**Module ICT3715**

**2022**

**INFORMATION AND COMMUNICATION TECHNOLOGY PROJECT**

**ASSIGNMENT 4 | RUBRIC**

**Examination | November 2022**

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| **STUDENT NUMBER (Student completes)** | | | | | | | | | |
| **6** | **5** | **6** | **1** | **4** | **9** | **6** | **8** | **-** | **-** |

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| **IDENTITY NUMBER (Student completes)** | | | | | | | | | | | | |
| **9** | **3** | **0** | **2** | **2** | **4** | **5** | **0** | **5** | **3** | **0** | **8** | **8** |

**Telephone number** (*only in exceptional instances where we need to contact you*)

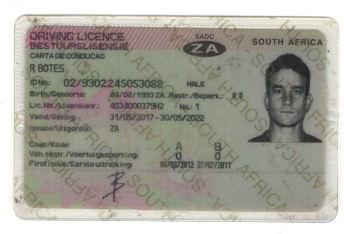
079 971 9978

**Instructions for the student:**

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| **Instruction(s)** | **Note(s)** |
| Complete pages 3 - 6 |  |
| Save the completed document to PDF format. | Use Filename:  **StudentNumber\_ICT3715\_November\_2022** Example:  **12345678\_ICT3715\_November\_2022** |
| **This Rubric will be used during the Examination by the Examiner to mark your Practical System.** | |

**Instructions for the student:**

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| **Instruction(s)** |
| Insert on this page a copy (image) of your ID Document or Driver License or Passport or Student Card. |

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**Instructions for the student:**

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| **Instruction(s)** | |
| **Student completes the following:** |
| 1. Programming Language(s) used | | |
| 1. Database used | | |
| 1. Describe your backup process that you have put in place for the database | | |
| 1. Describe your recovery process that you have put in place to recover the database | | |

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| 1. **Programming Language(s) used** |
| **WLanguage** (WinDev official programming language) |
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| 1. **Database used** |
| **HFSQL Client Server** (WinDev official database) |
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| 1. **Describe your backup process that you have put in place for the database** |
| WEBDEV HFSQL Control Centre, allows for easy Database backup on the server in HFSQL Client/Server. To backup the database, I will follow the following steps: |
| * 1. Access the HFSQL Control Center in WebDev, In the “Connect to an HFSQL server” section, login to your server database. |
| * 1. In the “Backups” group, select “New backup”. |
| * 1. Follow the Backup wizard to complete the backup. I will create a “Hot backup”. |
| * 1. Select the backup database “ICT3715\_DB” |
| * 1. Set backup configuration settings. |
| * 1. Set backup directory. |
| * 1. Finalize. |
| * 1. Backup is started and is progress can be viewed in the backups window.   Graphical user interface, background pattern  Description automatically generated |
| * 1. Once finished, the backup’s success can be viewed in the main panel.   A screenshot of a computer  Description automatically generated |

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| 1. **Describe your recovery process that you have put in place to recover the database** |
| Restoring a backup can be done from the same window as backup (HFSQL Control Center).  4.1 Simply select the “Restore Option” in the “Backups” group and select a restore option, I will restore the backup I just made, It is already selected. |
| 4.2 Once restore is done, a successful message is displayed. |
| **Remark:** Other backup options are also available, “Restore a backup from a directory…” and “Restore a backup from a zip file…”. Each of these have a simple wizard that helps to easily implement the restore. |

**PLAGIARISM PLEDGE BY THE STUDENT**

**Refer to:**

[https://www.unisa.ac.za/sites/myunisa/default/Assignments-&- Examination/Assignments/Plagiarism](https://www.unisa.ac.za/sites/myunisa/default/Assignments-%26-Examination/Assignments/Plagiarism)

<https://www.unisa.ac.za/sites/myunisa/default/Study-@-Unisa/Student-policies-&-rules>

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| **Tick the applicable box** | | |
| **Yes** | **No** |  |
| **X** |  | 1. I have read Unisa’s plagiarism policy. |
| **X** |  | 2. I understand Unisa’s plagiarism policy. |
| **X** |  | 3. I agree to abide by Unisa’s plagiarism policy. |
| **X** |  | 4. I have read the direct copying, plagiarism, and “patch-writing”  document. |
| **X** |  | 5. I understand what direct copying, plagiarism, and “patch-writing” is. |
| **X** |  | 6. I undertake to avoid copying directly, plagiarism and patch writing. |
| **X** |  | 7. All academic work, written or otherwise, that I submit is expected to be the result of my own skill and labour. |
| **X** |  | 8. I understand that, if I am guilty of the infringement of breach of copyright/plagiarism or unethical practice, I will be subject to the applicable disciplinary code as determined by Unisa. |
| **X** |  | 9. The examiner has the right to refuse to assess the system if plagiarism is detected. |

