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| **New Zealand Certificate in Information Technology Essentials** | | |
| **Course No: HTCS4605** | **Database Project** | **Level: 4, Credits: 15** |

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| **Student Name:** | **Student ID:** |
| **Assessment Type:** Project | **Weighting:** 100% |
| **Due Date:** See below | **Total Marks:** 100 Marks |

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| **Student declaration**  I confirm that:  • This is an original assessment and is entirely my own work.  • The work I am submitting for this assessment is free of plagiarism. I have read and  understood the [Academic Integrity Policy](https://thenest.unitec.ac.nz/TheNestWP/wp-content/uploads/2019/05/2013-09-10-Academic-Integrity-Policy.pdf) here. I have also read and understood the  [Student Disciplinary Statue](https://thenest.unitec.ac.nz/TheNestWP/wp-content/uploads/2020/07/Student-Disciplinary-Statute-FINAL-Feb-2020.pdf) here.   * Where I have used ideas, tables, diagrams etc of other writers, I have acknowledged the source in every case. | |
| **Student Signature:** | **Date:** |

**Assessment information:**

* This is an individual project with some group components. You will work in a group of 2 or 3.
* There are two or three scenarios (see Appendix A in Moodle). Your lecturer will assign your group a scenario for the project. Some groups might get the same scenario.
* As a group you will apply project management and technical skills to develop a database project for the assigned scenario (assigning tasks and timeframes to each stage in development).
* This assessment consists of 4 tasks. See the table below for more details.

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| **Assessment Tasks** | **Marks** | **Weighting** | **Submission date & time** |
| **Task 1:** **Project Plan** (Part A & B) | 20 | 20% | **Task 1 (Project Plan) due:  Wed, 26 March at 5 pm** |
| **Task 2: Database Development**  **(Stage 1 – Part A)** DB Tables & ERD | 20 | 20% | **Task 2A (DB Table, ERD) due:  Wed, 14 May at 5 pm** |
| **(Stage 2 – Part B)** DB Queries, Forms and Reports | 30 | 30% | **Task 2B (DB complete) due:  Wed, 4 June at 5 pm** |
| **Task 3** **Project Management** (Part A):  **Teamwork Self and Peer Evaluation** (Part B)  (Note: **required** to scale group work for individuals) | 10  5 | 10%  5% | **Task 3 (Proj Mgmt & Evals) due:  Wed, 21 May at 5 pm** |
| **Task 4:** **Project** **Presentation** | 15 | 15% | **Task 4 (Pres. in class) due:  Wed, 11 June at 5 pm** |

**Document format requirements:**

* All responses to be typed in a clear, neat font (such as Arial or Calibri).
* Headings to be larger in size 14 or 16 pts.
* All paragraph text to be typed in size 12 font and aligned using left or justify alignment.
* Use single, 1.15 or 1.5 line spacing and leave one blank line (space) between each paragraph.
* Header and footer should appear on each page (except the cover page if used).
  + **Header** to include **your ID** number on the right.
  + **Footer** should include ***title of the course*** and ***assessment task number*** on the left and ***page number*** on right.
* Correctly reference your used sources in-text and include a full reference list at the end of the assessment, using APA referencing guidelines.

**HTCS4605 Database Project**

**Marking Scheme**

**Student Name:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Marking Scheme** | | | |
|  | **Maximum marks** | **Your marks** | **Comments** |
| Task 1 – Project Plan | 20 |  |  |
| Task 2 – DB Development | 50 |  |  |
| Task 3 – Project Management |  Self & Peer Evaluation  (Note: required to scale group work) | 15 |  |  |
| Task 4 – Presentation | 15 |  |  |
| **Total** | **100** |  |  |

**Assessment Mapping**

After completing this assessment, the student will have met the following learning outcomes related to the graduate profile outcome.

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| --- | --- | --- | --- | --- | --- |
| **Graduate Profile Outcome** | **Learning Outcome** | **Task 1** | **Task 2** | **Task 3** | **Task 4** |
| Apply industry relevant project management and planning tools and methodologies to meet the requirements of specified briefs. | 1. Apply project planning tools and methodologies and project management to meet organisational database requirements. | *  |  |  |  |
| Apply knowledge of database design, development, queries and management, to support organisational information systems requirements. | 1. Apply IS application skills in database design and development to manage and support organisational database requirements. |  |  |  |  |
| Communicate and collaborate clearly and professionally to maintain relationships and achieve objectives in a range of contexts within the IT industry. | 1. Communicate professionally to design, develop and manage a database project. |  |  |  |  |

**Assessment submission instructions:**

* Upload in the assessment TAB in Moodle by the due date

**Task 1: Project Plan (Part A & B) [Total = 20 marks]**

**Instructions:**

* This task has 2 parts and for Part B, you will work in your group to complete this task.
* The response for part A must be submitted in a Microsoft Word document on Moodle. Maximum 700 words.
* You may use a software tool (e.g., Microsoft Excel) for part B to assist you in developing the project plan. Your plan file must be submitted on Moodle.

**Part A** **(8 marks)**

Identify two advantages and two disadvantages of using the waterfall methodology for your project and explain why you consider them as such.

**Part B** **(12 marks)**

Develop a detailed project plan (i.e., Gantt Chart or could use Trello, OneNote or an app like MS ToDoinstead) using the headings listed below.

