



GA10003/4 – Information Systems Development Assignment – 2

Basic Guidelines

Hand in Method: My Dundee

Deadline for Submission: Sunday, 2nd April 2023 23.59 Hrs

Feedback Date: Sunday 7th May 2023 23.59 Hrs – 3 weeks after deadline (*excluding Easter break*)

Penalty for late submission: One grade point per day late (meaning if a submission is one day late and marked as a C2 it will receive a C3 grade). A day is defined as every 24 hours following the submission deadline including weekends and holidays. Assignments submitted more than 5 days after the agreed deadline will receive a zero mark (AB).

Font & Spacing: Times New Roman & 1.5

Word Count: A Maximum 3000 words is allowed.

Total Credit: This assignment is worth 10 credits (*out of 120 for the year*).

Overview of the Assignment

Case Study

Consider for a moment that you are an administrator at a school and that it is your job to compile the personal information of the students and store it in paper files. In the office, you can find a Student Personal Profile (SPP) form to fill out. When a student is accepted into a program, he or she is required to report to the departmental office of that program to provide personal information such as their student id, first name, middle name, last name, gender, age, the department to which they were admitted, the year in which they were admitted, and so on.

Part 1 – (5 Credits)

1a - Database Design & OOP

1.
 - i. Identify any two objects from the case study apart from STUDENT. Describe the structure of the two tables. Show in a tabular form all the properties of both tables including, field names, data types, primary/foreign keys and any constraints placed on the tables.
 - ii. Assuming that STUDENT is a parent table and that STUDENT DETAILS is a child table. Draw an Entity Relationship Diagram (ERD) to show this relationship.
 - iii. Implement a simple database using Microsoft Access that contains 2 tables: STUDENT and STUDENT DETAILS.



1b – HTML & CSS

2.
 - i. Design a web page using HTML and CSS to represent the Student Personal Profile (SPP) form (that is, the type of form that students would fill out in the school office). The form should capture all key details that a student would normally be required to provide to the school. Appropriate choice of HTML elements that maps to the properties of the form should be taken into consideration.
 - ii. Test the web page on a browser such as Microsoft Edge or Chrome. Print out the screenshot of the Student Personal Profile (SPP) web page.

Part 2 – (5 Credits)

Source Control

3. Describe four areas in which Source/Version Control (with Git) could be useful to your organization. Discuss the challenges associated with implementing source/version control and the potential solutions.
4. Perform the following source/version control operations:
 - i. Create a directory in your local disk and initialize this local repository using **git**.
 - ii. Create a new file **CommitAssignemnt.txt** in Notepad. Add and commit **CommitAssignemnt.txt** into the local repo. Also, commit the MS Access database file created in question 2 to the local repo.
 - iii. Create a GitHub Account using the link below:
<https://github.com/signup?source=login>
 - iv. Create a new repository on GitHub. Make a clone of the GitHub repo to a local repo on your computer.

Additional Information:

1. The assignment should be written up as a report with appropriate sections as outlined below:

Title Page

Table of Contents

Introduction

Case Study Description

Assignment

Question 1

Question 2

Question 3

Question 4



Conclusion

References

Appendix

2. **The length of the report should not be more than 3000 words and not less than 2000 words.** The report should cover all aspects of the assignment. References should be used where applicable.
3. *Documents and other relevant evidence (e.g., screenshots, diagrams, image files, java classes files, SQL scripts, source code, URL of online repository etc.) should be indicated in the Appendix section as necessary.*
4. Submit your screenshots of the MS Access, and Git commands as well as the zip file that contains the database.

Marking Guidance

In addition to the points above, the table below provides guidance on how marks would be allotted for this assignment.

Handing in: Submissions should be made through My Dundee. Please, remember that late work will be penalised according to the rules outlined in the student handbook. Please submit your work as a PDF or MS Word file.

Marking Scale

The University Marking Scale can be found in the Student Handbook on My Dundee or here: <https://www.dundee.ac.uk/registry/exams/assessmentscales/>

Good Academic Practice

Please see the Student Handbook on My Dundee for information about marking, plagiarism, and referencing.