

TAXI RESERVATION SYSTEM

A Minor project report
submitted in partial fulfillment of the
requirements for the award of the Diploma

Information Technology

Submitted By

Vivek Joshi	(18007120026)
Suraj Bhan	(18007120021)
Ajay Singh Kiroula	(18007120002)
Shubham Pandey	(19007122002)



Under the supervision of
Miss. Neha Bora
(Lecturer Information Technology)

S.S.S.S.S. RAM SINGH BISHT GOVERNMENT POLYTECHNIC
DWARAHAT, ALMORA 263653 (UTTARAKHAND) INDIA
FEBRUARY, 2021

SUPERVISOR'S CERTIFICATE

It is to certify that the minor Project entitled “**Taxi Reservation System**” which is being submitted by **Vivek Joshi, Suraj Bhan, Ajay Singh kiroula, Shubham Pandey** to the S.S.S.S.S. Ram Singh Bisht Government Polytechnic Dwarahat, Almora in the Fulfillment of the requirement for the award of the **Information Technology**, is a record of bonafide project work carried out by them under our guidance and supervision. The matter presented in this project report has not been submitted either in part or full to any University or Institute for award of any degree.

(**Mr. Jagdish Chandra Pandey**)
H.O.D. Information Technology

(**Miss.Neha Bora**)
Lecturer Information Technology

ACKNOWLEDGEMENT

Here we gladly present this minor project report on "Taxi Reservation System" as part of the 5th semester in Information Technology. At this time of submitting this report we use this opportunity to mention those people who with us along the work. We take this occasion to thank God, almighty for blessing us with his grace and taking our endeavour to a successful culmination. We extend our sincere and heartfelt thanks to our esteemed guide, Miss. Neha Bora (lecturer Information Technology) for providing us with the right guidance and advice at the crucial junctures and for showing us the right way. We extend our sincere thanks to our respected Head of the Department Mr. Jagdish Chandra Pandey (H.O.D. Information Technology), for allowing us to use the facilities available. We would like to thank the other faculty members also, at this occasion. Last but not the least; we would like to thank friends for the support and encouragement they have given us during the course of our work.

CANDIDATE'S DECLARATION

We hereby declare that the work presented in this minor project report titled, “Taxi Reservation System” submitted by us in the partial fulfillment of the requirement of the award of the diploma in Information Technology Submitted in the Department of Information Technology, S.S.S.S.S. Ram Singh Bisht Government Polytechnic Dwarahat (Almora), is an authentic record of our project carried out under the guidance of Ms. Neha Bora(Lecturer Information Technology).

Date :

(Candidate Name)

Place : Dwarahat

Vivek Joshi 18007120026

Suraj Bhan 18007120021

Ajay Singh Kiroula 18007120002

Shubham Pandey 19007122002

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ABSTRACT

As we all know that the most of the Government Engineering College are located at such places which are not developed well and are at rural places. Like that in

Dwarahat we have two engineering colleges (Government Polytechnic & B. Tech), Large Number of students take admissions in these two colleges every year.

Due to the location of the colleges student faces many problem as the Station (Bus & Taxi Stands) are far away from the colleges, Hostels and those who live by taking rooms. And students residential houses are located far away from these colleges.

Due to the problem of transport vehicle students faces many problems such as:

- Students are not able to reach in stations at time and due to which they are not able to reach in there destination place.
- If they find a vehicle , till the time they reach at stations the bus or taxi for the destination place has been departed.
- And the transport vehicles charge them lot more than they should charge.
- The conductor of the bus or taxi take more passengers than the actual capacity of the transport which create many problem for the passengers as they are not able to find the sitting seats for them which create problem for the people who have to go far away

The particular project deals with the problem of transport face by the students, thus overcome the drawback of the existing system.

Chapter 1:

Introduction

Introduction

1.1 Need of the project

As we all know that the most of the Government Engineering College are located at such places which are not developed well and are at rural places. Like that in Dwarahat we have two engineering colleges (Government Polytechnic & B. Tech), Large Number of students take admissions in these two colleges every year.

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The particular project deals with the problem of transport face by the students, thus overcome the drawback of the existing system.

