**ASSIGNMENT 1 FRONT SHEET**

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| **Qualification** | **BTEC Level 5 HND Diploma in Computing** | | |
| **Unit number and title** |  | | |
| **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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| Grade (0-10) |
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| **❒ Summative Feedback: ❒ Resubmission Feedback:** | | |
| **Grade:** | **Assessor Signature:** | **Date:** |
| **IV Signature:** | | |

Assessment Brief

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| Student Name/ID Number |  |
| **Unit Number and Title** | **Object Oriented Programming with Java** |
| Academic Year | 2020 - 2021 |
| Unit Tutor |  |
| **Assignment Number & Title** | **Design, Implement and Test a GUI application** |
| **Issue Date** |  |
| Submission Date |  |
| IV Name & Date |  |

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| **Submission Format** |
| The submission is in the form of a written report. This should be written in a concise, formal business style using single spacing and font size 12. You are required to make use of headings, paragraphs and subsections as appropriate, and all work must be supported with research and referenced using the Harvard referencing system. Please also provide a bibliography using the Harvard referencing system. |

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| **Unit Learning Outcomes** |
| **LO1** Understand basic programming skills and OOP paradigm  **LO2** Understand how to detect errors and handle errors  **LO3** Understand how to working with files in applications  **LO4** Understand how to build GUI application |
| **Assignment Brief** |

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| You have to develop an application to solve a small business problem. The problem requires a graphical user interface with features that required reading / writing data from text file, working with a collection of data (searching for item / min / max / sum / etc.). The application must handle errors so that it will not crash at end user side. The application also need to be fully tested before the production phase.  You need to write a technical report about the development of the application. Content of the report should cover design, implementation and testing.  In the end you need to demo your application, explain your code and answer technical questions. |

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| Learning Outcomes and Assessment Criteria |
| **LO1** Understand basic programming skills and OOP paradigm  **LO2** Understand how to detect errors and handle errors  **LO3** Understand how to working with files in applications  **LO4** Understand how to build GUI application |
| **To get Pass (5 – 6.5 points)**  - Student can design and implement GUI for the application solve a specific problem  - Student knows how to load and save data from file.  - Student knows how to handle errors by using exceptions  - Student knows how to write test plan, execute test cases and log results. |
| **To get Merit** (**7 – 8.5 points**)  - The application is well designed, user friendly and has logical flow of actions.  - Can apply MVC in the application, can apply JUnit to test automatic  - Errors are well handle to avoid program crashing, the test can cover as many as possible the errors in program |
| **To get Distinction (9 – 10 points)**  The application must show excellent design & implementation, runs without any errors, all inputs are validated, all errors are well handled including recover choice, rich features showing unique ideas, algorithms. |

Assessment Brief

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| Student Name/ID Number |  |
| **Unit Number and Title** | **Object Oriented Programming with Java** |
| Academic Year | 2020 - 2021 |
| Unit Tutor |  |
| **Assignment Number & Title** | **Design, Implement and Test a GUI application** |
| **Issue Date** |  |
| Submission Date |  |
| IV Name & Date |  |

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# Introduction.

# Requirement.

# Design.

## UI design.

## Use case.

# Implementation.

# Test.

# Result.

# Conclusion.