of team-working and leadership skills	Extraordinary Professional evidence of all aspects of team-working and leadership skills

## Use of AI in this Assessment

Generative AI is permitted at Solent University under specific conditions and must continue to follow the university's rules around Academic Misconduct and the AI and Academic Integrity policy. In this assessment, you are allowed to use AI for the following tasks:

### Generative AI may only be used to:

- Assist with improving your report writing
- But it must not be used to solve any part of the assessment.
- It must not be used to provide solutions for any aspect of the assessment.

**If it is found that Generative AI has been used to solve this assessment, the report will be subject to failure or referred for academic misconduct. Please be aware.**

[AI and Academic Integrity Policy](#)

## Learning Outcomes

This assessment will enable you to demonstrate in full or in part your fulfilment of the following learning outcomes identified in the Module Descriptor:

## Living CV

As part of the University's Work Ready, Future Ready strategy, you will be expected to build a professional, Living CV as you successfully engage and pass each module of your degree.

The Living CV outputs evidenced on completion of this assessment are:

- 1.
- 2.

Please add these to your CV via the Living CV builder platform on Solent Futures Online [Solent Futures Online](#)

## Important Information

[Solent University Academic Regulations 2024-25](#)

## Late Submissions

You are reminded that:

- i. If this assessment is submitted late i.e. within 7 calendar days of the submission deadline, the mark will be capped at 40% if a pass mark is achieved;
- ii. If this assessment is submitted later than 7 calendar 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; any Refer assessment submitted late will be regarded as a non-submission and will be awarded a zero.

## Assessment regulations

### **Extenuating Circumstances**

The University's Extenuating Circumstances (EC) procedure is in place if there are genuine short term exceptional circumstances that may prevent you submitting an assessment. You are able to self-certify for up to two assessment dates in any semester without supporting evidence for an extension of up to seven calendar days for coursework or to defer an exam to the resit period.

Alternatively, if you are not 'fit to study' (or you have used up your two self-certification opportunities), you can request:

- an extension to the submission deadline of 7 calendar days, or
- a request to submit the assessment at the next opportunity, i.e. the resit period (as a Defer without capping of the grade).

In both instances you must submit an EC application with relevant evidence. If accepted under the university regulations there will be no academic penalty for late submission or non-submission dependent on what is requested. You are reminded that EC covers only short-term issues (20 working days) and that if you experience longer term matters that impact on your learning then you must contact the Student Hub for advice.

Please find a link to the EC policy below:

### Extenuating Circumstances

### **Academic Misconduct**

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

Procedures relating to student academic misconduct are given below:

### Academic Misconduct

### **Ethics Policy**

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

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

### Ethics Policy

### **Grade marking**

The University uses an numeric grade scale for the marking of assessments. More detailed information on grade marking and the grade scale can be found on the portal and in the Student Handbook.

### Grade Marking Scale

## Guidance for online submission through Solent Online Learning (SOL)

### Online Submission