

**Batch: B4**

**Roll No.: 1711086**

**Experiment / assignment / tutorial No.: 9**

**Grade: AA / AB / BB / BC / CC / CD /DD**

**Signature of the Staff In-charge with date**

**Title: Python Application Development**

**AIM :** To develop a python application for a real world problem

## Expected OUTCOME of Experiment:

**CO2:** Interpret different Decision Making statements, Functions, Object oriented programming in Python.

**CO3:** Explain how to design GUI Applications in Python and evaluate different database operations

## Books/ Journals/ Websites referred:

1. [**https://realpython.com/python-gui-tkinter/**](https://realpython.com/python-gui-tkinter/)
2. [**https://docs.python.org/3/library/tk.html**](https://docs.python.org/3/library/tk.html)
3. [**https://www.w3schools.com/python/python\_mongodb\_getstarted.asp**](https://www.w3schools.com/python/python_mongodb_getstarted.asp)
4. [**https://docs.mongodb.com/manual/tutorial/**](https://docs.mongodb.com/manual/tutorial/)

**GitHub Link of Project files :**



**Problem definition:**

In this simple system, he/she can add/enter complaints of certain things easily.While

complaining,  the user has to enter his/her full name, select gender and write comments about any

topic the user wants to. All the entered complaints are stored in a database and the user can easily

view a list of complaints displaying the user’s name with their id number, gender, and comments.

There is an external database connection in this mini project to save user’s data permanently and

retrieve it.

# Scope:

The purpose of the whole project is to create a system for apply to all permanent and temporary employees of the Office as well as contractors, employment agency staff, sub-contractors, complainants, work experience students and volunteers (who are defined as workers in the Work Health and Safety Act 2011) while working in the workplace.  
  
This project system applies to complaints about any of this Office’s functions, including service delivery complaints and internal review requests, subject to the exclusions set out.

The project scope to give a simple and basic but attractive to simplify for the work of administrators and staff.



# Component Diagram:

Complaint Management System

Complaint Management System

# 

# 

Enter Name

Gender

List of Complaints

Complaint Message

# 

Database

**Packages used:**

## Tkinter

* + Tkinter is the standard Python interface to the Tk GUI toolkit
  + Used to create the UI of the application

## Sqlite3

Database is implemented by a Python module Sqlite3. It is a SQL based database



# Difficulties faced and measures taken to resolve:

* While using, Tkinter is a nightmare for User Interface Designing. You have to manually position each and every component and widget. It is a very tedious and a single mistake can destroy the entire GUI . So , in-order to solve this problem we just made use of the images and let the tkinter only do the functionality part, making the GUI looks a bit better. This difficulties only I faced.

# Team work (Contribution of each member):

|  |  |  |  |
| --- | --- | --- | --- |
| **Task** | **Student1** | **Student2** | **Student3** |
| **UI:** | ✓ | x | X |
| **Design** | ✓ | X | X |
| **Coding** | ✓ | X | X |
| **Database:** | ✓ | X | X |
| **Schema Design** | ✓ | X | x |
| **Query Design** | ✓ | X | X |
| **Coding** | ✓ | x | X |
| **Testing:** |  |  |  |
| **Test Cases** | ✓ | X | X |
| **Presentation** | ✓ | X | x |