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3.1: Python Flask Guestbook

3.1.1 Python Flask

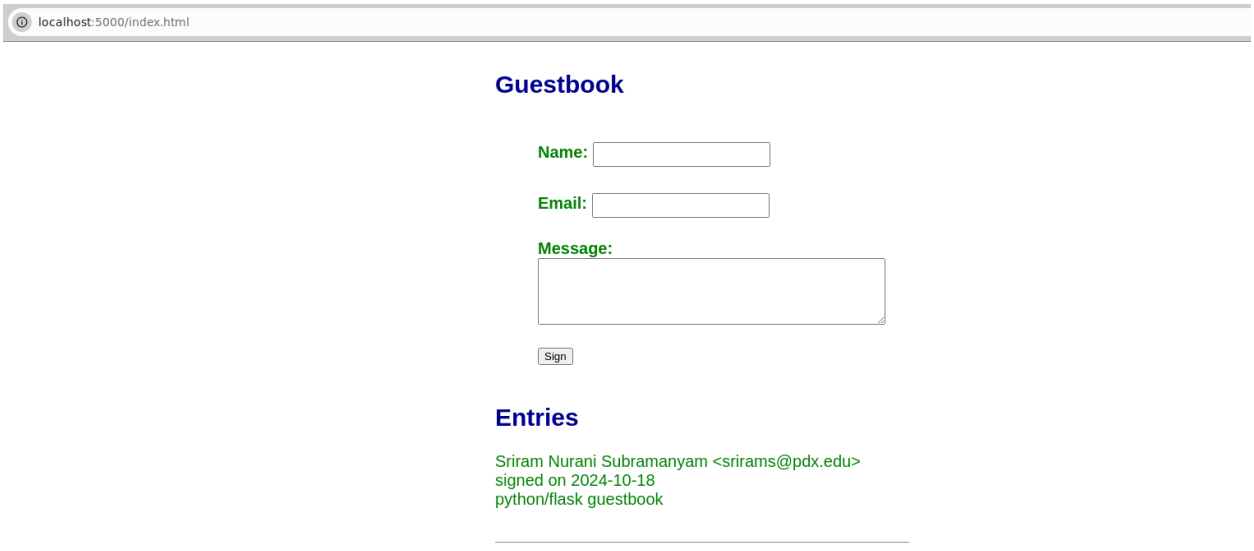
3.1.2 Model

3.1.3 View

3.1.4 Controller

3.1.5 Running the code

Add an entry that includes your PSU e-mail address in it and the message "python/flask guestbook". Take a screenshot of the resulting page for your lab notebook.



3.2ag: SQL

3.2.1 SQL, Cloud SQL, RDS

3.2.2 SQL quiz

- **Take the quiz and include a screenshot with your OdinID on it of the "Check your answers" page at the end of the quiz.**

SQL Quiz

Result:

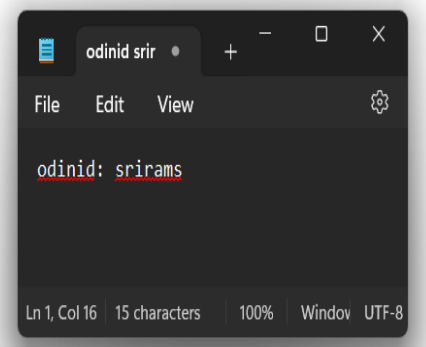
25 of 25

100%

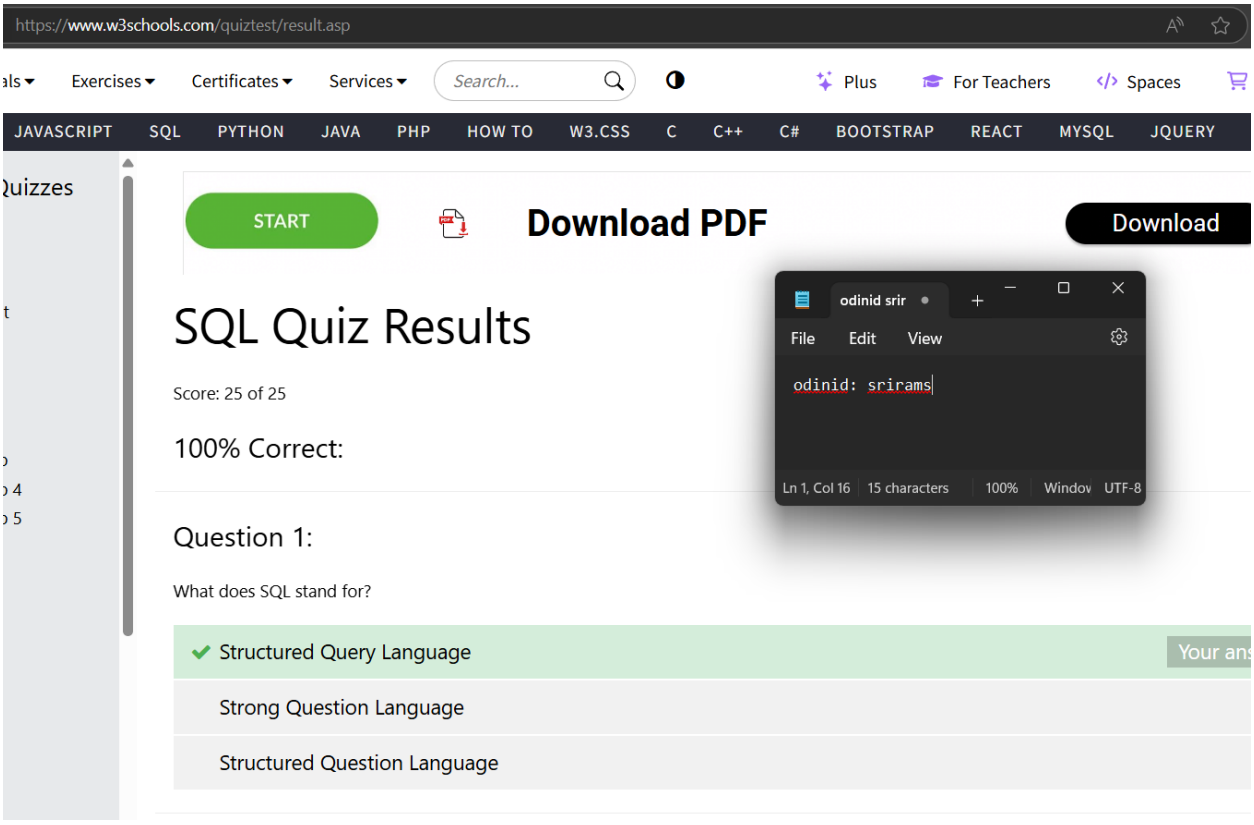
Perfect!!!

Time Spent

4:34



Check your answers | Try Again | Back to Quizzes



3.2.3 GCP Cloud SQL

- **What are the names of the tables that are created?**

  Recommendation

  Rating

  Accommodation

- **What are the primary keys of each table?**

  1. For Accommodation primary key is ‘ID’
  2. For Rating primary key is ‘accoId, userId’
  3. For Recommendation primary key is ‘userId, accoId

- **What data (e.g. columns) does the Accommodation table hold?**

id varchar(255),

title varchar(255),

location varchar(255),

price int,

rooms int,

rating float,

type varchar(255),

- **Assuming the column data is ordered as in the DDL, list the attributes and their values for each accommodation in Dublin.**

1.

"ID": 6,

"title": "Pleasant Quiet Place",

"location": "Dublin",

"price": 35,

"rooms": 5,

"rating": 4.3,

"type": "house"

2.