1.2 Motivation behind the project:

The main motivation behind the project is to solve the problem of lack of availability of transportation system in our local area as many student have to face the high charges of taxi to reach its destination as we are going to make taxi stand in our local and open a stationary shop at the same time we are going to take booking and updown to reach students to its destination .

1.3 Objective of the project:

- To save time of the students.
- Save money of the students.
- Providing door to door transportation facility.

Chapter 2:

Implementation of

Proposed Model

Implementation of Proposed Model

2.1.3 Development Environment :

As this project is written in Python and we use python 3.9.1 in Pycharm community version .Because the community version of pycharm is free to use and the feature available are sufficient for our project. We use SQLite3 Database which is preinstalled in Python 3 , and using DB browser for SQ lite.

About Python

Python is an interpreted, high-level and general-purpose programming language. Python's design philosophy emphasizes code readability with its notable use of significant whitespace. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects.

Python was created in the late 1980s, and first released in 1991, by Guido van Rossum as a successor to the ABC programming language. Python 2.0, released in 2000, introduced new features, such as list comprehensions, and a garbage collection system with reference counting, and was discontinued with version 2.7 in 2020. Python 3.0, released in 2008, was a major revision of the language that is not completely backward-compatible and much Python 2 code does not run unmodified on Python 3. With Python 2's end-of-life (and pip having dropped support in 2021), only Python 3.6.x and later are supported, with older versions still supporting e.g. Windows 7 (and old installers not restricted to 64-bit Windows)

Features of Python

Object Oriented :- In python we can apply the concept of object oriented programming.

Simple :- Python is easy to learn as in C programming we see for printing one line we need to write 5-6 line of codes. Where in Python we just need to call print function.

Machine-Learning , Data Science, Artificial Intelligence :- can be done.

Platform support :- support all platform windows, mac, linux

Wide community :- wide community of python all over the world.

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.

Creating a GUI application using Tkinter is an easy task. All you need to do is perform the following steps –

- Import the *Tkinter* module.
- Create the GUI application main window.
- Add one or more of the above-mentioned widgets to the GUI application.
- Enter the main event loop to take action against each event triggered by the user.

Sq lite3

SQLite3 can be integrated with Python using sqlite3 module, which was written by Gerhard Haring. It provides an SQL interface compliant with the DB-API 2.0 specification described by PEP 249. You do not need to install this module separately because it is shipped by default along with Python version 2.5.x onwards.

To use sqlite3 module, you must first create a connection object that represents the database and then optionally you can create a cursor object, which will help you in executing all the SQL statements.

DB browser for SQLite

DB Browser for SQLite (DB4S) is a high quality, visual, open source tool to create, design, and edit database files compatible with SQLite.

DB4S is for users and developers who want to create, search, and edit databases. DB4S uses a familiar spreadsheet-like interface, and complicated SQL commands do not have to be learned.

Controls and wizards are available for users to:

- Create and compact database files
- Create, define, modify and delete tables
- Create, define, and delete indexes
- Browse, edit, add, and delete records
- Search records
- Import and export records as text
- Import and export tables from/to CSV files
- Import and export databases from/to SQL dump files

- Issue SQL queries and inspect the results
- Examine a log of all SQL commands issued by the application
- Plot simple graphs based on table or query data

2.2 System Design:

2.2.1 Input Design

This system design consists of administrative section.

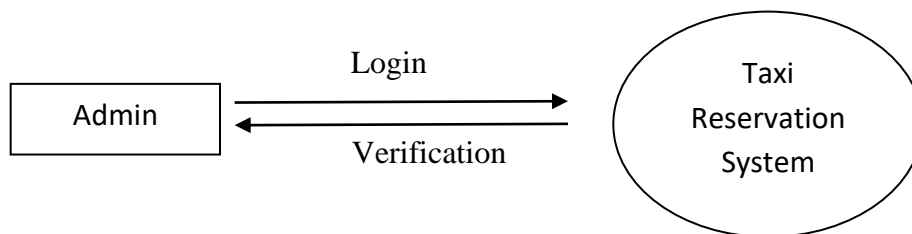
2.2.2 Administrative

He will take input from the user and fill details in the system for the reservation of the students.

He will edit the details and provide printout to the user.