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| **Student Names** | Ralph |
| **Student Surname** | Botes |
| **Student number** | 65614968 |
| **Student Signature** | A picture containing table, console table  Description automatically generated |
| **Date** | 10-10-2022 |

**The Examiner will not be able to mark your practical system without this signed plagiarism page!!**

**This Sections to follow will be marked (completed) by the Examiner**

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| **Practical System Component** | **Maximum**  **Mark** | **Mark**  **Awarded** | **Mark Indication** | | **Note(s)** | |
| **Documentation and Preparation** | **17** |  | | | | | |
| Code | 2 |  | 0 | not available | |  | |
| 1 | does not meet minimum requirements | |
| 2 | complete and meet minimum requirements | |
| User Manual | 2 |  | 0 | not available | |  | |
| 1 | does not meet minimum requirements | |
| 2 | complete and meet minimum requirements | |
| Installation Manual | 2 |  | 0 | not available | |  | |
| 1 | does not meet minimum requirements | |
| 2 | complete and meet minimum requirements | |
| Backup and Recovery of Database  [Refer to page 3 - 4] | 3 |  | 0 | not available | |  | |
| 1 | does not meet minimum requirements | |
| 3 | complete and meet minimum requirements | |
| Professional Impression | 3 |  | 0 | not on time | |  | |
| 1 – 2 | on time but not ready for examination | |
| 3 | dressed according, on time and practical system ready for examination | |
| Sufficient preparation done for the evaluation  (e.g., guiding document, steps to follow, data to use [student numbers – passwords – Module Codes …], etc.) | 5 |  | 0 | not sufficient, unorganized |  | |
| 1 | available, but unorganized |
| 2 | available, but did not cover all the requirements in this rubric |
| 3 - 5 | sufficient, organized |

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| **Question 1** | **MIS Reports** |
| Login to the dashboard and display the MIS Reports to the Examiner | |
| Explain the MIS Reports to the Examiner | |
| Show the output of the MIS Reports to the Examiner | |

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| **Practical System Component** | **Maximum**  **Mark** | **Mark**  **Awarded** | **Mark Indication** | | **Note(s)** |
| **MIS Reports** | **20** |  | | | | |
| Daily MIS Report | 5 |  | 0 - 2 | 0 - no report.  1 - report is created but does not reflect the data correctly.  2 - only a long list of data is displayed. |  |
| 3 - 4 | 3 - meets **minimum** requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.).  4 - meets requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.). |
| 5 | report **exceed** minimum requirements and can assist the Exam Department in making predictions and use it for future planning |

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| Weekly MIS Report | 5 |  | 0 - 2 | 0 - no report.  1 - report is created but does not reflect the data correctly.  2 – only a long list of data is displayed. |  |
| 3 - 4 | 3 - meets **minimum** requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.).  4 - meets requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.). |
| 5 | report **exceed** minimum requirements and can assist the Exam Department in making predictions and use it for future planning. |
| Another MIS Report | 5 |  | 0 - 2 | 0 - no report.  1 - report is created but does not reflect the data correctly.  2 – only a long list of data is displayed. |  |
| 3 - 4 | 3 - meets **minimum** requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.).  4 - meets requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.). |
| 5 | report **exceed** minimum requirements and can assist the Exam Department in making predictions and use it for future planning. |

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| Another MIS Report | 5 |  | 0 - 2 | 0 - no report.  1 - report is created but does not reflect the data correctly.  2 – 0nly a long list of data is displayed. |  |
| 3 - 4 | 3 - meets **minimum** requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.).  4 - meets requirements and student can provide evidence on how the report was created (SQL: tables, fields, etc.). |
| 5 | report **exceed** minimum requirements and can assist the Exam Department in making predictions and use it for future planning. |

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| **Question 2** | **User Interfaces** |
| Login and create examination session for a Module for today [if not already existing] | |
| Time slot for the examination session for the Module must be between 9H00 – 14H00 for the day of the examination session | |
| Duration of the examination session must be 2 hours [thus from the student starts the examination session the student has 2 hours to complete the examination session] = Timer | |
| Login as the student and complete the examination session for the Module for today | |