"ID": 77,

"title": "Great Private Country House",

"location": "Dublin",

"price": 1150,

"rooms": 10,

"rating": 2.4,

"type": "mansion"

3.2.4 Cloud SQL instance creation

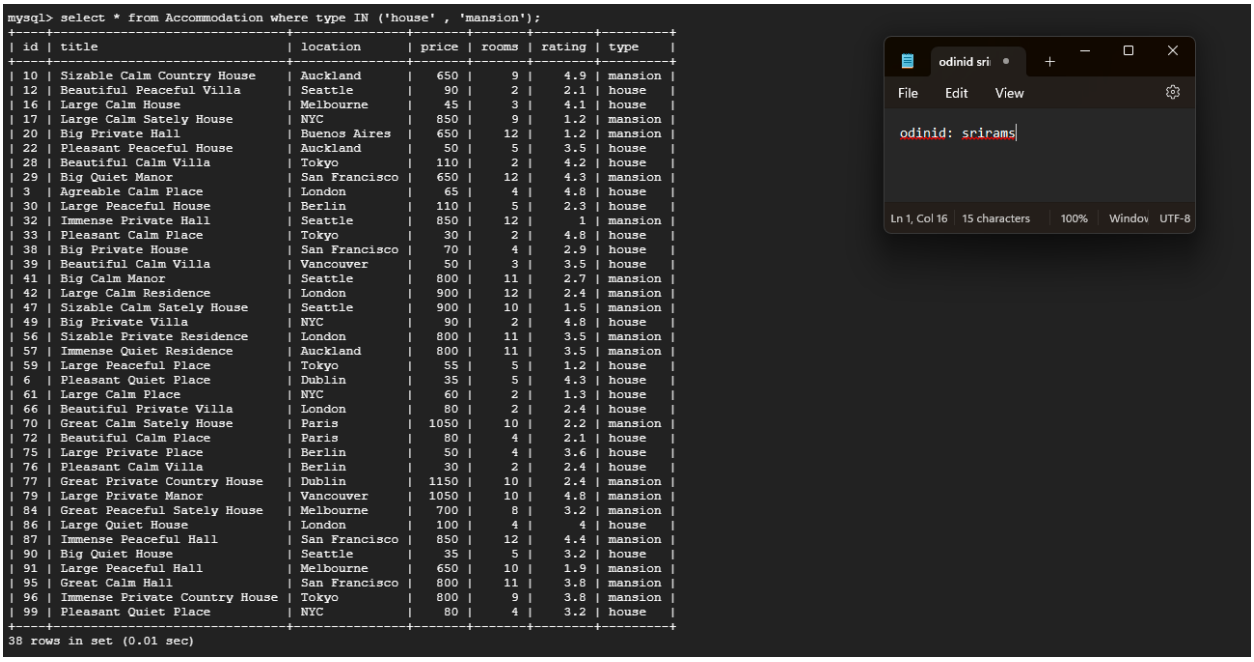
3.2.5 Cloud SQL instance creation (Option #2)