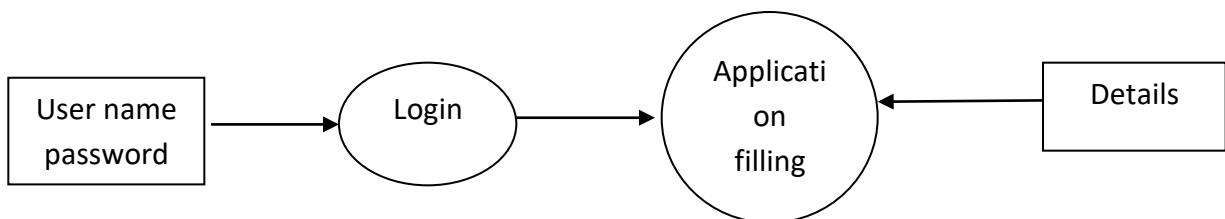
2.3 (DFD) Data flow diagram

Level 1:



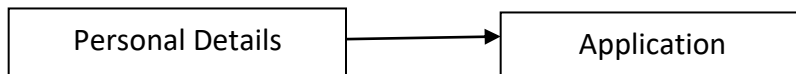
DFD for allotment process

Level 1.1:



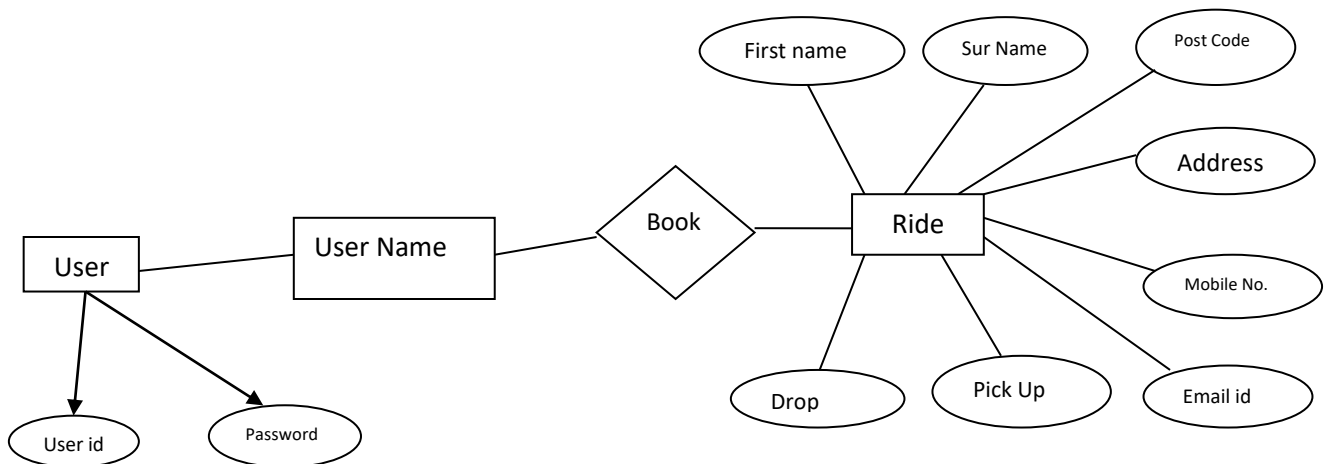
DFD for student module

Level 1.2:

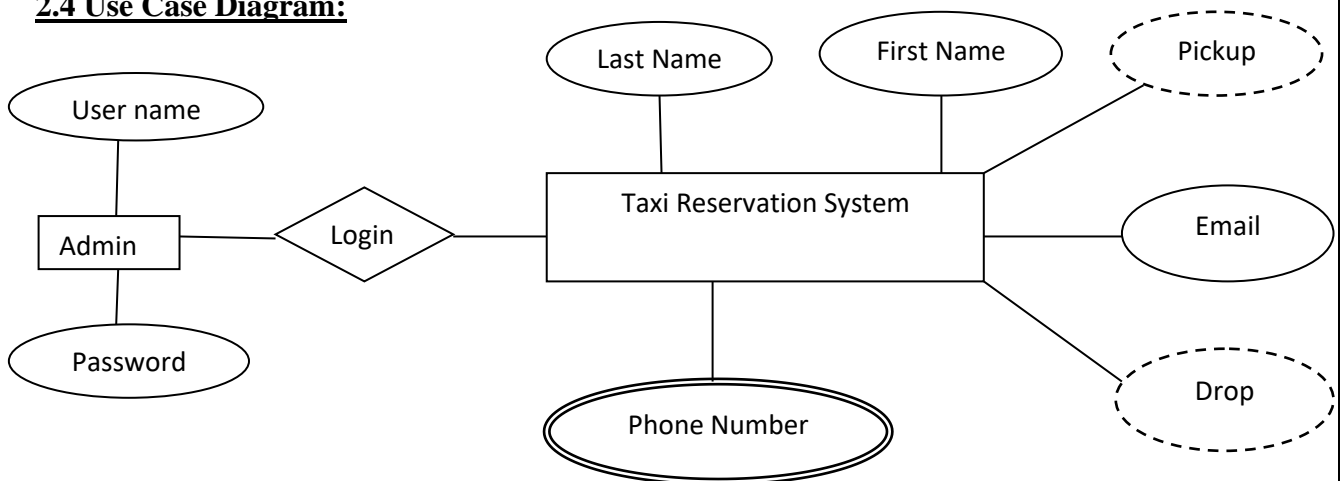


DFD for student registration

ER Diagram:



2.4 Use Case Diagram:



Chapter 3:

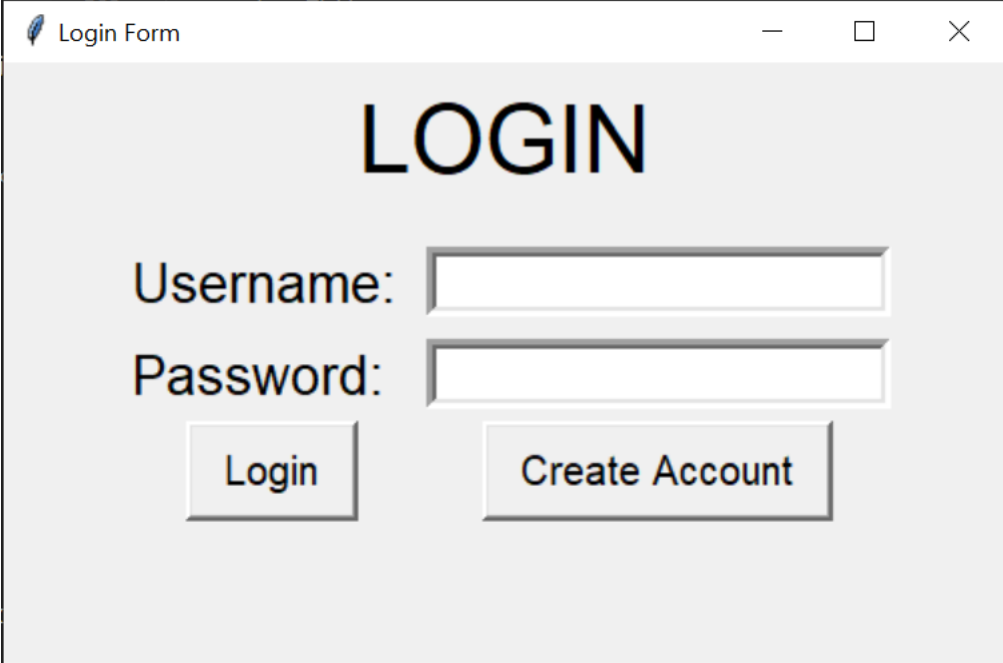
SCREENSHOTS OF

PROJECT

3. Result :

The final result of the project.

3.1 User Panel : This panel is used to admin login and admin fill its username and password.



The image shows a web browser window with the title 'Login Form'. The main heading is 'LOGIN' in large, bold, black letters. Below the heading, there are two input fields: 'Username:' and 'Password:'. Each label is followed by a white rectangular input box with a thin gray border. Below the 'Username' input box is a button labeled 'Login'. Below the 'Password' input box is a button labeled 'Create Account'. The entire form is centered on a light gray background.

3.1.2 Registration Form:

This section consists of details filling of the students for taxi reservation and then details can be taken in printed form.

