

INDIRECT TAX CONSULTANTCY

A Project Report

Submitted by

SIDDHARTH MEHTA(N021)

NISCHAYA SHARMA(N036)

Under the Guidance of

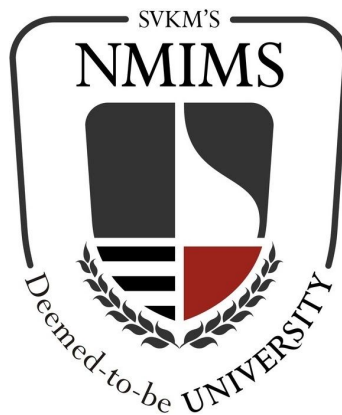
PROF. Pragati Khare

in partial fulfillment for the award of the degree of

MBA TECH

COMPUTER

At



MUKESH PATEL SCHOOL OF TECHNOLOGY MANAGEMENT

AND

ENGINEERING, MUMBAI.

NMIMS UNIVERSITY.

APRIL 2020

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This is to certify that the project entitled "Indirect Tax Consultancy " is the bonafide work carried out by Siddharth Mehta and Nischaya Sharma of MBA. Tech, MPSTME (NMIMS), Mumbai, during the IV semester of the academic year 2019-2020 in partial fulfillment of the requirements for the course of Programming Language.

Prof. Pragati Khare
Internal Mentor

Examiner 1

Examiner 2

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INTRODUCTION

GST is an Indirect Tax which has replaced many Indirect Taxes in India. The Goods and Service Tax Act was passed in the Parliament on 29th March 2017. The Act came into effect on 1st July 2017; Goods & Services Tax Law in India is a comprehensive, multi-stage, destination-based tax that is levied on every value addition.

In simple words, Goods and Service Tax (GST) is an indirect tax levied on the supply of goods and services. This law has replaced many indirect tax laws that previously existed in India.

GST is one indirect tax for the entire country and hence due to the very short time period many people have doubts on it regarding many topics.

Hence we have created a platform where the user can ask any doubts on GST and can get it solved by the experts.

Also many students and teachers can also solve their doubts over any topic related to GST.

PROBLEM STATEMENT

There are many doubts related to the new tax system in India, GST, hence to provide a platform where anyone can ask their doubts and can get it solved easily by an expert.

FUNCTIONAL REQUIREMENTS OF THE SYSTEM

Following functional requirements are expected from the system:

1. Admin:

- a. To answer the queries asked by the user

2. User:

- a. To ask any query related to GST, once asked is then stored in database
- b. To check the replies from the admin
- c. To ask further questions if any to
- d. To check all their questions

USERS OF THE SYSTEM

1. KeyUsers:

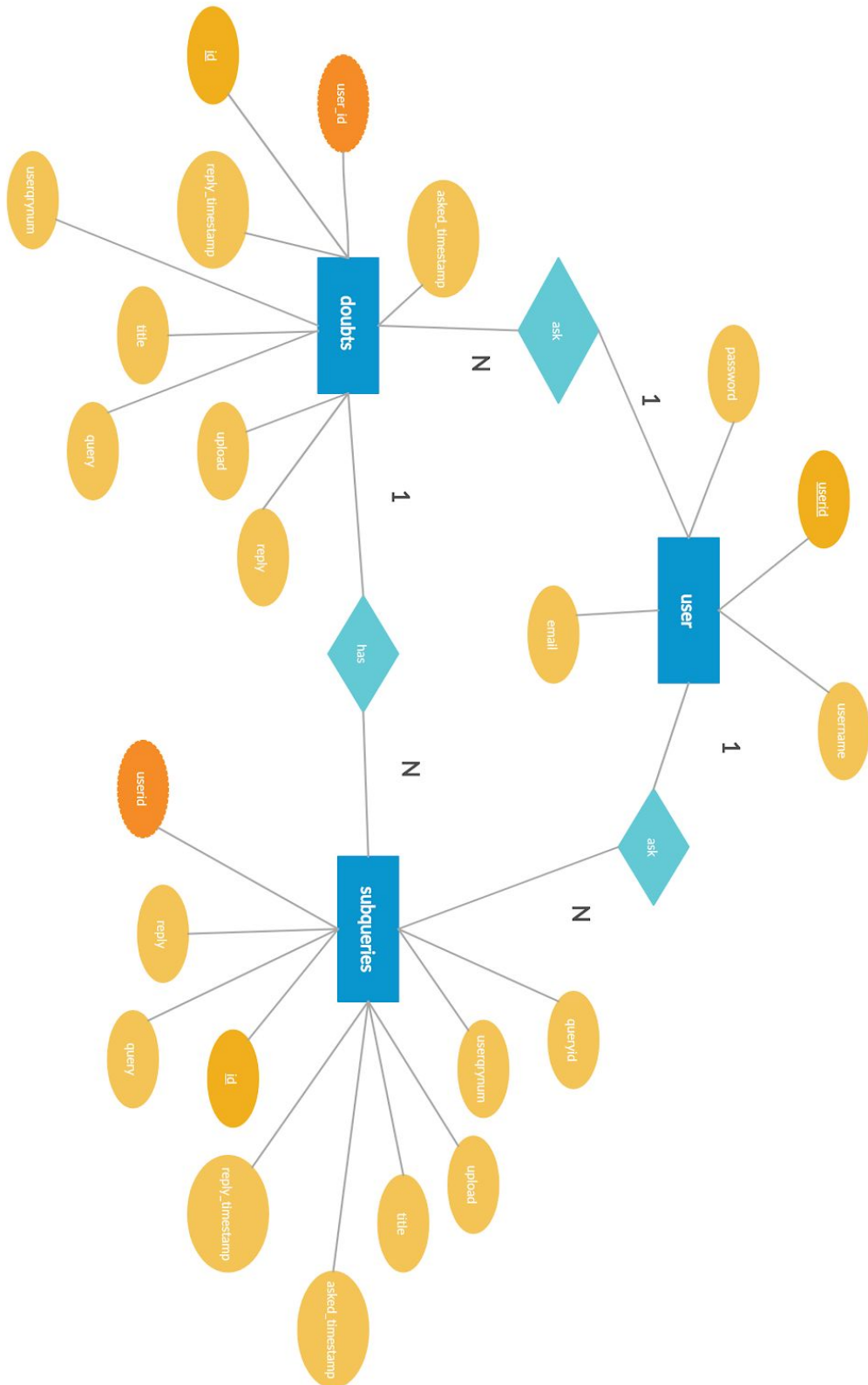
- a. Students
- b. Teachers
- c. CA's
- d. Companies
- e. Experts (Those who would answer the queries)
- f. General users