Option #2: Cloud Shell

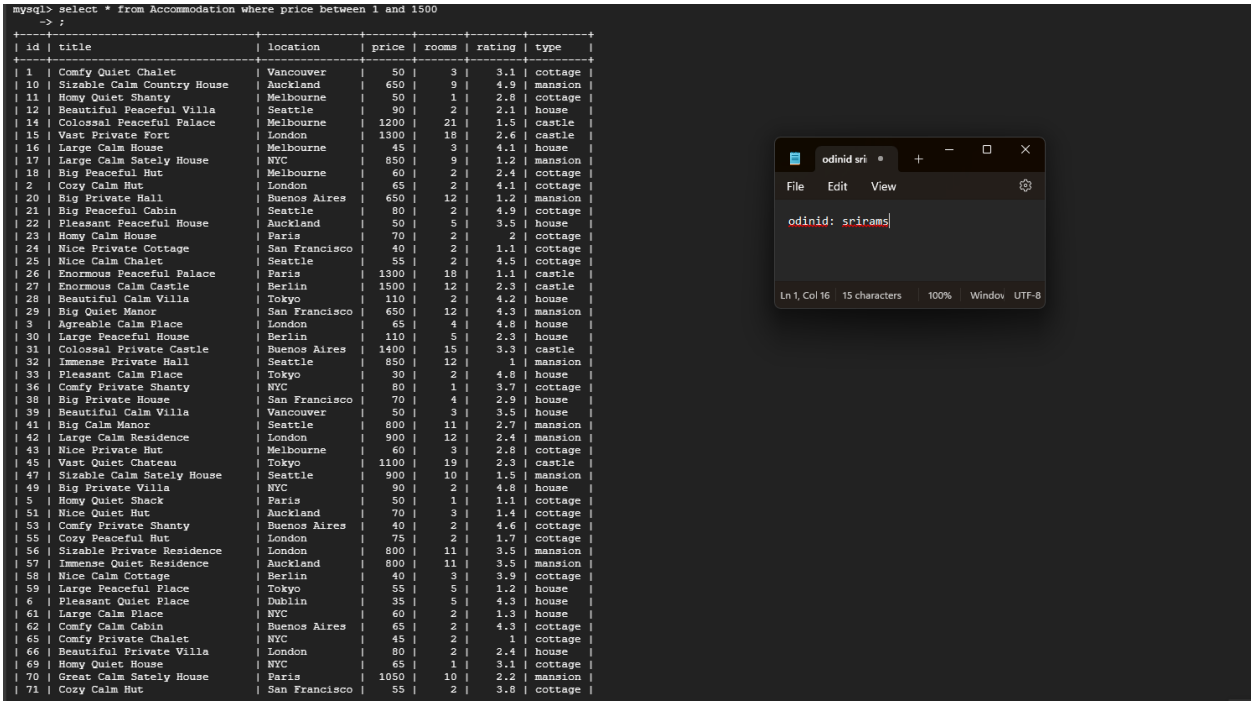
3.2.6 Cloud SQL importing data

3.2.7 Cloud SQL from Cloud Shell

- **Take screenshots of the output of each query for your lab notebook.**



```
mysql> select * from Accommodation where type IN ('house' , 'mansion');
+----+-------------------------------+---------------+-------+-------+--------+---------+
| id | title                         | location      | price | rooms | rating | type    |
+----+-------------------------------+---------------+-------+-------+--------+---------+
| 10 | Sizable Calm Country House    | Auckland      |   650 |     9 |    4.9 | mansion |
| 12 | Beautiful Peaceful Villa      | Seattle       |    90 |     2 |    2.1 | house   |
| 16 | Large Calm House              | Melbourne     |    45 |     3 |    4.1 | house   |
| 17 | Large Calm Sately House       | NYC           |   850 |     9 |    1.2 | mansion |
| 20 | Big Private Hall              | Buenos Aires  |   650 |    12 |    1.2 | mansion |
| 22 | Pleasant Peaceful House       | Auckland      |    50 |     5 |    3.5 | house   |
| 28 | Beautiful Calm Villa          | Tokyo         |   110 |     2 |    4.2 | house   |
| 29 | Big Quiet Manor               | San Francisco |   650 |    12 |    4.3 | mansion |
| 3  | Agreable Calm Place           | London        |    65 |     4 |    4.8 | house   |
| 30 | Large Peaceful House          | Berlin        |   110 |     5 |    2.3 | house   |
| 32 | Immense Private Hall          | Seattle       |   850 |    12 |      1 | mansion |
| 33 | Pleasant Calm Place           | Tokyo         |    30 |     2 |    4.8 | house   |
| 38 | Big Private House             | San Francisco |    70 |     4 |    2.9 | house   |
| 39 | Beautiful Calm Villa          | Vancouver     |    50 |     3 |    3.5 | house   |
| 41 | Big Calm Manor                | Seattle       |   800 |    11 |    2.7 | mansion |
| 42 | Large Calm Residence          | London        |   900 |    12 |    2.4 | mansion |
| 47 | Sizable Calm Sately House     | Seattle       |   900 |    10 |    1.5 | mansion |
| 49 | Big Private Villa             | NYC           |    90 |     2 |    4.8 | house   |
| 56 | Sizable Private Residence     | London        |   800 |    11 |    3.5 | mansion |
| 57 | Immense Quiet Residence       | Auckland      |   800 |    11 |    3.5 | mansion |
| 59 | Large Peaceful Place          | Tokyo         |    55 |     5 |    1.2 | house   |
| 6  | Pleasant Quiet Place          | Dublin        |    35 |     5 |    4.3 | house   |
| 61 | Large Calm Place              | NYC           |    60 |     2 |    1.3 | house   |
| 66 | Beautiful Private Villa       | London        |    80 |     2 |    2.4 | house   |
| 70 | Great Calm Sately House       | Paris         |  1050 |    10 |    2.2 | mansion |
| 72 | Beautiful Calm Place          | Paris         |    80 |     4 |    2.1 | house   |
| 75 | Large Private Place           | Berlin        |    50 |     4 |    3.6 | house   |
