### **Assignment Guidelines**

Students must create a system using the PYTHON language based on the requirements. The details of the assignment:

## 1. Assignment Title Registration.

- a) The leader must register the title in the link HERE. The title will be entitled on a first-come, first-serve basis.
- b) Due date: 18 April 2025 Friday (Week 4) before 5.00 pm.
- c) Minimum and Maximum no of students: 4 persons.

# 2. Assignment Submission.

- a) Softcopy (Submit to eBwise) Submit by the Group Leader:
  - i. Assignment Evaluation Form.
  - ii. Report file. Example:
  - iii. The source code is in the .py file. Name the file according to your group number and title. Example: GROUP\_1 Online Banking System.py)
  - iv. The text files that contain the data of the data stored system (Example: product.txt).
  - v. Presentation Video. (Example: GROUP\_1.mp4)
- b) Due date: 26 May 2025 Monday (Week 10) before 5.00 pm.

### 3. Assignment Descriptions:

In this assignment, you must develop a mini information system consisting of a business program that gets user input and displays the output. Create a good business flow system representing a real system to use. You may add any additional functions or algorithms to your system.

- 1. You should provide at least a total of 10 records with a minimum of 1000 code lines. Exclude/remove empty lines and comments that exist in the code.
- 2. Create a **GitHub** repository for version control.
  - The group leader must create the repository and add group members and the lecturer as collaborators.
- 3. A system which requires you to include these functions:
  - a) Two modules:
    - User- Regular user functionalities
    - Admin modules Administrative and management functionalities.
  - b) **Functions** for both modules:
    - 1. Register for user.
    - 2. Login and Logout: user and admin.
    - 3. Display information or menu: user and admin.
    - 4. Add new Record. Make a reservation or add to the cart : user. Add/update product : admin.
    - 5. Edit/Update Record : user and admin.
    - 6. Make a payment : user.
    - 7. Update reservation status: admin.

- 8. Display the receipt to text file: user and admin.
- 9. Display record : user and admin. Show all possible calculations on price or total item/price/value.
- 10. Search record: user and admin.
- 11. Sort record: user and admin.
- 12. Delete record : admin.
- 13. Summary report : admin. Example: monthly sale.
- 14. Read/Write the input/output from/to the .txt file.

#### c) Requirements:

- 1. Apply at least THREE (10) functions in the system.
- 2. Apply at least TWO (5) control structures.
- 3. Apply at least TWO (5) looping statements.
- 4. Apply at least TWO (2) file processing for read, write, or append.

#### d) Report:

The report must be in the PDF file format only. Student need to write a complete report, including a cover page and the document must consist of the following:

- 1. Introduction
  - Topic selection
  - System overview and description
  - Objectives of the project
  - Scope and limitations
  - Key system features
- 2. Methodology (the system functions in detail).
  - Explain how you store and organize data in memory
  - Explain the sorting and searching algorithms applied
  - Mention any additional algorithms used beyond core requirements
- 3. System Features & Output (Screenshots). Include the user interface of the system.
- 4. Python implementation/code.
- 5. Conclusion.
- 6. Appendix.
  - References & Bibliography. All URLs are used.
  - AI Tool Usage.
    - State the AI tools such as ChatGPT.
    - Screenshots of the parts that were AI-assisted and how they were implemented.
  - Git Log (Screenshots)
    - o Show a list of commits from your repository.
    - o Include contribution logs from all group members
    - o Use git log to display and explain team collaboration history

- e) Important Guidelines for algorithm Implementation
  - Do not use any built-in functions or libraries for algorithm implementation.
  - All code must be original, written manually, and visible in the source file.
  - The program should rely on raw arrays, pointers, and your own logic for implementing the complete system.
  - Do not use any imported file.
  - All code must be written in one file only and name it with your group name. Example: Group1.py.
  - Error handling mechanisms should be implemented in both the User and Staff/Admin modules. Example: User enters the wrong password; the system should display an alert message. If more than 3 times enter the wrong password, the system should terminate.

## 4. Group Presentation Video:

## a) Presentation Guidelines

- The presentation must show every single function in the system that starts from the user module and ends at the admin module.
- The presentation must include all the text files such as receipt/ summary report/ user/admin/product.
- Allocated time must be at least 30 minutes.
- Presentation must involve all members. During the presentation, student must show their face.
- The presentation video extension must be mp4.

#### b) Presentation Requirements

• Formal attire is mandatory for all presenters. The beginning of the video must show the student's attire.

# **Important Notes:**

- No late submission is accepted.
- Copying or other forms of cheating is forbidden (0 marks to all members involved).

Mark Deduction for report similarity percentage and AI :Any (Report Similarity or AI Writing Detection) %	Deduction Mark Report	Deduction Mark Python(Code)
20%-30%	10%	10%
40%-50%	20%	20%
60%-70%	30%	30%
80%-90%	40%	40%
100%	50%	50%