FACULTY OF COMPUTING
UTM Johor Bahru

SECB3203-01(PROGRAMMING FOR BIOINFORMATIC)

Semester 01 2025/2026
Section 01

Progress 1

Faculty of Computing

Dataset:
https://www.kaggle.com/datasets/uciml/mushroom-classification

STUDENT NAME	MATRIC NUMBER
NURUL NATALIA BINTI ROSNIZAM	A23CS0165
ADLINA NARISYA BINTI ISMAIL	A23CS0033
NAZATUL NADHIRAH BINTI SABTU	A23CS0144

1.0   Software and Hardware Requirements

1. Software Requirements

   - Operating System : Windows 11

   - Programming Language : Python 3.13

   - Development Environment : Visual Studio Code

   - Libraries : pandas, numpy, matplotlib, scikit-learn, os, seaborn

   - Dataset Source : Kaggle

2. Hardware

   - **Processor (CPU):** The central processing unit is responsible for executing all program instructions and handling computations. A modern processor allows data operations and analysis tasks to be performed quickly.

   - **Memory (RAM):** Sufficient RAM is needed to load the dataset and perform multiple data operations without slowing down the system.

   - **Storage:** Storage is needed to save the dataset, code and results safely.

   - **Graphics Processing Unit (GPU):** Having a GPU can accelerate plotting and rendering of visualizations in some environments.

Component	Specification
Processor (CPU)	Intel® Core(™) i5-8350U or equivalent
Memory (RAM)	16.0 GB / 32.0 GB
Storage	At least 1 GB free space
GPU	8 GB

1.1 Flowchart of Proposed Approach