

DBMS final project

Name：許郁翎

ID：F74072277

系級：資訊111

system architecture and environment

device

裝置名稱

LAPTOP-045SKT50

處理器

Intel(R) Core(TM) i5-10210U CPU @ 1.60GHz 2.11 GHz

已安裝記憶體 (RAM)

8.00 GB (7.87 GB 可用)

系統類型

64 位元作業系統 · x64 型處理器

packages

GUI：Tkinter (python)

database：SQLite3

screenshot of interface and description

this is a still developing program!!
the part that will be use to demo is the query part, the APP and release options in the button part

file description

main.py
the main program

button.py
the code of the interface to do button demo

query.py
the code of the interface to do query demo

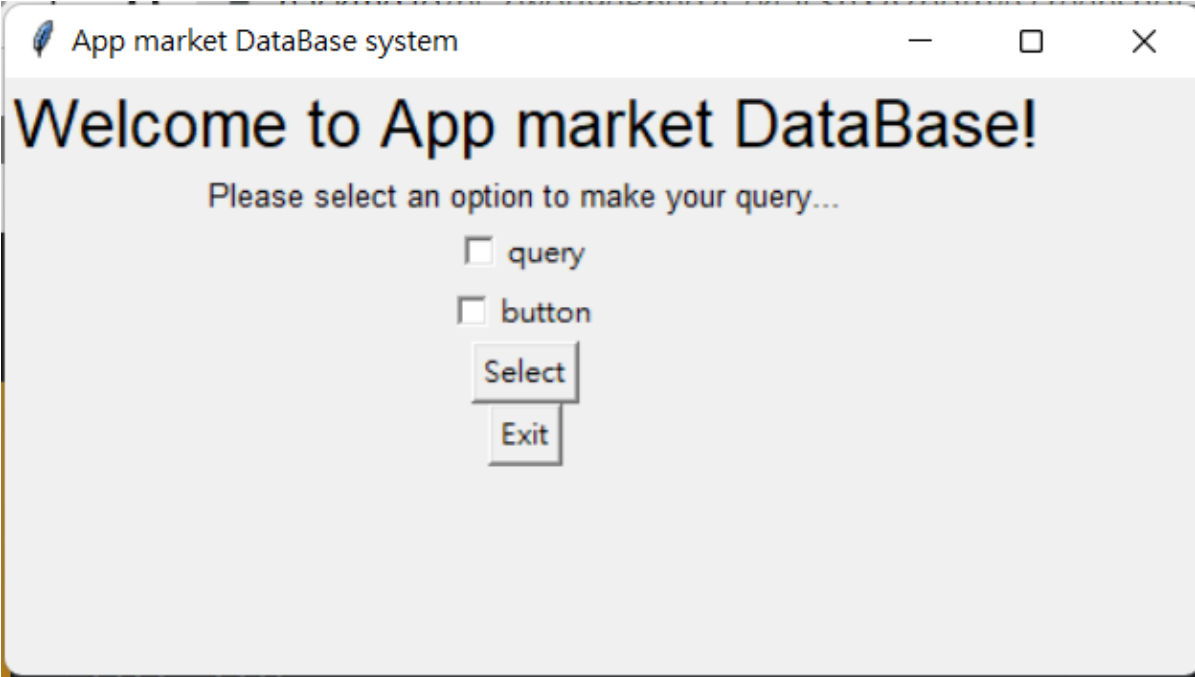
db.py
the code to create a new empty table

tmp.py
plz ignore it...

