



Prifysgol Cymru
Y Drindod Dewi Sant
University of Wales
Trinity Saint David

ACCA5036

Scripting and Programming Concepts

Assessment Brief

Trawsnewid Addysg; Trawsnewid Bywydau
Transforming Education; Transforming Lives



www.uwtsd.ac.uk

Assessment Overview

- Module: Scripting and Programming Concepts (ACCA5036)
- Contribution to Final Grade : 100%
- Programming Language : Python
- Word Count (or Equivalent) : 4500
- Submission Deadline : 22nd August 2025, 14:00
- Submission:
 - Report via Turnitin
 - Code via GitHub link in the report

Project Scenario: Bakery Inventory System

You are tasked with creating a Python-based inventory system for *Sweet Surrender Bakery* to help them track ingredient levels using dictionaries or lists. No database required.

Functional Requirements (in Python):

- 1. Add Ingredients** – Add new ingredients and their quantities.
- 2. Check Inventory** – List all ingredients with current quantities.
- 3. Update Levels** – Adjust ingredient quantities after use.
- 4. Search Ingredient** – Search by ingredient name to display current stock.

Report Structure & Documentation Requirements

1. Analysis (500 words)

- Define the business problem and goals.
- Identify system features and explain chosen functionalities.

Report Structure & Documentation Requirements

2. Software Design and Development

- **Design:**
 - Flowcharts (show program logic visually)
 - Pseudocode (for main functions)
- **Implementation Decisions:**
 - Explain choice of **data structures** (lists, dictionaries)
 - Justify use of **control structures, functions**, and any **libraries**
- **Source Code:**
 - Paste annotated Python code (with comments) into the report
 - Include link to GitHub repository

Report Structure & Documentation Requirements

3. Testing and Debugging Report

- Explain importance of testing
- Identify error types: syntax, logic
- Create **test cases** (including edge cases)
- Include **screenshots + commentary** showing:
 - Correct input/output
 - Validation handling for incorrect input

Report Structure & Documentation Requirements

4. Evaluation & Reflection

- Reflect on:
 - Challenges faced and solutions
 - Possible future improvements to the system
 - Personal learning and skill development

Report Structure & Documentation Requirements

5. References & Appendices

- Use **IEEE referencing**
- Include all citations used in your design, code decisions, and testing discussion
- Append flowcharts, extra screenshots, and GitHub prompts if relevant

Report Structure & Documentation Requirements

Key Deliverables

1. **Python Inventory System** with:

1. Clear user interface in console
2. Functional CRUD operations
3. Proper use of functions and validation

2. **Well-structured report** containing:

1. GitHub code link
2. Flowchart and pseudocode
3. Testing screenshots
4. Evaluation and references

Report Structure & Documentation Requirements

Assessment Criteria Highlights

Marks will be based on:

Criteria	Weight
Engagement with Literature	10%
Knowledge & Understanding	20%
Cognitive & Intellectual Skills	20%
Practical Programming Skills	40%
Professional Writing & Presentation	10%