| 76 | Pleasant Calm Villa           | Berlin        |    30 |     2 |    2.4 | house   |
| 77 | Great Private Country House   | Dublin        |  1150 |    10 |    2.4 | mansion |
| 79 | Large Private Manor           | Vancouver     |  1050 |    10 |    4.8 | mansion |
| 84 | Great Peaceful Sately House   | Melbourne     |   700 |     8 |    3.2 | mansion |
| 86 | Large Quiet House             | London        |   100 |     4 |      4 | house   |
| 87 | Immense Peaceful Hall         | San Francisco |   850 |    12 |    4.4 | mansion |
| 90 | Big Quiet House               | Seattle       |    35 |     5 |    3.2 | house   |
| 91 | Large Peaceful Hall           | Melbourne     |   650 |    10 |    1.9 | mansion |
| 95 | Great Calm Hall               | San Francisco |   800 |    11 |    3.8 | mansion |
| 96 | Immense Private Country House | Tokyo         |   800 |     9 |    3.8 | mansion |
| 99 | Pleasant Quiet Place          | NYC           |    80 |     4 |    3.2 | house   |
+----+-------------------------------+---------------+-------+-------+--------+---------+
38 rows in set (0.01 sec)
```



```
mysql> select * from Accommodation where price between 1 and 1500
    -> ;
+----+------------------------------+---------------+-------+-------+--------+---------+
| id | title                        | location      | price | rooms | rating | type    |
+----+------------------------------+---------------+-------+-------+--------+---------+
| 1  | Comfy Quiet Chalet           | Vancouver     |    50 |     3 |    3.1 | cottage |
| 10 | Sizable Calm Country House   | Auckland      |   650 |     9 |    4.9 | mansion |
| 11 | Homy Quiet Shanty            | Melbourne     |    50 |     1 |    2.8 | cottage |
| 12 | Beautiful Peaceful Villa     | Seattle       |    90 |     2 |    2.1 | house   |
| 14 | Colossal Peaceful Palace     | Melbourne     |  1200 |    21 |    1.5 | castle  |
| 15 | Vast Private Fort            | London        |  1300 |    18 |    2.6 | castle  |
| 16 | Large Calm House             | Melbourne     |    45 |     3 |    4.1 | house   |
| 17 | Large Calm Sately House      | NYC           |   850 |     9 |    1.2 | mansion |
| 18 | Big Peaceful Hut             | Melbourne     |    60 |     2 |    2.4 | cottage |
| 2  | Cozy Calm Hut                | London        |    65 |     2 |    4.1 | cottage |
| 20 | Big Private Hall             | Buenos Aires  |   650 |    12 |    1.2 | mansion |
| 21 | Big Peaceful Cabin           | Seattle       |    80 |     2 |    4.9 | cottage |
| 22 | Pleasant Peaceful House      | Auckland      |    50 |     5 |    3.5 | house   |
| 23 | Homy Calm House              | Paris         |    70 |     2 |      2 | cottage |
| 24 | Nice Private Cottage         | San Francisco |    40 |     2 |    1.1 | cottage |
| 25 | Nice Calm Chalet             | Seattle       |    55 |     2 |    4.5 | cottage |
| 26 | Enormous Peaceful Palace     | Paris         |  1300 |    18 |    1.1 | castle  |