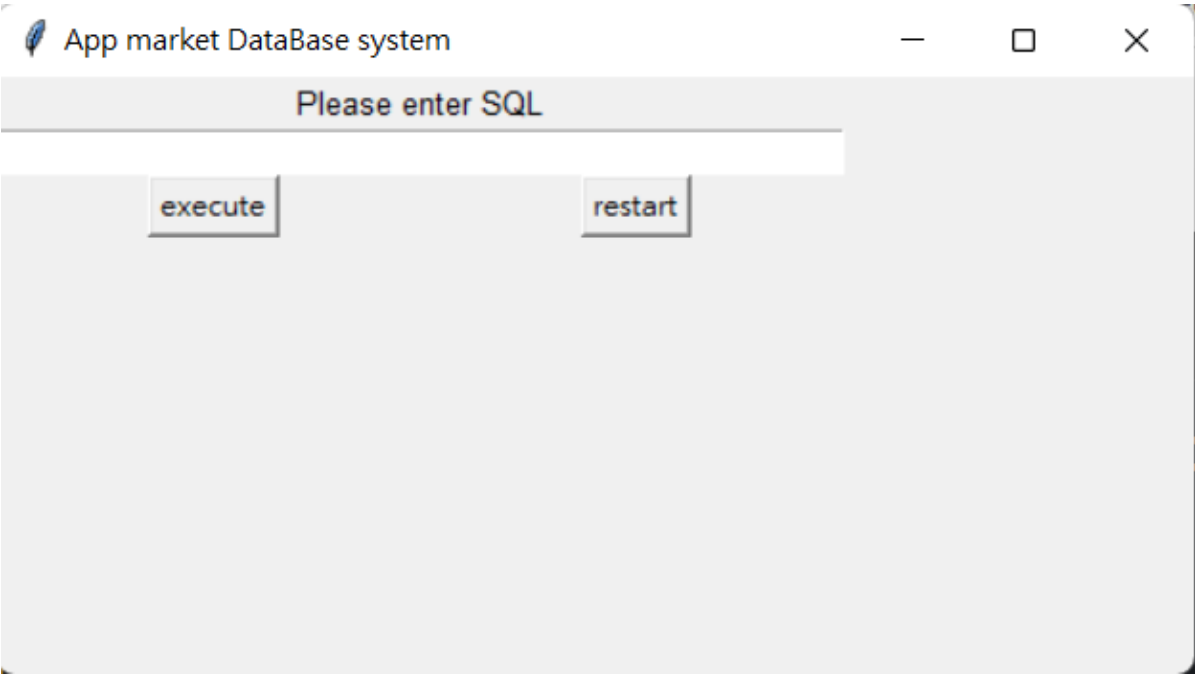
info.txt
the file record the data inserted into database.db, and the demo instructions