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| **Practical System Component** | **Maximum**  **Mark** | **Mark**  **Awarded** | **Mark Indication** | | **Note(s)** |
| **Graphical User Interfaces (GUI)** | **18** |  | | | |
| User (Student)  Student taking the upload file examination!! | 8 |  | 0 - 1 | 0 - no applicable front-end.  1 - GUI not correctly interacting with the practical system and database. |  |
| 2 | GUI interacting correctly.  Dropdowns available. |
| 3 - 4  5  6  8 | 3- 4 above and data validation fields, Student number or myLife e-mail.  5 - above and data validation using REGEXP for email.  complete the examination session.  e-mail confirmation send to the student. |
| User (Lecturer)  Set up examination session for the file upload examination | 5 |  | 0 | no applicable front-end |  |
| 1 - 2 | GUI not correctly interacting with the practical system and database |
| 3 – 5 | GUI interacting correctly.  time slots and duration of the examination sessions correct.  dropdowns available.  validation. |

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| User (Exam Department)  Set up examination session for the file upload examination | 5 |  | 0 | no applicable front-end |  |
| 1 - 2 | GUI not correctly interacting with the practical system and database |
| 3 – 5 | GUI interacting correctly.  time slots and duration of the examination sessions correct.  dropdowns available.  Validation. |

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| **Question 3** | **Database** |
| Explain the structure of the database [3NF] | |
| Show the information of the examination that was taken by the student for today (during your examination demonstration) | |
| Show where your files were uploaded on the system (your computer) | |
| Login to show your MIS Reports again | |
| Show the MIS Reports again to indicate that the MIS Reports have been updated with the new data in the database | |

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| **Practical System Component** | **Maximum**  **Mark** | **Mark**  **Awarded** | **Mark Indication** | | **Note(s)** |
| **Database** | **17** |  | | | |
| Database correctly setup  Data cleansed and imported from the Spreadsheets.  All the tables included in the database | 5 |  | 0 - 1 | 0 - unable to provide access to the database.  1 - database is not setup to reflect 3NF. |  |
| 2 | database is setup to reflect 3NF and referential integrity enforced (PKs and FKs) |
| 5 | database is correctly setup and data imported from spreadsheet |
| Update of Database | 12 |  | 0 | no updating of the database |  |
| 1 -4 | data updates but there are errors and inconsistencies |
| 5 – 8 | student can show the uploaded files and the data that is stored in the database |
| 9 - 12 | updates and inserts correctly reflecting in the database and reports |  |

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| **Question 4** | **Backup and Recovery of the Database** |
| Explain and show how your backup and recovery work for your database | |

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| **Practical System Component** | **Maximum**  **Mark** | **Mark**  **Awarded** | **Mark Indication** | | **Note(s)** |
| **Backup and Recovery** | **5** |  | | | |
| Backup (for the client) correctly implemented | 3 |  | 0 | no backup plan implemented |  |
| 1 | backup must be done manually |
| 2 – 3 | backup automated (either from desktop or within system) |
| Recovery (for the client) correctly implemented | 2 |  | 0 | no recovery plan implemented |  |
| 1 | recovery must be done manually |
| 2 | recovery automated (either from desktop or within the system) |

**This Section will be marked by the Examiner when evaluating the documentation and your code received.**

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| **Practical System Component** | **Maximum**  **Mark** | **Mark**  **Awarded** | **Mark Indication** | | **Note(s)** |
| **Technical** | **23** |  | | | |
| Level of programming  applied | 8 |  | 0 - 1 | coding copied and pasted from other sources without referencing or adapting for this project and scope.  programming not on 3rd year level. |  |
| 2 - 3 | programming has lots of errors and system crashes.  programming is sufficient. |
| 4  8 | OO programming implemented.  programming exceeds the requirements. |
| Algorithms and functions used | 5 |  | 0 | no algorithms or advanced coding applied |  |
| 5 | examples of advanced algorithms and  functions included.  regular expressions used to validate data. auto generated messages, warnings, etc.. |
| General look and feel of the practical system | 10 |  | 1 - 5 | the practical system meets the minimum requirements. |  |
| 6 – 10 | the practical system exceeds the minimum requirements. |

**This Section to be completed by the Examiner, Second Examiner and or the Moderator**

Examiner Name & Surname Examiner Signature

Date:

Moderator Name & Surname Moderators Signature

Date:

Comments from the Examiner / Moderator:

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