# **Higher Nationals**

# Assignment Brief – BTEC (RQF)-for work submitted via Moodle or ‘turnitin’ only-(**There is an extra section on the last page to replace the submission sheet used for hard copy submission of work)**

**Formative work/Summative work ( delete as necessary)**

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| Programme title | HNC in Computing | | | |
| Unit Number and Title | 1 | Programming | | |
| Assignment Number and Title | 2 of 2 | Interview Practical Test | | |
| Student Name |  | | | |
| Unit Assessor (receiving the work) | Neil Merrick | | | |
| Issue Date | 18/01/2021 | | Submission Deadline/s | 12/2/2020 |
| Late submission | Work submitted after the deadline cannot be accepted without consequence unless extenuating circumstances apply. Please refer to the RQF HN submission framework | | | |
| Feedback | Feedback will be available within 3 weeks of the submission date. | | | |
| Resubmission | Y/N | | Deadline |  |
| IV Name |  | | Date |  |

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| **Number of tasks** | **Submission dates ( if required for organisational reasons)** |
| Task 1 |  |
| Task 2 |  |
| Task 3 |  |

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| Assignment Format and General Assignment Guidance: |
| **Format**  e.g.  Is the assignment in the form of different folders to submit or a booklet?  Hard copies or /and electronic folders?  Is there an examination? How long is this? Is it closed book?  **General Guidance**   * All work must be supported with research. To reference all the work of others, the Harvard system of referencing must * be used throughout with valid and credible sources accurately referenced. * Please present work as directed by using single line spacing, size 12, Arial font, including headings, paragraphs, subsections and illustrations as appropriate. * Ensure that you have signed the authenticity statement on the assignment submission cover sheet * Always keep a copy of your final work   Please access HN Global for additional resources support and reading for this unit. For further guidance and support on report writing please refer to the Study Skills Unit on HN Global. Link to [www.highernationals.com](http://www.highernationals.com) or ask for help in the LRC about, research, study skills and referencing. Please see details in your student handbook. |
| Unit Learning Outcomes (state fully): |
| LO3. Implement basic algorithms in code using an IDE.  LO4. Determine the debugging process and explain the importance of a coding standard. |
| Overall assignment scenario ( link to the learning outcomes) |
| **SCENARIO/ASSIGNMENT BACKGROUND**  You have decided that you want to become a software engineer coding for a living. You have completed an HNC in computing where you learned the basics of coding and now you are looking for a job. You have been applying for jobs for the last few months and finally you have been offered an interview with New Kingston Developments Ltd. New Kingston Developments write coded solutions for companies within Kingston upon Thames though they are looking to expand into other areas locally.  You have applied for the role of junior developer working on mobile applications for client management reporting directly to the senior developer.  In addition to proving that you have a basic understanding of programming concepts you have been asked to write a program to prove that you can put these concepts into practice. |
| Assignment Brief and Guidance: (link the requirement of the tasks to the learning outcomes and assessment criteria)  Task 1 |
| **Learning outcome/s**: LO3  **Assessment criteria**: P3, M3, D3  **Relate the task to the scenario/Assignment Background**  Create a program that meets the requirements of the attached program specification. This program must conform to a coding standard and must be fully functional.  **Specific requirements**  Design and build a program that meets the requirements of the specification. You must implement this using at least one complex data structure and the data stored must be saved to permanent storage and be loaded back into the program when it is restarted. You must use the extended features of the IDE to manage the development lifecycle. Check your code using the code analyser against the Extended Correctness Rules and resolve any errors. Write a short evaluation of the IDE and the benefit it brought in managing this development. Contrast this against not using an IDE such as using Notepad instead. |
| Task 2 |
| **Learning outcome/s:** LO4  **Assessment criteria**: P4, M4  **Relate the task to the scenario/Assignment Background**  Fully debug your program and explain how and why this is important.  **Specific requirements:**  Identify the steps required in the debugging process and demonstrate those steps by debugging your code. Evaluate how the process can be used to build better, more robust and secure applications. |

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| Task 3 |
| **Learning outcome/s**: LO4  **Assessment criteria**: P5, D4  **Relate the task to the scenario/Assignment Background**  Describe the coding standard that you used and explain why this is important.  **Specific requirements:**  Outline the coding standard that you have adhered to and evaluate why such a standard is necessary when building applications in a team environment. |

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| Learning Outcomes and Assessment Criteria | | | |
| Learning Outcome | Pass | Merit | Distinction |
| **LO3** Implement basic algorithms in code using an IDE | **P3** Write a program that implements an algorithm using an IDE. | **M3** Use the IDE to manage the development process of the program. | **D3** Evaluate the use of an IDE for development of applications contrasted with not using an IDE. |
| **LO4** Determine the debugging process and explain the importance of a coding standard | **P4** Explain the debugging process and explain the debugging facilities available in the IDE. | **M4** Evaluate how the debugging process can be used to help develop more secure, robust applications. | **D4** Critically evaluate why a coding standard is necessary in a team as well as for the individual. |
| **P5** Outline the coding standard you have used in your code. |

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| IV Name |  | | |
| Signature (IV of the brief) \* |  | Date |  |

\*The brief cannot be given out without this signature.

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| **Plagiarism statement** |
| When you submit work via Moodle or ‘turnitin’ it is very important that you recognise that when you upload your work and tick the box on Moodle to state the work is your own, **you are agreeing to the following statement**. Ticking the box is the equivalent of signing the statement below.   |  | | --- | | Plagiarism statement Learner declaration | | I declare that all the work submitted for this assignment is my own work or, in the case of group work, the work of myself and the other members of the group in which I worked, and that no part of it has been copied from any source.  I understand that if any part of the work submitted for this assignment is found to be plagiarised, none of the work submitted will be allowed to count towards the assessment of the assignment. | |

**HNC/HND Submission - for work submitted via Moodle or ‘turnitin’ only ( this statement below must be given out with each assignment brief and referred to when you go over the assignment brief with the learner).**

Remember to reference all sources used in this work. Please use Harvard referencing. The LRC guide to referencing can be found here: <https://online.kingston-college.ac.uk/lrc/default.aspx>

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| HNC/D Pearson’s Assignment Brief Version 2- for work submitted electronically via Moodle or via ‘turnitin’ | QLS July 2019 |

Based on Pearson Education 2016

Higher Education Qualifications

Assignment Brief

Pearson Education 2016

Higher Education Qualifications

Summative Assignment Feedback Form