Your plan must include:

* key milestones
* deliverables
* timelines
* tasks (deliverables broken down by milestone)
* work schedule identifying who is doing what
* relationships between tasks (dependencies)

**Task 2: Database Development (Part A – group & Part B - individual) [Total = 50 marks]**

**Instructions:**

* You will work in your group and individually to complete these tasks.
* In your group, you will development tables for your database, based on your project planning from Task 1 (Part B).
* Follow the steps below:

**Steps (Part A – Group work creating tables as instructed)**

1. Use the set of business rules and data dictionary supplied in the scenario assigned to your group to discuss and create appropriate tables that include attributes with data types and validation rules etc. Ideally ensure these are correct before adding records of data.
2. Check for accuracy and upload your groups database.

**Steps (Part B – Individual work creating queries, forms and reports)**

1. You will need to add at least one row of data to each table for testing purposes and then create an entity relationship diagram and enforce referential integrity.
2. Test data rules and data validation and include at least 5 records of data to each table.
3. Test and save at least 5 different queries supplied in the scenario.
4. Demonstrate editing data tasks eg add and delete
5. Create and save the forms and reports.

**Task 3 (Part A): Project Management** **[10 marks]**

**PART A**

**Instructions:**

* You will organise a meeting with your group and discuss answers for the questions below.
* You will provide answer the questions below in your own words and submit individually.
* The response for this task must be submitted in a word document following the layout requirements as follows. Maximum 700 words.

**You need to discuss the following questions:**

1. how well did your group plan work?
2. what changes did your group make to the plan?
3. how did you monitor your progress as a team?
4. how did you manage document and version control within the team?
5. what risks related to the project did you identify as a team and how did you manage these risks?

**Task 3 (Part B): Self & Peer assessment [5 marks]**

**Part B**

**Instructions:**

* Use the form provided to evaluate yourself and your group members.
* Write **your name** and the names of each **team member** you are evaluating and add comments to support your ratings.
* For each evaluation criteria in the form, use the scale given below to rate each person
* 0 = did not contribute
* 1 = willing but barely contributed/not successful
* 2 = under average/minimal contribution
* 3 = average contribution
* 4 = above average contribution
* 5 = outstanding contribution
* If you have more members then add an extra column to the form.
* The marks scored in this evaluation will be used to assess members contribution to the project.

**Self and Peer Evaluation Form**

Your name: Date

Team member’s name/s:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Evaluation Criteria** | **Score** | **Your Name** | **Team member A** | **Team member B** | **Team member C** |
| Task 1: Project plan (Part B – Ghantt Chart)   * Actively communicates, cooperative and supportive attitude * Contributes meaningfully to the project and completes assigned task/s on time | **/5** |  |  |  |  |
| Task 2: Database Design (Tables/ERD)   * Actively communicates, cooperative and supportive attitude * Contributes meaningfully to the project and completes assigned task/s on time | **/5** |  |  |  |  |
| Task 3: Project Management (Questions)   * Actively communicates, cooperative and supportive attitude * Contributes meaningfully to the project and completes assigned task/s on time | **/5** |  |  |  |  |
| **TOTAL (out of 20) = 5%** | **20** |  |  |  |  |
| **Comments:** | | | | | |

**Information:**

* The marks scored in this evaluation will be used to assess members contribution to the project.

**Example:**

* Below is an example of how the marks will be calculated.
* Student will complete the form for themselves and other group members   
  (e.g., student A will rate themselves and student B and C).
* Your lecturer will average the marks for each student.

For example: student A gave themselves 5/20, student B gave student A 10/20 and student C gave student A 0/20. The average for student A is 5/20

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| --- | --- | --- | --- | --- |
|  | **A** | B | C | **Average for all evaluator** |
| **A** | **5** | 10 | 0 | **5** (15/3) |
| B | 5 | 20 | 5 | **10** (30/3) |
| C | 20 | 20 | 20 | **20** (60/3) |

* If for the practical task, the lecturer scored your group work 60/100

Student C scored 20/20 in the self and peer evaluation which is the highest

* Your lecturer will calculate the difference between other students and the highest marks

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| --- | --- | --- |
| Student | Average | Difference |
| A | **5** | 20 - 5 = 15 |
| B | **10** | 20 -10 =10 |
| C | **20** | 20 - 20 = 0 |

Student A scored 60 - 15 = 45/100, Student B scored 60 - 10 = 50/100, Student C scores 60 - 0 = 60/100

**Task 4: Database Presentation**  **[15 marks]**

**Instructions:**

* Oral presentations will be held in the last week of the course and you will present your completed project to your class to complete this task.
* Your presentation should be approximately 5 minutes plus an additional question and answer time.
* The structure of your presentation needs to include the following:
  + introduction
  + tasks
  + conclusion/summary
* You will prepare a visual presentation using Microsoft PowerPoint or similar software.
* Your presentation might be recorded for marking and moderation purposes.
* Familiarise yourself with the attached observation checklist to ensure you meet the requirements. Your lecturer will complete the attached observation checklist.

**Presentation observation checklist**

**Name of Student:**

**Date of Presentation**:

|  |  |  |  |
| --- | --- | --- | --- |
| **Criteria** | **Max Marks** | **Your mark** | **Comment** |
| **Timing:** Student spoke for 5 minutes | 2 |  |  |
| **Content**:  Student demonstrates full knowledge with explanations and elaboration. | 4 |  |  |
| **Body language** (eg: voice, speed, eye contact, clarity, tone, good rapport with audience, movement and gestures) | 4 |  |  |
| **Structure**: Student presents information in logical, interesting sequence which audience can follow. | 2.5 |  |  |
| **Effective use of visual aids** | 2.5 |  |  |
| **TOTAL** | **15** |  |  |
| **Extra Notes:** | | |  |
| Indicate if the student has met the criteria during the process of achieving the objective.  Use the space to add comment for feedback to the student and for moderation purposes. | | | | |

**Name of Observer:**

**Observer’s Signature: Date:**