## Module ICT3715

## INFORMATION AND COMMUNICATION TECHNOLOGY PROJECT

STUDENT NUMBER (Student completes)									
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9	1	0	1	1	3	5	8	0	7	0	8	6

No handwritten assignments will be accepted.

#### **INSTRUCTIONS:**

Complete this Front Page (page 1)

Complete the Plagiarism Pledge (page 2). Your Assessment (assignment) will not be assessed without this.

After you have completed the front page with your information, the plagiarism pledge, and Assessment (Assignment) 1 with Section A to C, save the document as a PDF document.

You must save your Assessment (Assignment) 1 as a PDF document, or it will not be assessed.

Keep a copy of the original should there be problem with the upload.

PLAGIARISM PLEDGE BY THE STUDENT

1. I have read Unisa's plagiarism policy.

2. I understand Unisa's plagiarism policy.

3. I agree to abide by Unisa's plagiarism policy.

4. I have read the direct copying, plagiarism, and "patch-writing" document.

5. I understand what direct copying, plagiarism, and "patch-writing" is.

6. I undertake to avoid copying directly, plagiarism and patch writing.

7. All academic work, written or otherwise, that I submit is expected to be the result of my

own skill and labour.

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.

9. The marker has the right to refuse to assess the assignment and the system if plagiarism

is detected.

10. [Here you can add your references that you have used e.g., information taken from the

Internet]

Student name and Surname: Lebogang Peter Sekaleli

Student number: 49740598

LP SEKALELI

Student signature:

Date: 06 May 2024

## Assessment (Assignment) 1

#### Notes:

This is a compulsory assessment. The assessment contributes to 30% of your year mark.

#### System | Online Bus Registration system for a Community

Due to excessive administrative actions, the Strive High Secondary School preferred to move from a paper base bus registration system to an online bus registration system. The purpose of this Module is to examine the paper base bus registration system and to **design**, **develop**, **implement**, **test**, and **demonstrate the new system for your final examination**.

**Note:** You are not allowed to develop any other system or use any other data that was not prescribed or provided to you.

The system must be designed and developed as an online system, that is both web-based and mobile-friendly. For demonstration purposes, the system and database must be hosted locally.

The outcome of this assessment will form part of the design, development, and implementation of the database and the system. Your implementation effort will be greatly reduced if you take care with the preparation phases of the system.

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#### **Instructions:**

- ❖ Make sure that you did complete the instructions on page 1 of this document (template)
- Complete the header and footer with your own information
- ❖ Add your practical system content to the document
- \* Remove everything that is in brackets []
- Make sure that your Table of Content is updated
- Save the document as PDF, e.g., 12345678\_ICT3715\_01.pdf, (replace 1234568 with your student number)
- When you are done submit via myModules 2024 on the Module Site under Assessment
  1

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#### 1 Assessment 1

### 1.1 Section A [4]

#### 1.1.1 Programming Languages (3)

The programming languages that will be used are HTML5, BootStrap 5, and PHP

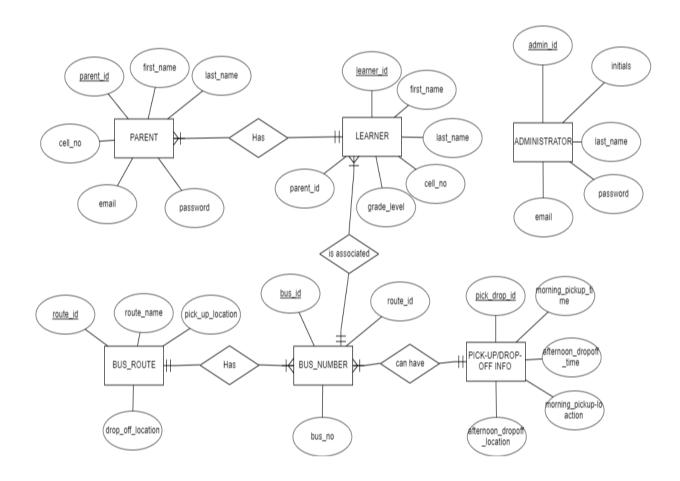
#### 1.1.2 Database (1)

The database/s that will be used are MySQL

## 1.2 Section B [28]

#### 1.2.1 Activity Diagram (16)

#### 1.2.2 ERD Diagram (12)



# 1.3 Section C (Backup and Recovery for the Database and Programming code) [4]

#### 1.3.1 Backup and Recovery Software for the Database (2)

[Identified two types of software that you can use for the backup and recovery of your database. Remember software must be free and not have a trail period, that can expire before your examination of your system at the end of the year]

- MySQLDumper This is an open-source PHP/MySQL-based backup utility that
  allows me to create backups of my MySQL databases. It offers a user-friendly
  interface and supports both full and partial backups. I can schedule backups and
  store them locally or remotely. Since it's open-source, there are no trial periods or
  limitations.
- phpMyBackupPro Another open-source PHP-based backup tool, allows me to backup my MySQL databases through a web-based interface. It offers features like automatic scheduling, compression of backups, and support for multiple backup destinations (e.g., FTP, email). It's widely used and reliable for database backup and recovery tasks.

Both options are free, open-source, and designed specifically for MySQL databases, making them suitable for my PHP/MySQL project without any trial limitations.

## 1.3.2 Backup and Recovery process for the Programming code and your Portfolio (assessments) (2)

[Identified what process / software you can use for the backup and recovery of your programming code and your Portfolio (assessments). Remember software must be free and not have a trail period, that can expire before your examination of your system at the end of the year]

1. **Version Control System** – I am going to use version control system to manage and back up my code and assignments files. Git is a popular and free distributed

version control system that I can use. I can set up a Git repository to store my code

and project files, track changes, and collaborate with others if needed.

2. **GitHub** - Once I have my Git repository set up, I can use a platform like GitHub to

host my code and assignments files remotely. GitHub offer free plans for public

repositories, allowing me to store my code and portfolio assessments securely in

the cloud. I can also take advantage of features like version history, collaboration

tools, and issue tracking.

By using Git along with GitHub, I can ensure that my programming code and

portfolio assessments are backed up, version-controlled, and easily recoverable

without any cost. Plus, I will have the added benefit of collaboration and sharing

options provided by these platforms.

Total of Assessment 1 = 36 marks