| 27 | Enormous Calm Castle         | Berlin        |  1500 |    12 |    2.3 | castle  |
| 28 | Beautiful Calm Villa         | Tokyo         |   110 |     2 |    4.2 | house   |
| 29 | Big Quiet Manor              | San Francisco |   650 |    12 |    4.3 | mansion |
| 3  | Agreable Calm Place          | London        |    65 |     4 |    4.8 | house   |
| 30 | Large Peaceful House         | Berlin        |   110 |     5 |    2.3 | house   |
| 31 | Colossal Private Castle      | Buenos Aires  |  1400 |    15 |    3.3 | castle  |
| 32 | Immense Private Hall         | Seattle       |   850 |    12 |      1 | mansion |
| 33 | Pleasant Calm Place          | Tokyo         |    30 |     2 |    4.8 | house   |
| 36 | Comfy Private Shanty         | NYC           |    80 |     1 |    3.7 | cottage |
| 38 | Big Private House            | San Francisco |    70 |     4 |    2.9 | house   |
| 39 | Beautiful Calm Villa         | Vancouver     |    50 |     3 |    3.5 | house   |
| 41 | Big Calm Manor               | Seattle       |   800 |    11 |    2.7 | mansion |
| 42 | Large Calm Residence         | London        |   900 |    12 |    2.4 | mansion |
| 43 | Nice Private Hut             | Melbourne     |    60 |     3 |    2.8 | cottage |
| 45 | Vast Quiet Chateau           | Tokyo         |  1100 |    19 |    2.3 | castle  |
| 47 | Sizable Calm Sately House    | Seattle       |   900 |    10 |    1.5 | mansion |
| 49 | Big Private Villa            | NYC           |    90 |     2 |    4.8 | house   |
| 5  | Homy Quiet Shack             | Paris         |    50 |     1 |    1.1 | cottage |
| 51 | Nice Quiet Hut               | Auckland      |    70 |     3 |    1.4 | cottage |
| 53 | Comfy Private Shanty         | Buenos Aires  |    40 |     2 |    4.6 | cottage |
| 55 | Cozy Peaceful Hut            | London        |    75 |     2 |    1.7 | cottage |
| 56 | Sizable Private Residence    | London        |   800 |    11 |    3.5 | mansion |
| 57 | Immense Quiet Residence      | Auckland      |   800 |    11 |    3.5 | mansion |
| 58 | Nice Calm Cottage            | Berlin        |    40 |     3 |    3.9 | cottage |
| 59 | Large Peaceful Place         | Tokyo         |    55 |     5 |    1.2 | house   |
| 6  | Pleasant Quiet Place         | Dublin        |    35 |     5 |    4.3 | house   |
| 61 | Large Calm Place             | NYC           |    60 |     2 |    1.3 | house   |
| 62 | Comfy Calm Cabin             | Buenos Aires  |    65 |     2 |    4.3 | cottage |
| 65 | Comfy Private Chalet         | NYC           |    45 |     2 |      1 | cottage |
| 66 | Beautiful Private Villa      | London        |    80 |     2 |    2.4 | house   |
| 69 | Homy Quiet House             | NYC           |    65 |     1 |    3.1 | cottage |
| 70 | Great Calm Sately House      | Paris         |  1050 |    10 |    2.2 | mansion |
| 71 | Cozy Calm Hut                | San Francisco |    55 |     2 |    3.8 | cottage |
+----+------------------------------+---------------+-------+-------+--------+---------+
```