Taxi Booking System

Welcome, vivek

Taxi Booking System Dwarhat

Customer Name Firstname <input type="text"/> Surname <input type="text"/> Address <input type="text"/> Postcode <input type="text"/> Telephone <input type="text"/> Mobile <input type="text"/> Email <input type="text"/>		Booking Detail Pickup <input type="text"/> Drop <input type="text"/> Pooling <input type="text" value="1"/> <input type="checkbox"/> Taxi Tax(Base Charge) * <input type="text" value="0"/> <input type="checkbox"/> Distance(KMs) * <input type="text" value="0"/> <input type="checkbox"/> Travelling Insurance * <input type="text" value="0"/> <input type="checkbox"/> Extra Luggage <input type="text" value="0"/>		Receipt Total Receipt Reset Exit
<input type="radio"/> Standard <input type="text" value="0"/> <input type="radio"/> PrimeSedan <input type="text" value="0"/> <input type="radio"/> PremiumSedan <input type="text" value="0"/>	<input type="radio"/> Single <input type="radio"/> Return <input type="radio"/> SpecialNeeds	Paid Tax <input type="text"/> Sub Total <input type="text"/> Total Cost <input type="text"/>		

3.1.3 Details Filling:

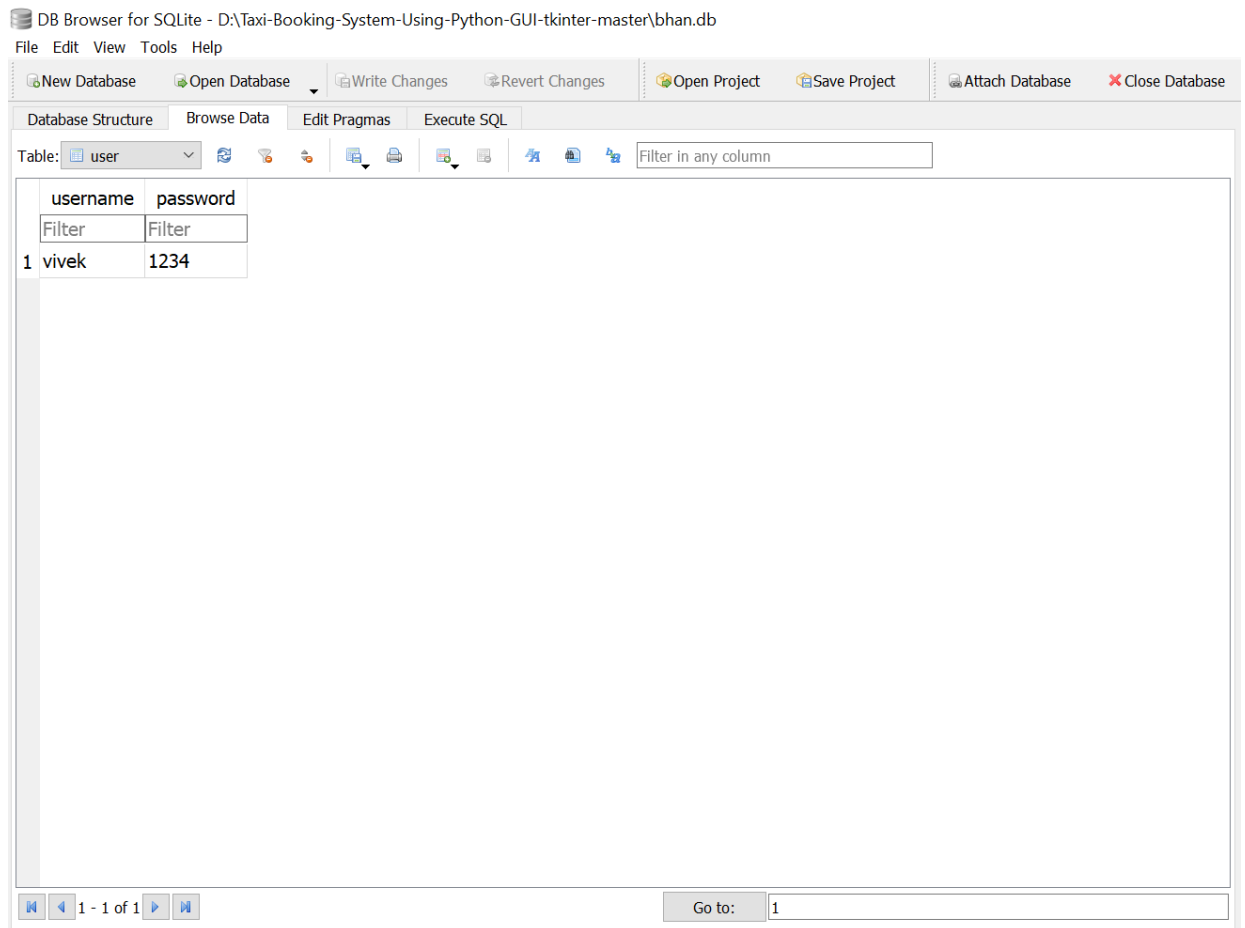
Taxi Booking System

Welcome, vivek

Taxi Booking System Dwarhat

Customer Name Firstname <input type="text" value="Suraj"/> Surname <input type="text" value="Bhan"/> Address <input type="text" value="Boy's Hostel"/> Postcode <input type="text" value="263653"/> Telephone <input type="text" value="000000"/> Mobile <input type="text" value="7467808125"/> Email <input type="text" value="bhan2303@gmail.com"/>		Booking Detail Pickup <input type="text" value="BoysHostel"/> Drop <input type="text" value="CampusCafe"/> Pooling <input type="text" value="1"/> <input checked="" type="checkbox"/> Taxi Tax(Base Charge) * <input type="text" value="Rs 50.0"/> <input checked="" type="checkbox"/> Distance(KMs) * <input type="text" value="10"/> <input checked="" type="checkbox"/> Travelling Insurance * <input type="text" value="Rs 10.0"/> <input checked="" type="checkbox"/> Extra Luggage <input type="text" value="Rs 30.0"/>		Receipt Receipt Ref: 330584 Date: 15 / 03 / 2021 Taxi No: TR 330584 BW Firstname: Suraj Surname: Bhan Address: Boy's Hostel Postal Code: 263653 Telephone: 000000 Mobile: 7467808125 Email: bhan2303@gmail.com From: BoysHostel To: CampusCafe Pooling: 1 Standard: 0 Prime Sedan: 0 Premium Sedan: Rs 15.0 Paid: Rs 21.60 SubTotal: Rs 240.00 Total Cost: Rs 456.00
