# COS20015 – Fundamentals of Data Management

Learning Summary Report

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# **Self-Assessment Details**

The following checklists provide an overview of my self-assessment for this unit.

|                               | Pass<br>(P) | Credit<br>(C) | Distinction (D) | High Distinction (HD) |
|-------------------------------|-------------|---------------|-----------------|-----------------------|
| Self-Assessment (please tick) |             |               |                 | <b>√</b>              |

#### Self-assessment Statement

| Pass level   | Included<br>(please tick) |
|--|---------------------------|
| Learning Summary Report  | V                         |
| Test is Complete on Canvas OR required quiz score achieved       | V                         |
| All Pass-Level tutorial assessments marked as complete in Canvas | √                         |

| Credit level – in addition to Pass level criteria:                 | Included<br>(please tick) |
|--|---------------------------|
| All Credit-level tutorial assessments marked as complete in Canvas | √                         |
| All Credit-level quizzes marked as correct on Canvas               | V                         |

| Distinction level – in addition to Credit level criteria               | Included<br>(please tick) |
|--|---------------------------|
| Project report has been submitted on Canvas in the Distinction section |                           |
| Project video has been submitted on Canvas in the Distinction section  |                           |

| High Distinction level – in addition to Credit level criteria | Included (please tick) |
|---|------------------------|
| Project report has been submitted on Canvas in the HD section | $\checkmark$           |

# **Declaration**

I declare that this portfolio is my individual work. I have not copied from any other student's work or from any other source except where due acknowledgment is made explicitly in the text, nor has any part of this submission been written for me by another person.

| Signature: | Serena |  |
|------------|--------|--|
|            |        |  |

### Reflection

## The most important things I learnt:

[ Think about topics covered, but also other general things you may have learnt. Think about what you have learnt in this subject, and reflect on what you think were key learning points, or incidents. Did you learn what you wanted/expected to learn? ]

The most important things that I learned in this course is I learned about the text processing and regular expressions in the first week assessment. Furthermore, I also learned about how to create and navigation the tree-structured data formats in the topic of a Semi-Structed Data: XML and JSON. Next, about the UML diagram, I learned how to build the UML diagrams, draw the relationship between the entity based on the topic and mark the cardinalities & define Primary key and Foreign key. Moreover, about the Functional Dependencies and Normalisation, I learned about 1NF, 2NF and 3NF. In addition, I also learned SQL, I also learned how to write SQL and I know how to use CREATE, ALTER, DROP tables in database. That is what I expected to learn this unit.

The key learning points in this unit were how to organise data, effectively search and sort information, and use techniques to optimise these operations.

## The things that helped me most were:

The things that helped me most were my tutor lecture every week. She conveys the knowledge in the easy way to understand to her students. The module lectures and weekly tutorials helped me overcome the obstacle of the tutorial assessments. Furthermore, they helped me understand and strengthen my expertise.

Weekly assignments, including Pass and Credit tasks, helped me cultivate my knowledge and understanding of each task. This allowed me to assess my level of ability and study further to solve any questions that remained unanswered.

# I found the following topics particularly challenging:

The one I found particularly challenging was Normalisation topic, especially 2NF and 3NF. I got stuck at 3NF because I always make confusion between 2NF and 3NF. When I think I did 2NF correctly, it is the outcome of 3NF.

#### I found the following topics particularly interesting:

The topic I found particularly interesting was SQL DDL, DML. I enjoy when I write a SQL query commands.

# I feel I learnt these topics, concepts, and/or tools really well:

I believe I learned Query and SQL concepts well. I understand how to apply these subjects to my database and modify the data. I am able to generate and understand the relationship lines in an UML or ERD diagram.

I'm aware that virtually SQL (structured query language) is used to manage database objects and data.

# I still need to work on the following areas:

Describe the components of each entity in relational schema, define the weak and strong entities or largest table.

#### My progress in this unit was ...:

Because I have a lot of assignment from other units and this unit, that's why I did all next week tasks in the current week. For example, I did week 6 tasks when I was in week 5. That's

what the method I used to do during this unit. After that, when I was in week 6, I came to explain my work to my tutor and fix-resubmit in class time if I got some mistakes.

In terms of challenge, this topic will not be too tough, as I said above, our lecturer will explain each task in depth to us, so that we can all obtain a clear explanation and offer additional help instructions, therefore this unit when compared to other units will not be much difficult.

# This unit will help me in the future:

Overall, I learnt that creating queries is a powerful method/feature that improves analysis, data management and reporting capabilities while improving efficiency and data integrity. This course provided me with a better understanding of how corporate organisations use database administration and processing to examine data. This effort will help me to become a knowledgeable company data analyst in the future.

# If I did this unit again I would do the following things differently:

I will follow the same method I did during this unit, or I will study the lectures carefully and take note some key points from the lectures.

#### Other ...:

This is a great unit for me to get the chance to get in touch with database analysis. I learned many knowledges from data management that I have never studied before.