3.2.8 Cloud SQL cleanup

Option #1: Web UI

Option #2: Cloud Shell

3.2.9 AWS RDS

3.2.10 Cloud Shell network address

3.2.11 RDS security group creation

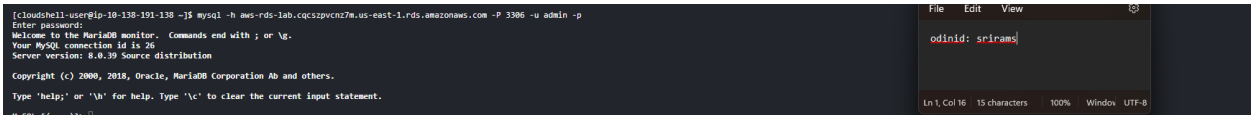
3.2.12 RDS instance creation (Option #1)

3.2.13 RDS instance creation (Option #2)

3.2.14 View instance

3.2.15 RDS test instance

- **Show a screenshot of the successful connection similar to below that includes your OdinID**



3.2.16 RDS cleanup

3.3: sqlite3 Guestbook

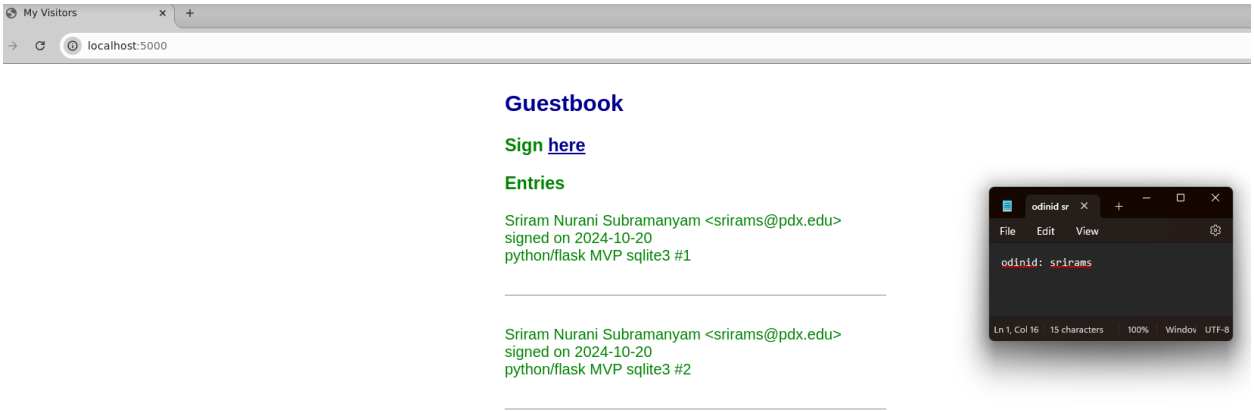
3.3.1 sqlite3

3.3.2 gbmodel package

3.3.3 Presenter architecture

3.3.4 Running the code

- **Take a screenshot of the resulting page for your lab notebook**



3.3.5 sqlite3 database

Then, within the sqlite client, perform the following commands and take a screenshot of their output to include in your lab notebook.

- List the tables in the database and note the table name

```
srirams@course-vm:~/cs430-src/02_mvp_modules_sqlite3$ sqlite3 entries.db
SQLite version 3.37.2 2022-01-06 13:25:41
Enter ".help" for usage hints.
sqlite> .tables
guestbook
sqlite>
```

- Then, output the schema for the table via its name

```
srirams@course-vm:~/cs430-src/02_mvp_modules_sqlite3$ sqlite3 entries.db
SQLite version 3.37.2 2022-01-06 13:25:41
Enter ".help" for usage hints.
sqlite> .tables
guestbook
sqlite> .schema guestbook
CREATE TABLE guestbook (name text, email text, signed_on date, message text);
sqlite>
```

- Finally, perform a SQL query to dump out all rows in the table

```
srirams@course-vm:~/cs430-src/02_mvp_modules_sqlite3$ sqlite3 entries.db
SQLite version 3.37.2 2022-01-06 13:25:41
Enter ".help" for usage hints.
sqlite> .tables
guestbook
sqlite> .schema guestbook
CREATE TABLE guestbook (name text, email text, signed_on date, message text);
sqlite> select * from guestbook;
Sriram Nurani Subramanyam|srirams@pdx.edu|2024-10-20|python/flask MVP sqlite3 #1
Sriram Nurani Subramanyam|srirams@pdx.edu|2024-10-20|python/flask MVP sqlite3 #2
sqlite>
```