2. Secondary users:

- a. Technology experts
- b. System administrators

SYSTEM DESIGN & CONSTRAINTS

ER MODEL



Constraints

Users table

1. Id: Primary Key, Auto Increment, Not Null
2. Username: Unique
3. Email: Unique

Doubts Table

1. Id: Primary Key, Auto Increment, Not Null
2. Userid: Foreign Key (users.id)

SubQueries Table

1. Id: Primary Key, Auto Increment, Not Null
2. Userid: Foreign Key (users.id)
3. Qryid: Foreign Key (doubts.id)

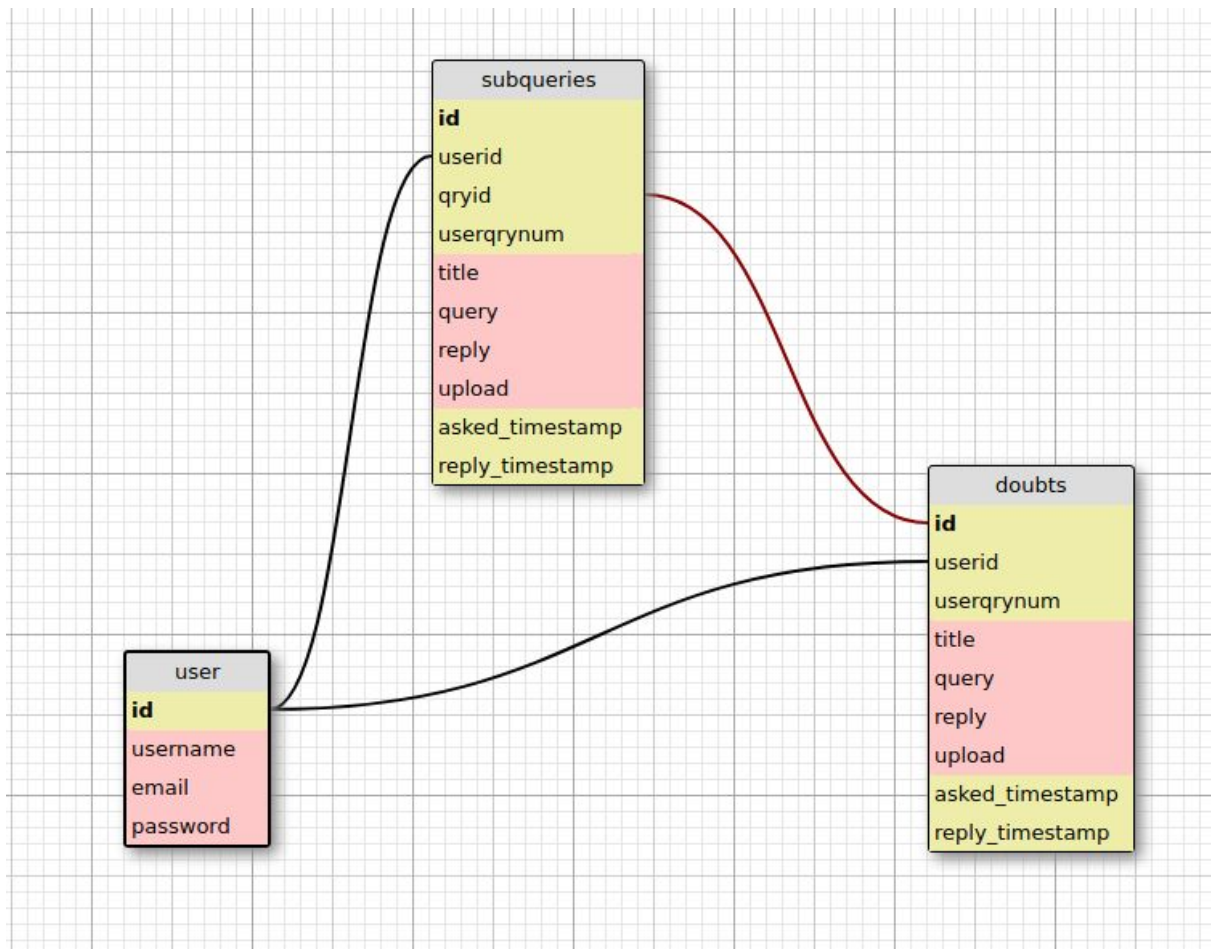
RELATIONAL MODEL

user(id,username,email,password)

doubts(id,userid,userqrynum,title,query,reply,upload,asked_timestamp,reply_timestamp)

subqueries(id,userid,qryid,userqrynum,title,query,reply,upload,asked_timestamp,reply_timestamp)

Schema Diagram



IMPLEMENTATION

HARDWARE & SOFTWARE REQUIREMENTS

1. Minimum 1500x800 Display size
2. Python 3.x
3. SQLite3
4. Flask

TOOLS & LIBRARIES

Our project consists of two components namely, the Website and the GUI based Answering System

For Website we have used the following software

→ HTML5

HTML5 is a markup language used for structuring and presenting content on the World Wide Web. HTML5 includes detailed processing models to encourage more interoperable implementations; it extends, improves and rationalizes the markup available for documents, and introduces markup and application programming interface (API's) for complex web applications.

We have used html for elemental structuring of the website

→ CSS

Cascading Style Sheets (CSS) is a language that is used to illustrate the look, style, and format of a document written in any markup language. In simple words, it is used to style and organize the layout of Web pages.

We have used CSS3 for designing our web pages.

→ Bootstrap

Bootstrap is a giant collection of handy, reusable bits of code written in HTML, CSS, and JavaScript. It's also a front-end development framework that enables developers & designers to quickly build fully responsive websites.

We have used Bootstrap for making our web pages more user friendly.

Elements used are:

1. navbar
2. container
3. buttons

→ JavaScript

JavaScript is a high-level, just-in-time compiled programming language that is one of the core technologies of the World Wide Web (WWW).

We have used JS for:

- 1.Extracting elements from Html and passing it to Flask via JSON and vice versa
- 2.Designing the Modal element in our Web page

→ Flask

Flask is a micro web framework written in Python. It is classified as a microframework because it does not require particular tools or libraries. It has no database abstraction layer, form validation, or any other components where pre-existing third-party libraries provide common functions.

We have used the following Flask frameworks:

- **Werkzeug**
 - We used Werkzeug framework to secure filename and for hashing the password created by the user
- **Smtplib**
 - We have used this framework for sending and receiving mail via gmail
- **Flask_bootstrap**
 - We have used this framework to design our web pages via BootStrap4
- **Flask_login**
 - We have used this framework to manage the logged in user

→ SQLAlchemy

SQLAlchemy is an open-source SQL toolkit and object-relational mapper for the Python programming language released under the MIT License.

We have used SQLAlchemy in python for our DataBase Management System

For that app we have used :

→ Python ~Tkinter

We have used tkinter module from python to create and design a gui based query answering system from which all the query from the users would be answered.

