# **Goal Manager**

# A PROJECT REPORT FOR STUDENTS

## FOR CBSE 2021 EXAMINATION

[AS A PART OF THE COMPUTER SCIENCE COURSE (083)]

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## **ACKNOWLEDGEMENT**

WE undertook this Project work, as the part of our XII-Computer Science course(083). we had tried to apply my best of knowledge and experience, gained during the study and class work experience. However, developing software system is generally a quite complex and

time-consuming process. It requires a systematic study, insight vision and professional approach during the design and development. Moreover, the developer always feels the need, the help and good wishes of the people near you, who have considerable experience and idea.

We would like to extend my sincere thanks and gratitude to my teacher

<u>Tarang Ma'am</u>, for giving valuable time and moral support to develop this software.

# **INTRODUCTION**

**GOAL MANAGER** is a python project with SQL connectivity. It is a project to help school students focus and help them track their Goals. Gives a Career path and helps to set and achieve goals and keeps motivating students.

During coding and design of the software Project, **Python IDLE**, as a powerful front-end tool is used for getting Graphical User Interface, GUI (Using **Tkinter Library**) based integrated platform and coding simplicity. As a back-end a powerful, open source RDBMS, **MySQL** is used as per requirement of the CBSE curriculum of Computer Science Course (083).

## **REQUIRNMENTS / INSTALLATION**

- Pip install mysql.connector
- Pip install time
- Pip install Json
- Pip install scheduler
- Pip install Tkinter
- Pip install Random(Usually Per-installed)

## MODULES/LIBRARIES USED IN THE PROJECT

Throughout the development of the project, many python modules have been used.

#### 1. Mysql.connector

MySQL Connector/Python enables Python programs to access MySQL databases, using an API that is compliant with the Python Database API Specification v2.0 (PEP 249). It is written in pure Python and does not have any dependencies except for the Python Standard Library. This module does not come built-in with Python and has to be downloaded.

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#### 2. Tkinter

Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit. Tkinter provides various controls, such as buttons, labels and text boxes used in a GUI application. These controls are commonly called widgets.

All Tkinter widgets have access to specific geometry management methods, which have the purpose of organizing widgets throughout the parent widget area. Tkinter exposes the following geometry manager classes: pack, grid, and place.

#### 3. Random

Python offers random module that can generate random numbers. These are pseudo-random numbers. It also contains functions which randomly selects an integer from a range or a random element from a list.

### 4. Json

JSON stands for JavaScript Object Notation. It is a lightweight data interchange format. It is a language-independent and cross platform text format, supported by many programming languages. This format is used for data exchange between the web server and clients.

JSON format is similar to pickle. However, pickle serialization is Python specific whereas JSON format is implemented by many languages hence has become universal standard. Functionality and interface of json module in Python's standard library is similar to pickle and marshal modules.

#### 5. <u>Time</u>

The Python time module provides many ways of representing time in code, such as objects, numbers, and strings. It also provides functionality other than representing time, like waiting during code execution and measuring the efficiency of your code.

This module begins the recording time from the epoch. Epoch means time in history and it begins on 1st January 1970.

## 6. Scheduler

An in-process scheduler for periodic jobs that uses the builder pattern for configuration. Schedule lets you run Python functions (or any other callable) periodically at pre-determined intervals. Schedule Library matches your systems time to that of scheduled time set by you. Once the scheduled time and system time matches the job function (command function that is scheduled) is called.

## PACKAGES MADE BY US IN THE PROJECT

#### Database

A python code which helps users create a new id, manage their existing ids and lets admins see all ids. It provides a menu for users to login to their ids also providing them with a guide option. It overall helps us to maintain records of the various users using mysql.connector.