**ASSIGNMENT 2 FRONT SHEET**

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| **Qualification** | **BTEC Level 5 HND Diploma in Computing** | | |
| **Unit number and title** | Unit 16: Cloud Computing | | |
| **Submission date** |  | **Date Received 1st submission** |  |
| **Re-submission Date** |  | **Date Received 2nd submission** |  |
| **Student Name** |  | **Student ID** |  |
| **Class** |  | **Assessor name** |  |
| **Student declaration**  I certify that the assignment submission is entirely my own work and I fully understand the consequences of plagiarism. I understand that making a false declaration is a form of malpractice. | | | |
|  |  | **Student’s signature** |  |

**Grading grid**

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| P5 | P6 | P7 | P8 | M3 | M4 | D2 | D3 |
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| **❒ Summative Feedback: ❒ Resubmission Feedback:** | | |
| **Grade:** | **Assessor Signature:** | **Date:** |
| **Internal Verifier’s Comments:** | | |
| **Signature & Date:** | | |

**ASSIGNMENT 2 BRIEF**

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| **Qualification** | **BTEC Level 5 HND Diploma in Computing** | | |
| **Unit number** | Unit 16: Cloud Computing | | |
| **Assignment title** | Cloud’s implementation and security threats | | |
| **Academic Year** | 2021 – 2022 | | |
| **Unit Tutor** | DO Quoc Binh | | |
| **Issue date** |  | **Submission date** |  |
| **IV name and date** |  | | |

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| **Submission Format:** |
| *Format:*  A report(in PDF format)  You must use font *Calibri size 12, set number of the pages and use multiple line spacing at 1.3. Margins must be: left: 1.25 cm; right: 1 cm; top: 1 cm and bottom: 1 cm.* The reference follows Harvard referencing system.  *Submission* Students are compulsory to submit the assignment in due date and in a way requested by the Tutors. The form of submission will be a soft copy posted on <http://cms.greenwich.edu.vn/>  *Note:* The Assignment *must* be your own work, and not copied by or from another student or from  books etc. If you use ideas, quotes or data (such as diagrams) from books, journals or other sources, you must reference your sources, using the Harvard style. Make sure that you know how to reference properly, and that understand the guidelines on plagiarism. *If you do not, you definitely get failed* |
| **Unit Learning Outcomes:** |
| **LO3** Develop Cloud Computing solutions using service provider’s frameworks and open source tools.  **LO4** Analyse the technical challenges for cloud applications and assess their risks |
| **Assignment Brief and Guidance:** |
| **Task 1**  Base on the scenario and architecture design in the first assignment provide the implementation. Because of the time constraint of the assignment, the implementation just provides some demo functions of the scenario. The implementation includes two parts:   * A step by step instruction   + which shows which functions are implemented   + How to config, deploy and test the services (Web application, Database Server, Source code management, server logs..) using service provider’s frameworks and open source tools.   + Images for the built functions * A brief discussion about difficulties which one can face during the development process(optional) * The source code for the built application   **Task 2**  The table of contents in your security manual (which should be 500–700 words) should be as follows:   1. Analysis of the most **common problems** and **security issues** of a cloud computing platform. 2. Discussion on how to overcome these issues. 3. Summary. |

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| Learning Outcomes and Assessment Criteria | | |
| Pass | Merit | Distinction |
| **LO3** Develop Cloud Computing solutions using service provider’s frameworks and open source tools | | **D2** Critically discuss how one can overcome these issues and constraints. |
| **P5** Configure a Cloud Computing platform with a cloud service provider’s framework.  **P6** Implement a cloud platform using open source tools. | **M3** Discuss the issues and constraints one can face during the development process. |
| **LO4** Analyse the technical challenges for cloud applications and assess their risks | |  |
| **P7** Analyse the most common problems which arise in a Cloud Computing platform and discuss appropriate solutions to these problems.  **P8** Assess the most common security issues in cloud environments. | **M4** Discuss how to overcome these security issues when building a secure cloud platform. | **D3** Critically discuss how an organisation should protect their data when they migrate to a cloud solution. |