As soon as the query is answered or asked the mail would be received to the user or admin respectively

→ SQLite3

We have used SQLite3 for retrieving and storing data from the GUI after answering the the respected queries asked by the different users on our website

APPLICATION - AT A GLANCE

Database:

User table

id	username	email	password
Filter	Filter	Filter	Filter
1	siddharth12	ss@gg.com	sha256\$rrMLZ...
2	ssd12	as@sa.com	sha256\$Cl7td...
3	nischaya	nischaya1703...	sha256\$NmE...

Doubts table

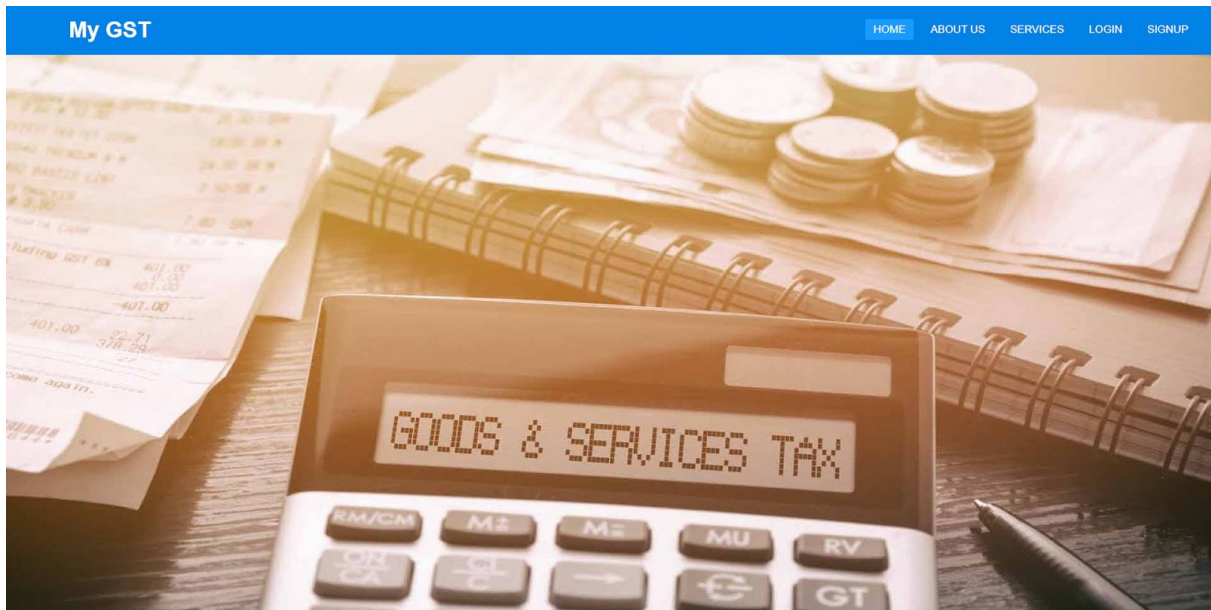
id	userid	userqnum	title	query	reply	upload	asked_timestamp	reply_timestamp
Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	3	1	Hello	Hello there, Ni...	aa		2020-03-21 0...	2020-03-21 0...
2	3	2	Query2	Hello, there, s...	as		2020-03-21 0...	2020-03-21 0...
3	2	1	Sid's 1st Query	Hello, I dont k...	ss		2020-03-21 0...	2020-03-21 0...
4	2	2	Query2	Hello there, si...	www		2020-03-21 0...	2020-03-21 0...
6	3	4	Sample title 2	Sample Query 2	ddd		2020-03-24 0...	2020-03-21 0...
7	3	5	Sample Query 2	Sample Body 2	aa		2020-03-24 0...	2020-03-21 0...
9	3	7	Hello There 2	Nischaya here 2	aaa		2020-03-24 0...	2020-03-21 0...
10	2	3	sd	sd	asdsad		2020-03-24 0...	2020-03-21 0...
11	2	4	aila	hehehehe	sssss		2020-03-31 1...	2020-03-21 0...
18	2	11	34343	43434343434...	ssdsdd		2020-04-12 0...	2020-03-21 0...
19	2	12	qqq	qqqqqqqqqq...	shshshshs		2020-04-12 0...	2020-03-21 0...
20	2	13	My Question 1	My Sample Q...	My reply to thi...		2020-04-12 0...	2020-03-21 0...
21	2	14	Sample questi...	Sample Quest...	NULL		2020-04-12 0...	NULL
22	2	15	Sample Quest...	sample questi...	NULL		2020-04-12 0...	NULL
23	2	16	Sample Quest...	Sample Quest...	NULL		2020-04-12 0...	NULL

SubQueries Table

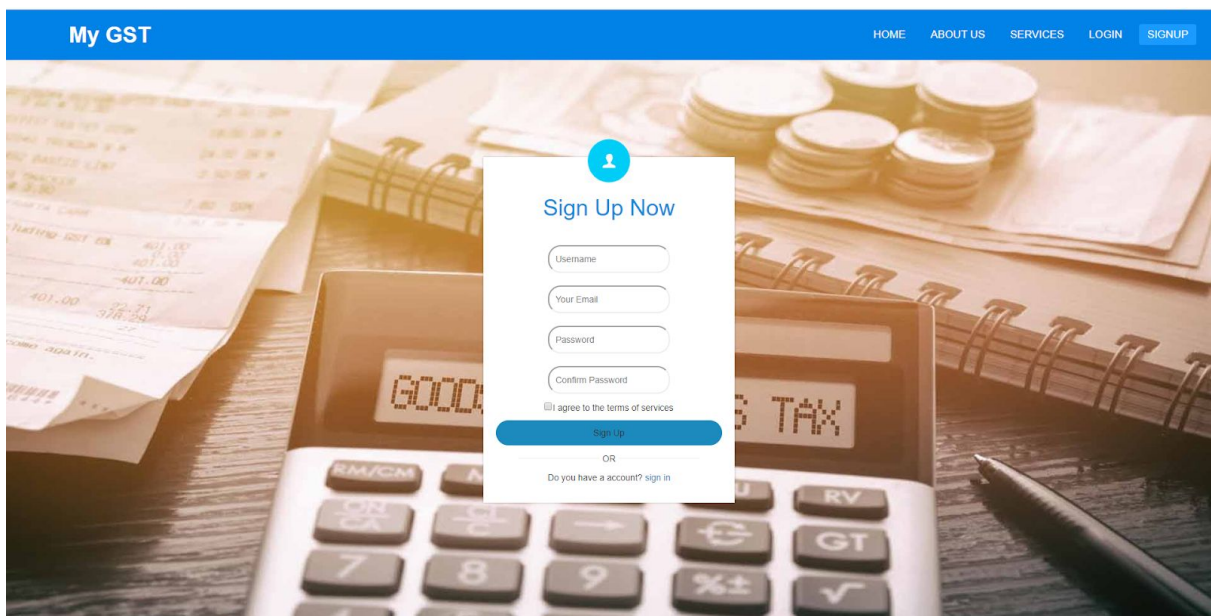
	id	userid	qryid	userqnum	title	query	reply	upload	asked_timestamp	reply_timestamp
	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter	Filter
1	1	2	3	17	Sub query	This tis a sub ...	NULL		2020-04-12 1...	NULL
2	2	2	11	17	Sub query	again a sub q...	NULL		2020-04-12 1...	NULL
3	3	2	18	17	i didnt unders...	i have doubt i...	NULL		2020-04-12 1...	NULL
4	4	2	20	17	Thanks	Thanks for sol...	NULL		2020-04-12 1...	NULL