<input type="radio"/> Standard <input type="text" value="0"/> <input type="radio"/> PrimeSedan <input type="text" value="0"/> <input checked="" type="radio"/> PremiumSedan <input type="text" value="Rs 15.0"/>	<input type="radio"/> Single <input type="radio"/> Return <input type="radio"/> SpecialNeeds	Paid Tax <input type="text" value="Rs 21.60"/> Sub Total <input type="text" value="Rs 240.00"/> Total Cost <input type="text" value="Rs 456.00"/>		

3.1.4 Data Base:



ID ▼ ¹	First_name	Surname	Address	Postcode	Email	Total
Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1 viv	1212	321	3	34	Rs 292.60
2	2 vivek	joshi	old iti	1234	johi@gmail.com	Rs 247.00
3	3 vivek	joshi	aryabhattach hostel	253651	joshhivivekadhi@gmail.com	Rs 216.60

Chapter 4:

Conclusions and

Future Scope

Conclusions

This project is about the designing Prepaid taxi management system using python (tkinter) and SQ lite3 using DB browser for SQLite . This project presents an investigative view of presenting the taxi management system . Present system of taxi management system is having some shortcoming on which we have tried to work on that to eliminate the disadvantages. There are options for new entry which will be stored in SQ lite3database and retrieved from database in future. Taxi reservation system is an innovative thought to simplify the Transportation problems .

Future Scope:

We can enhance our project by adding more feature in future time.

- Multi users can access this app in future ,as now only admin can access.
- In future taxi driver will automatically be informed about the reservation of the student as now the admin has to informed the driver about the reservation of the students.
- In the last we conclude that Indian taxi is having a strong IT Infrastructure and a well-equipped taxi management system but there is some shortcoming in the system on which we have tried to work on it on future time.

Reference:

1. <https://docs.python.org/3/library/tkinter.html>
<https://docs.python.org/3/library/tkinter.messagebox.html#module-tkinter.messagebox>
https://www.tutorialspoint.com/python/python_date_time.htm
<https://docs.python.org/3/library/sqlite3.html>
2. <https://sqlite.org/src/doc/trunk/README.md>
3. <https://en.wikipedia.org/wiki/Wikipedia>