B9IS100-Advanced Databases CA-1

Topic

<u>Individual Report for Food Menu TakeAway Application Database Design</u>

BY

Name: Enoja Livinus Onyebuchi
Reg No: 10606259

Table of Contents

1.0 My Contributions

I personally enjoyed working on this topic. I had to research extensively on key concepts in the database design. My team started the project by organizing a project initiation meeting where we agreed on the topic and scope. I was chosen as the project lead and was responsible for drafting the business case.

Here are the areas I worked on asides, assignment of responsibilities and follow up with all team members to ensure they deliver on milestones as agreed.

- Design of the hybrid database schema and normalization to ensure all tables are in 3 normal form.
- Produced the create tables queries. I ensured the queries implements exactly the agreed database ER diagram with the integrity constraints captured.
- Wrote the project reports with contributions from my team members in clarifying areas we needed to unanimously agree to.
- Created the parameterized stored procedures for fetching, update and searching of records in XML schema attributes on the hybrid table (Supplier)
- The integration of our database system to a third-party analytics tool called Metabase for easier and flexible data reporting was done by me.
- The data diagram for the database system was created by me. I generate the diagram after creating the tables and populating the tables with records.

2.0 Knowledge Acquired

This project exposed me to many important concepts that had never been cleared to me prior to this module.

- The concept of triggers, functions, stored procedures and hybrid database system became much clear to me.
- I learnt the importance of good database design at the beginning of a project to avoid complications and bugs in the system as the project grows.
- The importance of having your table in third normal form cannot be over emphasized. It makes life easier in the long run. All time spent in ensures that all tables in the system are normalized is worth it.
- Another important knowledge is the need to have a clearly defined business rules during the design of a database system. This business rules must be derived from the end-user perspective. That is why it is pertinent for the project team to conduct proper requirement gathering before the design of a database system for a project commences.
- I am now much comfortable with writing fast and efficient SQL queries for reporting purposes.
- Prior to this module, I am more familiar with oracle, MySQL and PostgreSQL database servers. This project has exposed me to Microsoft SQL server and its dependent tools for configuration management. I learnt how to create database users with adequate privileges required. Also learnt how to allow external connection to Microsoft SQL server.
- Asides technical knowledge acquired during the execution of this project, I also improved on my ability to relate better with team members. Throughout the time of this project, I engaged my team members with open mind always willing to give a listening ear to questions or clarifications when required.
- During the writing of the reports, I had to study the processes and recommended features of a good academic report as recognized by Dublin Business School. I had to

learn the many ways of citation, sections of academic reports, language and tone of reporting.

3.0 Conclusion

I appreciate all my team members for putting in all efforts possible to ensure we conclude the project and get the reporting done. Their collaboration and cooperation are highly commendable. If I am given the opportunity to work with them again ai will gladly accept. I hope to continue work on this project to complete the web interface implementation is a either Django, angular or using any other enterprise framework that will make development faster and efficient.