screenshots and description

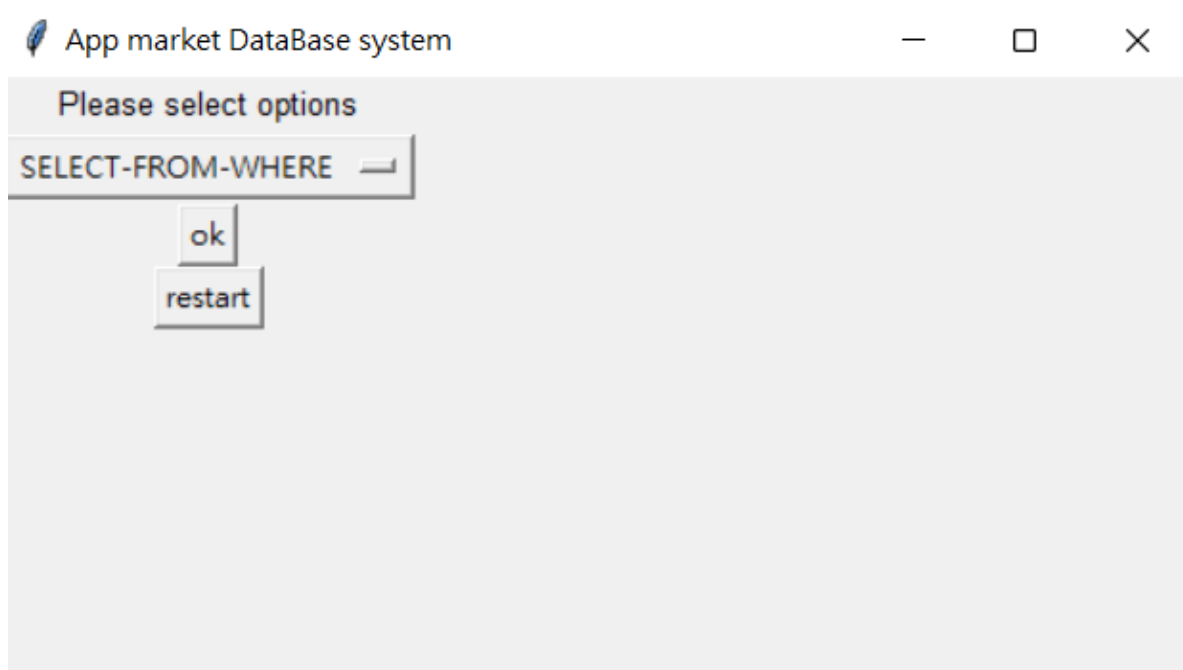
the main page



the query page



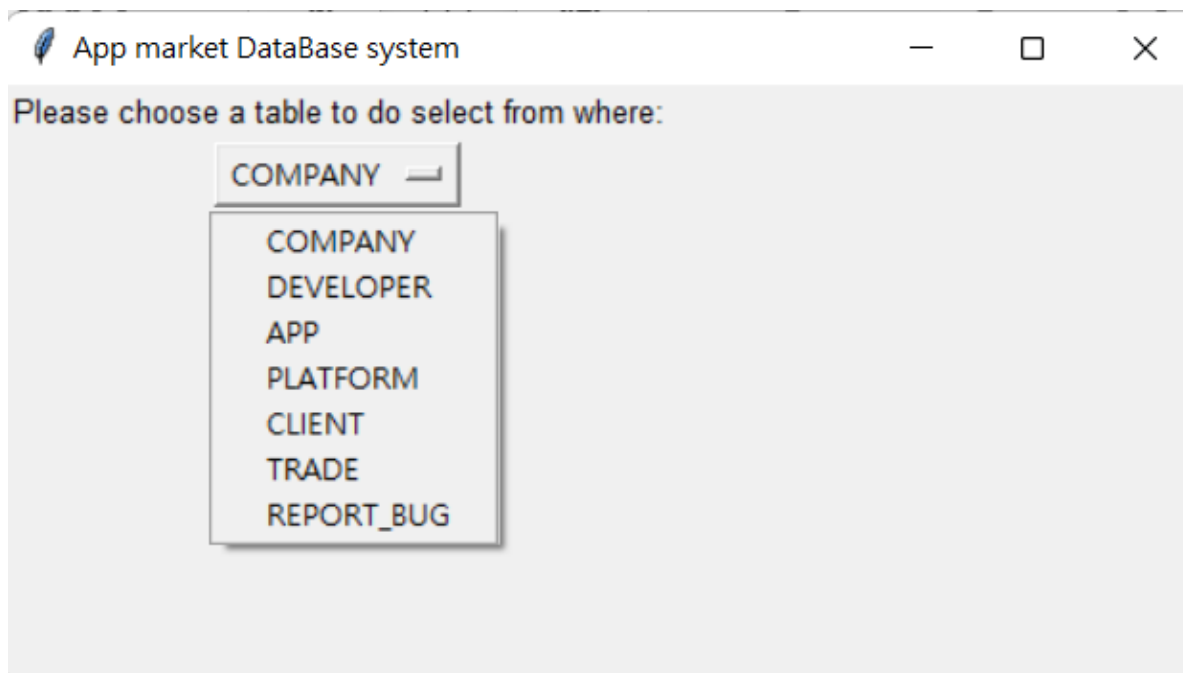
the button page



for the instruction as follows:

`SELECT-FROM-WHERE`, `DELETE`, `INSERT`, `UPDATE`, `COUNT`, `SUM`, `MAX`, `MIN`, `AVG`, `HAVING`

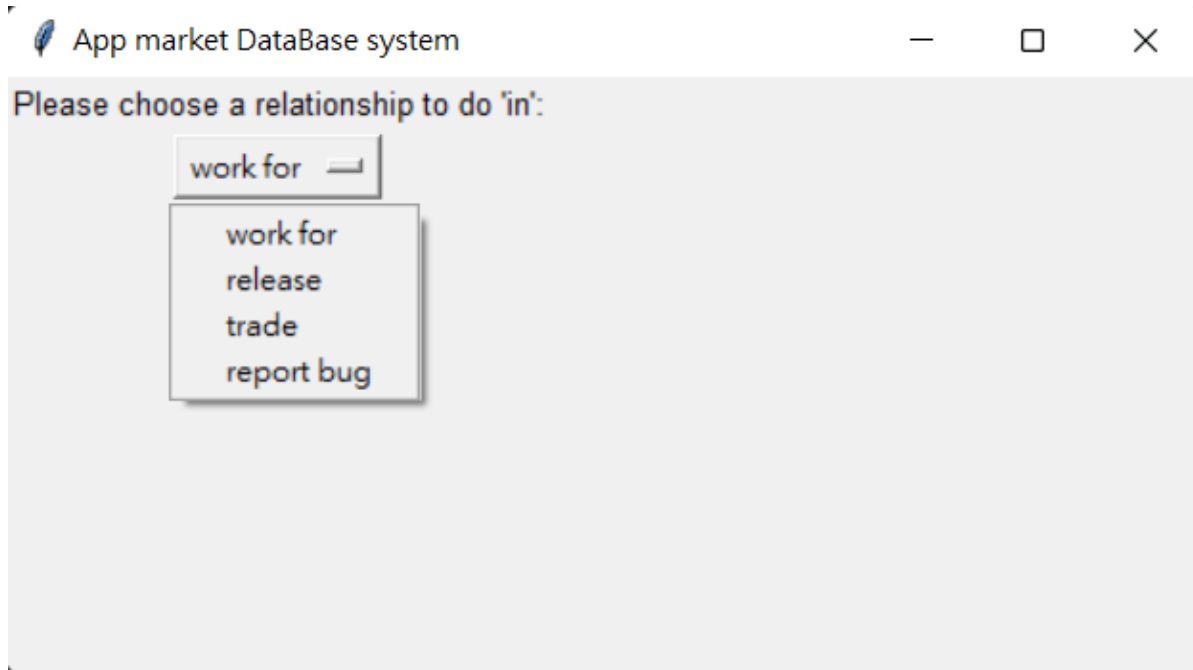
plz choose the option APP



for the instruction as follows:

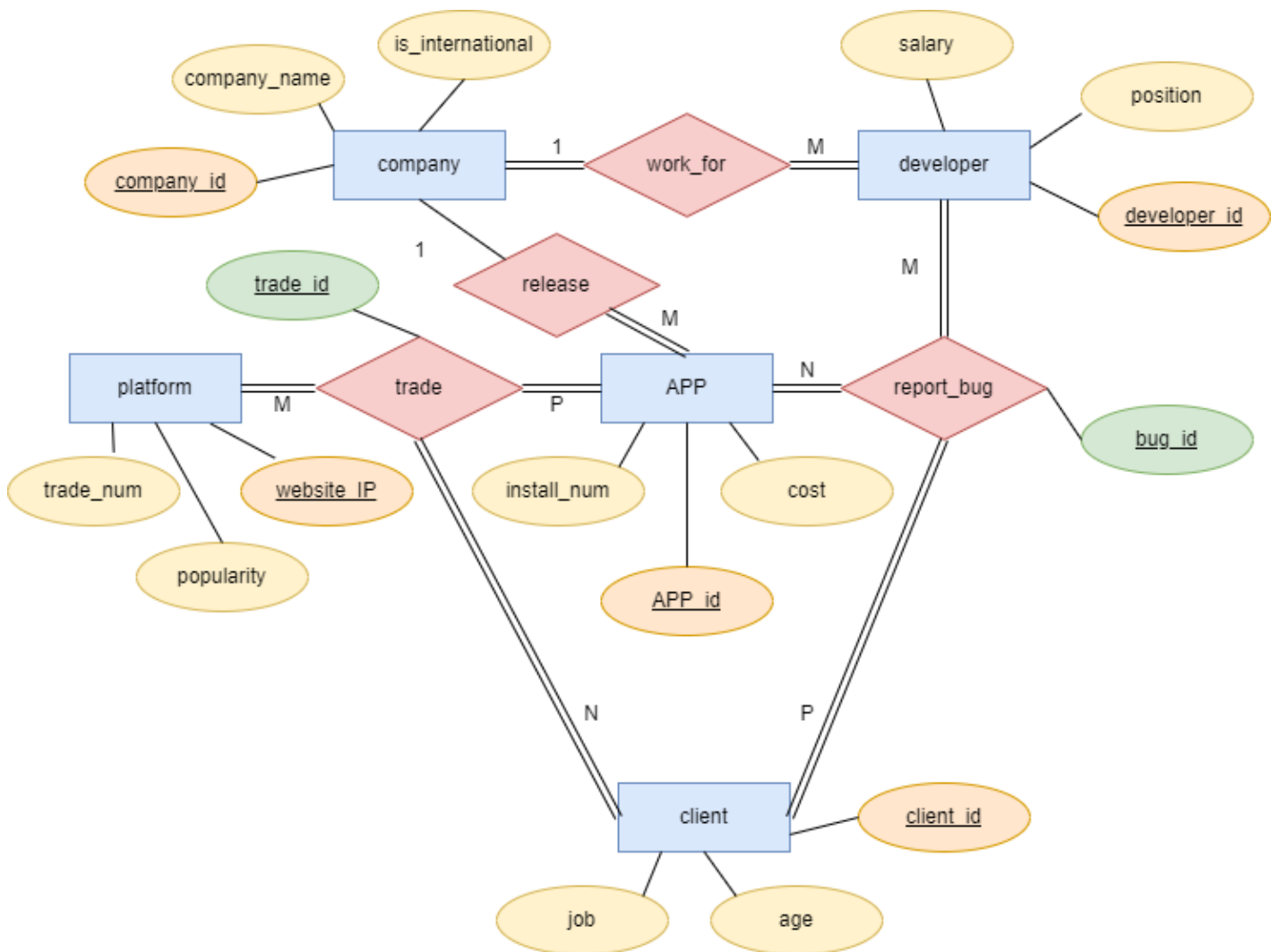
`IN`, `NOT IN`, `EXISTS`, `NOT EXISTS`

plz choose the option release



database design

ER diagram



The picture above is my ER diagram, the blue rectangle are entities, and the red diamond are relationships.

The yellow oval are attributes, and the orange ones are key attributes.

The green ones are attributes of relationships.

Relation Schema

company

company_id	company_name	is_international
------------	--------------	------------------

developer

developer_id	position	salary	work_for_id
--------------	----------	--------	-------------

APP

APP_id	install_num	cost	release_id
--------	-------------	------	------------

platform

website_IP	popularity	trade_num
------------	------------	-----------

client

client_id	job	age
-----------	-----	-----

trade

trade_id	platform_id	APP_id	client_id
----------	-------------	--------	-----------

report_bug

bug_id	developer_id	APP_id	client_id
--------	--------------	--------	-----------

table, attribute and relationship

The figure above shows relation schema in my database system. Similar with my ER diagram, the yellow part are attributes of entities , and the ones with red words are key attributes , so called primary keys . The green ones are attributes of relationships .

The red ones are foreign keys . work_for_id , which means the the ID of the company that developer work for, matchs company_id in the table, company . release_id , which represents the ID of the company that releases the APP, also matches company_id .

reference tutorial

[Python GUI's With TKinter](#)
[SQLite Tutorial](#)

additional link

[project demo youtube link](#)
[final project GitHub](#)