SCREENSHOTS

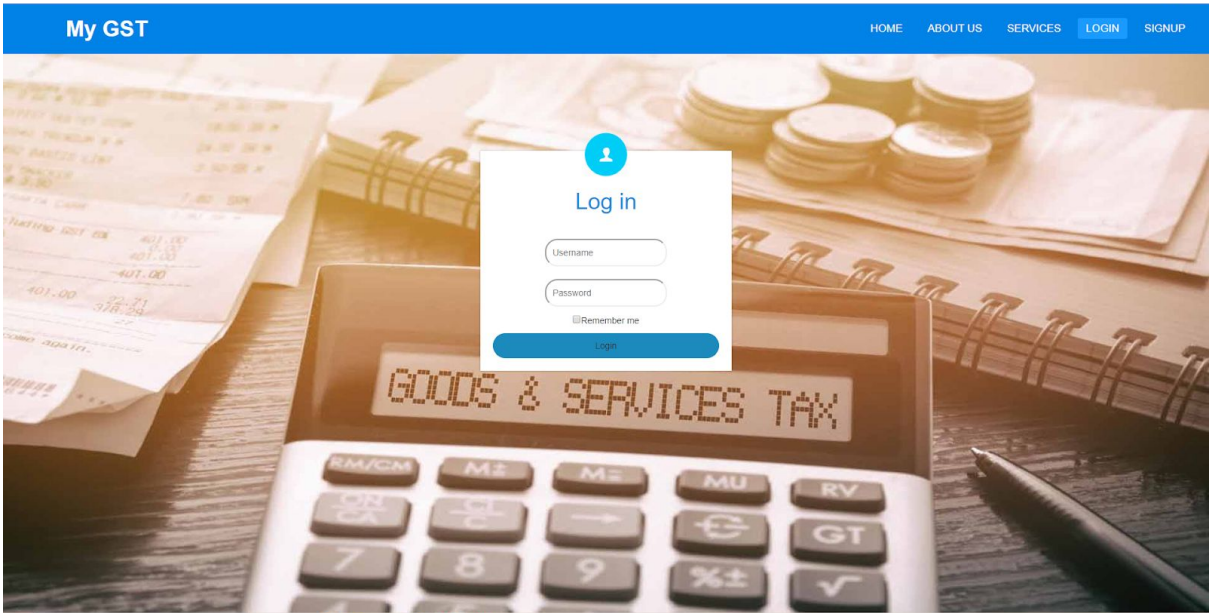
Home page:



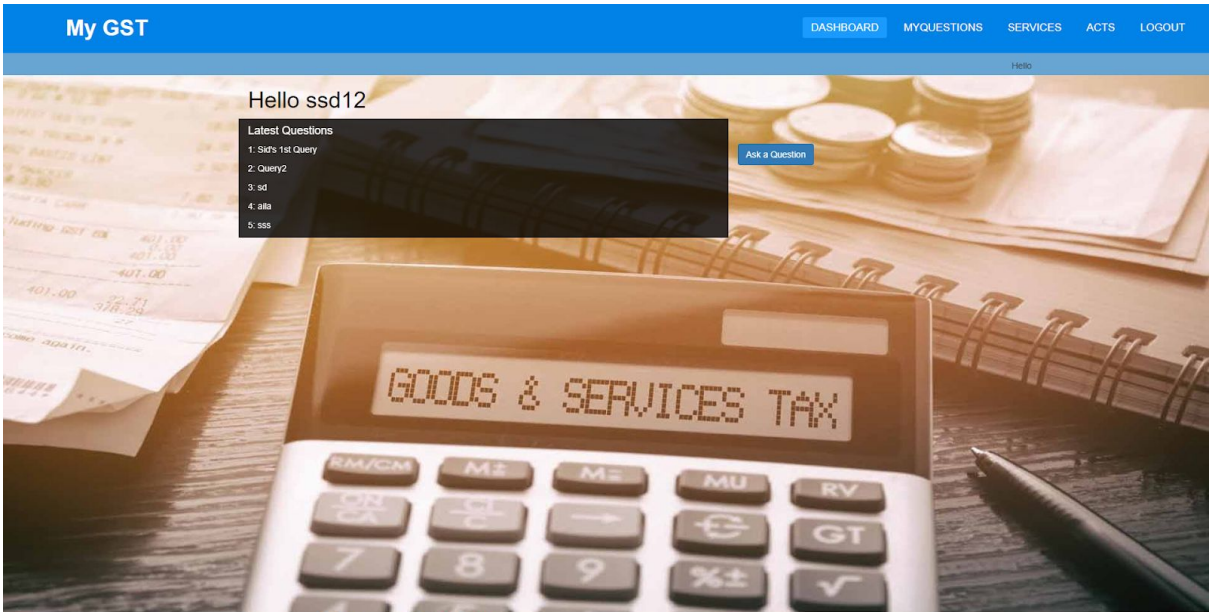
Signup page:



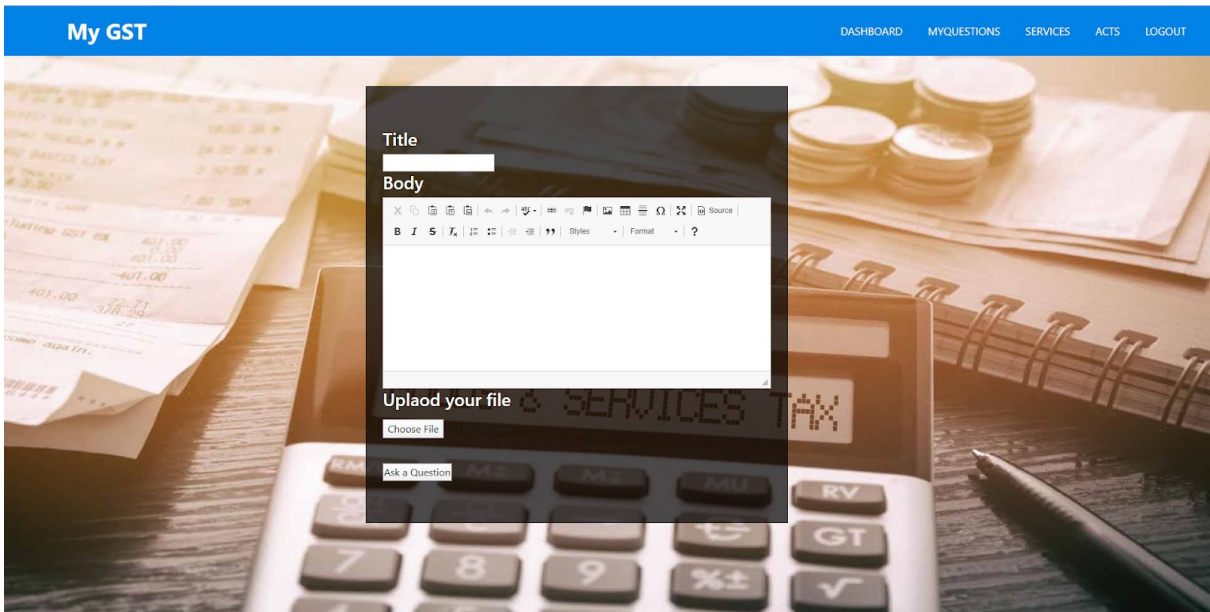
Login Page:



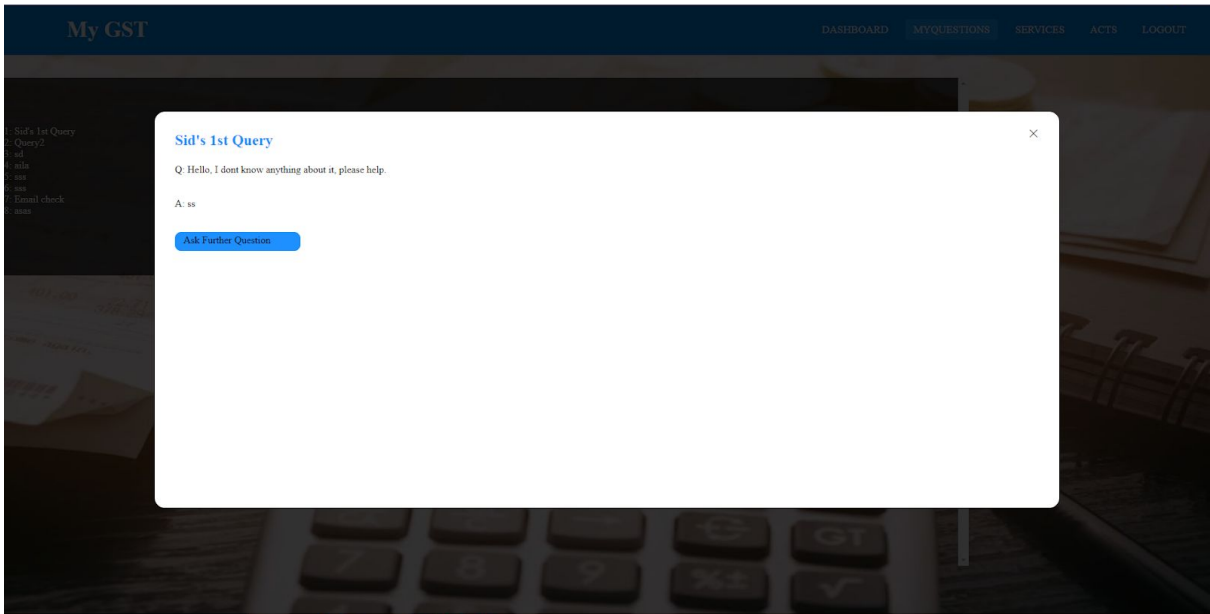
Dashboard:



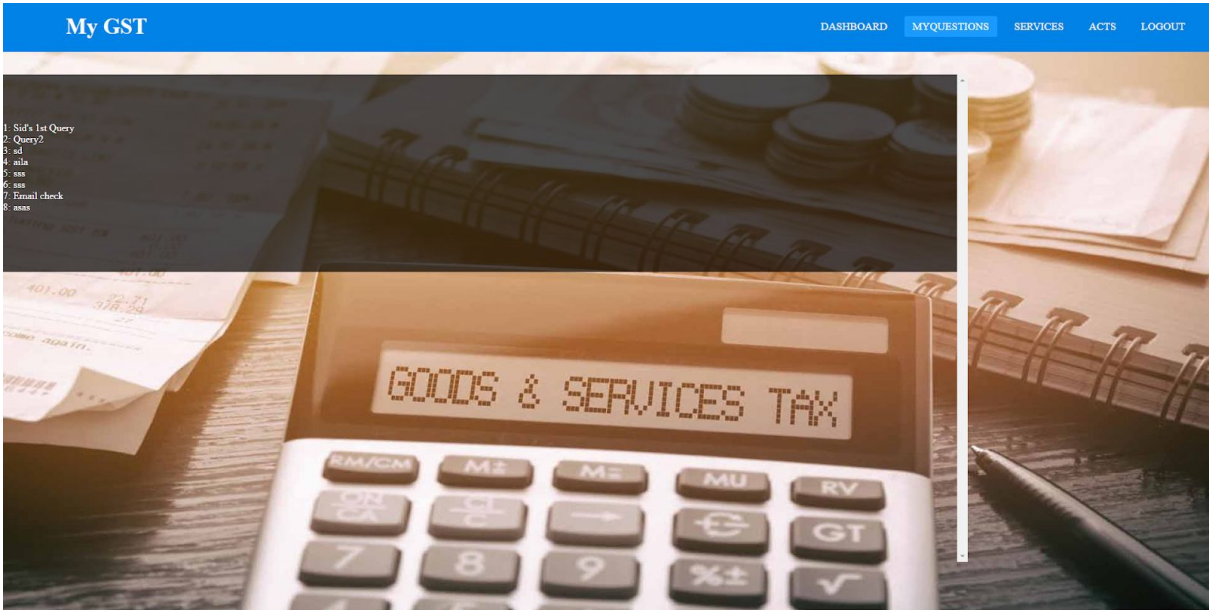
Ask Question Page:



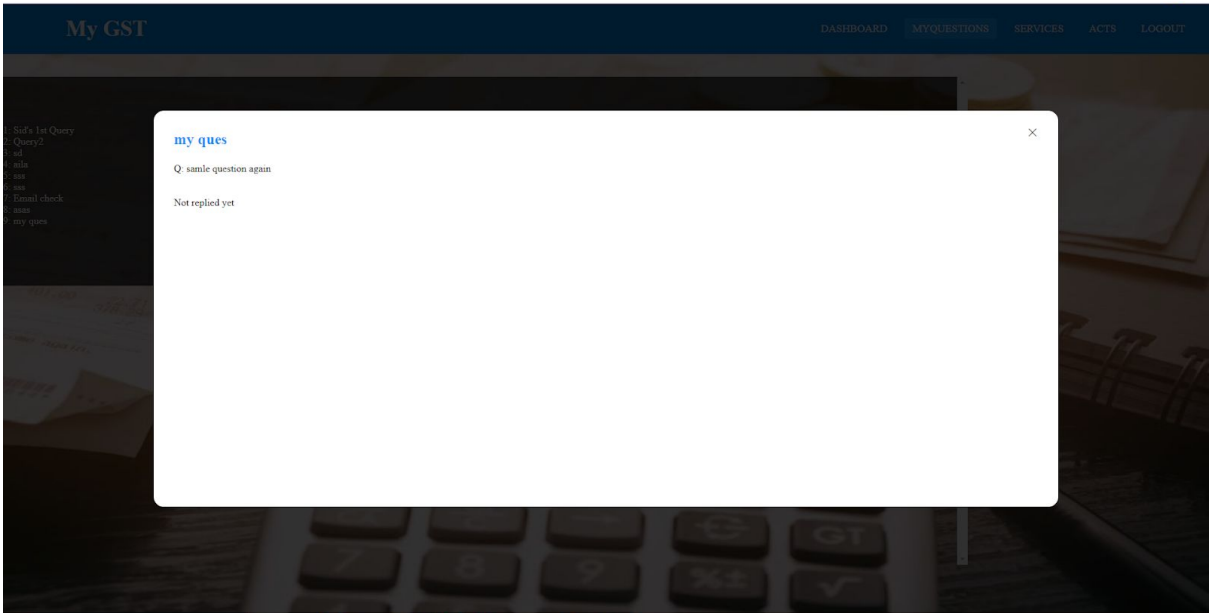
Question and Answer Modal:



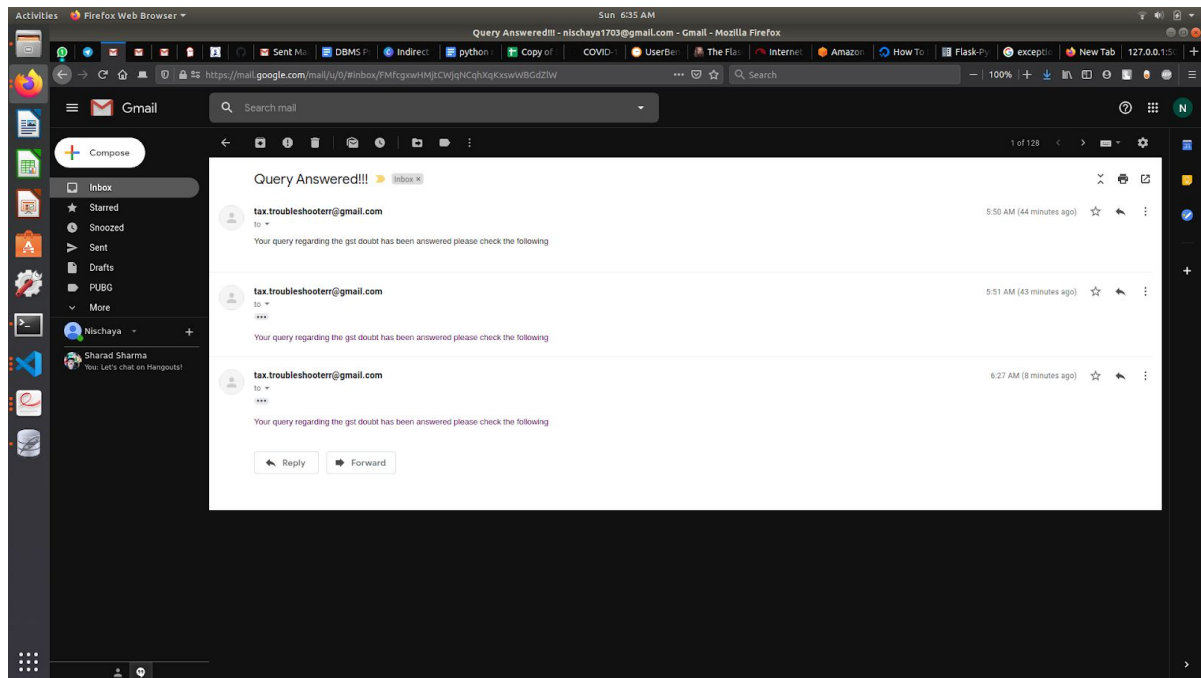
MyQuestions



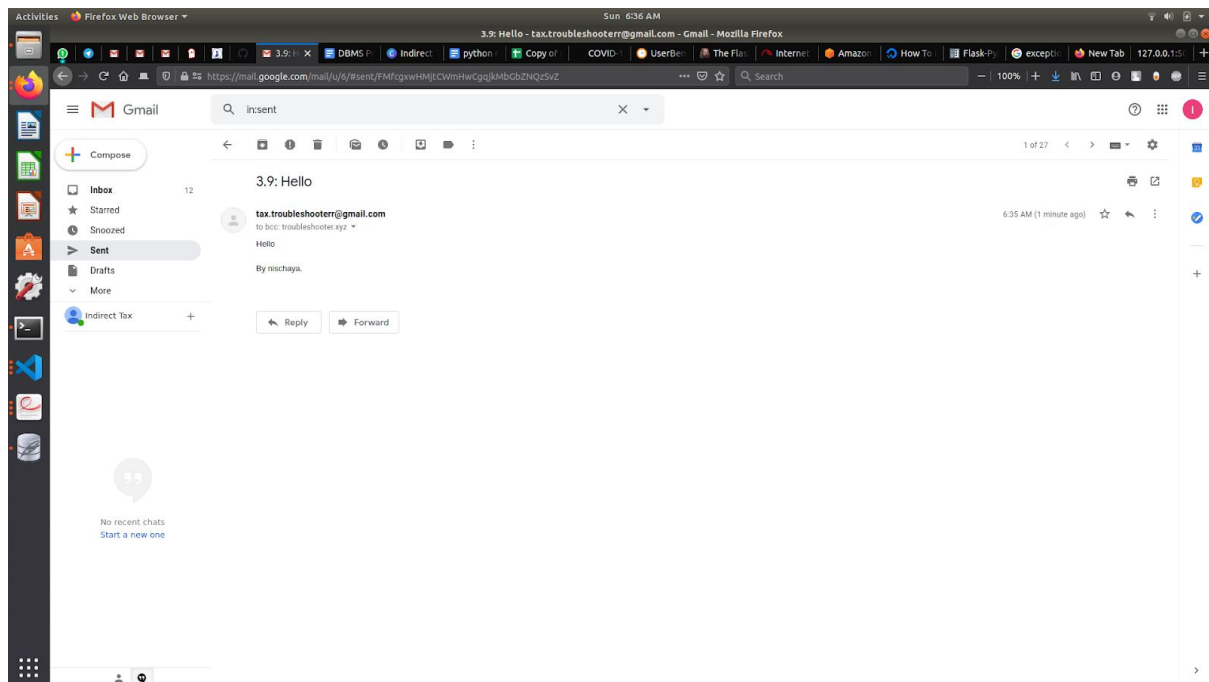
Not replied query



Query Answered E-Mail

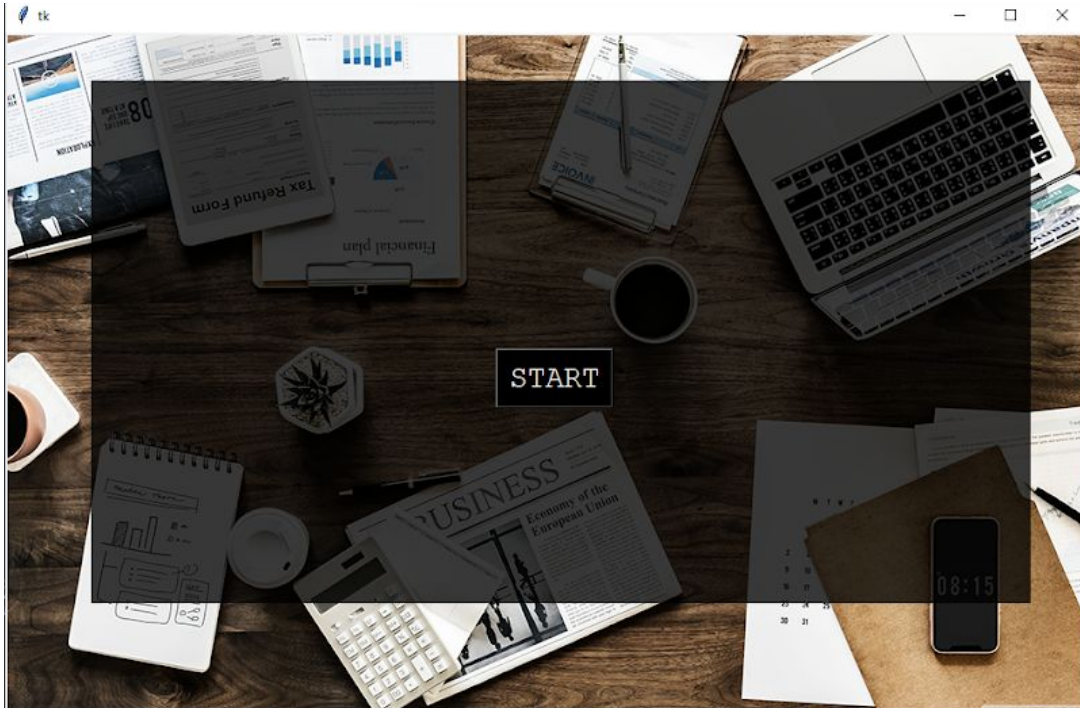


Query Raised E-Mail sent to our troubleshooting team

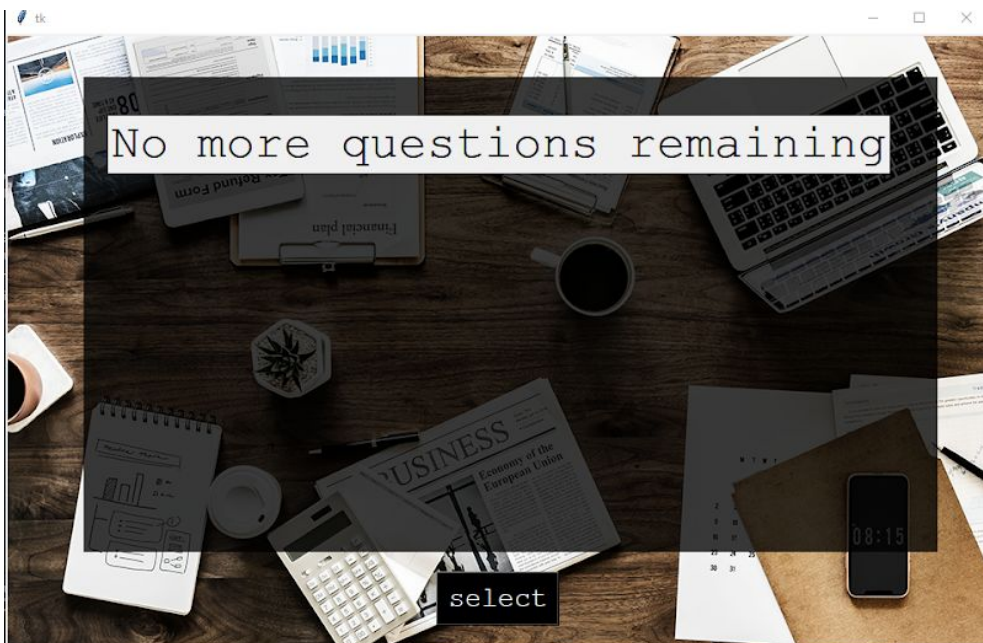


The Gui Based App

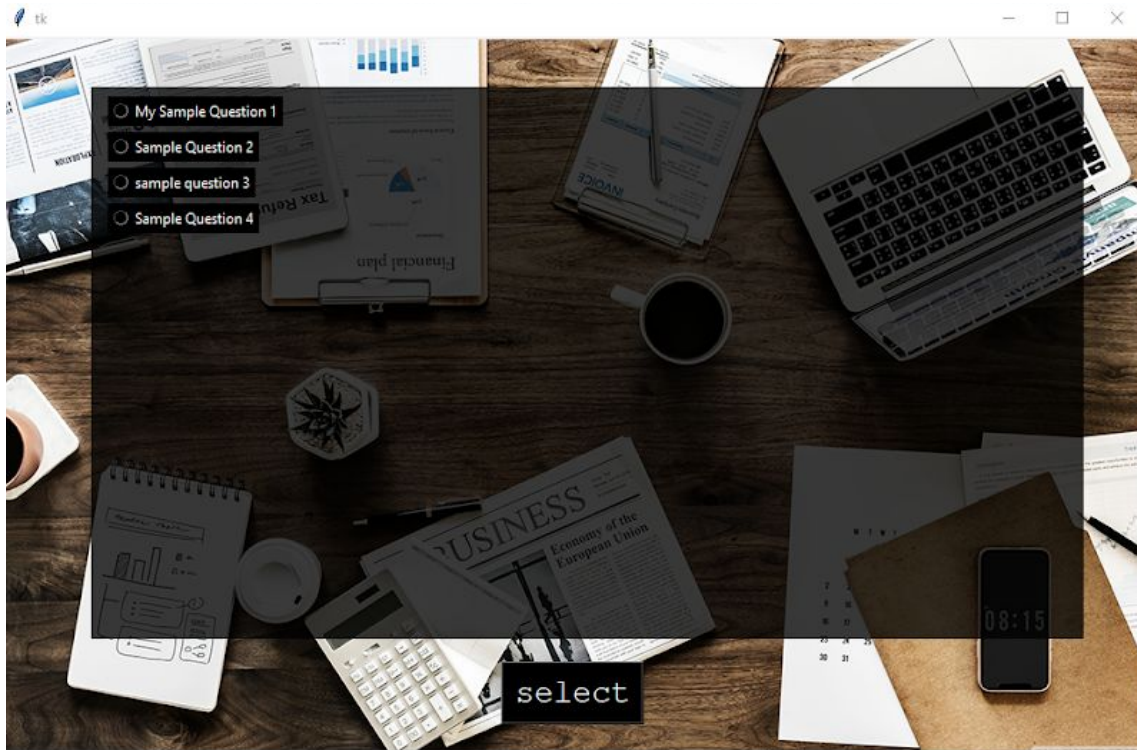
Start window:



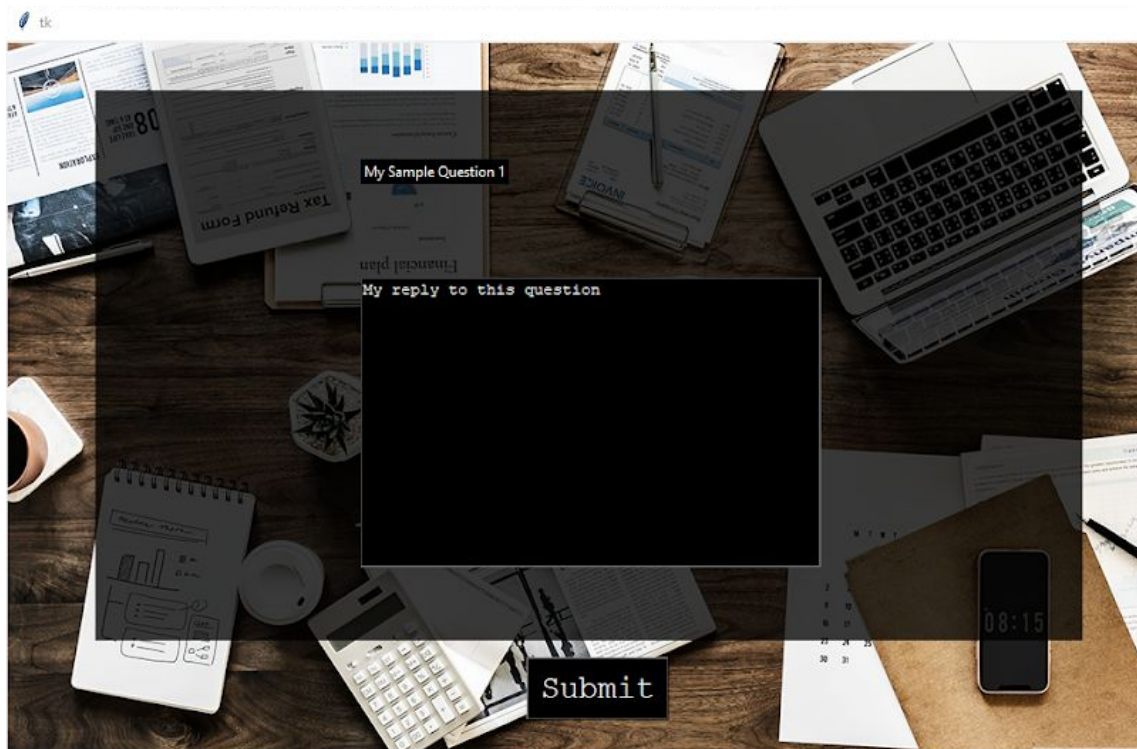
No more question remaining:



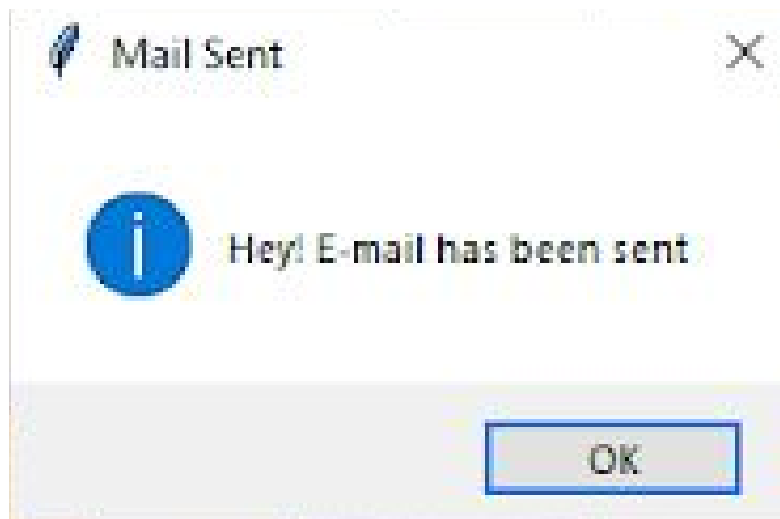
All Question Window:



Reply Window:



Mail sent message box:



DATABASE STRUCTURE

Name	Type	Schema
DOUBTS		CREATE TABLE 'doubts' ('id' INTEGER DEFAULT NULL PRIMARY KEY AUTOINCREMENT, 'userid' INTEGER DEFAULT NULL REFERENCES 'user' ('id'), 'userqrynum' INTEGER DEFAULT NULL, 'title' TEXT DEFAULT NULL, 'query' TEXT DEFAULT NULL, 'reply' TEXT DEFAULT NULL, 'upload' TEXT DEFAULT NULL, 'asked_timestamp' DATETIME DEFAULT NULL, 'reply_timestamp' DATETIME DEFAULT NULL);
id	integer	'id' integer
userid	integer	'userid' integer foreign key
userqrynum	integer	'userqrynum' integer
title	text	'title' text
query	text	'query' text
reply	text	'reply' text
upload	text	'upload' text
asked_timestamp	datetime	'asked_timestamp' datetime
reply_timestamp	datetime	'reply_timestamp' datetime
SUBQUERIES		CREATE TABLE 'subqueries' ('id' INTEGER DEFAULT NULL PRIMARY KEY AUTOINCREMENT, 'userid' INTEGER DEFAULT NULL REFERENCES 'user' ('id'), 'qryid' INTEGER DEFAULT NULL REFERENCES 'doubts' ('id'), 'userqrynum' INTEGER DEFAULT NULL, 'title' TEXT DEFAULT NULL, 'query' TEXT DEFAULT NULL, 'reply' TEXT DEFAULT NULL, 'upload' TEXT DEFAULT NULL, 'asked_timestamp' DATETIME DEFAULT NULL, 'reply_timestamp' DATETIME DEFAULT NULL);
id	integer	'id' integer
userid	integer	'userid' integer foreign key
qryid	integer	'qryid' integer foreign key

userqrynum	integer	'userqrynum' integer
title	text	'title' text
query	text	'query' text
reply	text	'reply' text
upload	text	'upload' text
asked_timestamp	datetime	'asked_timestamp' datetime
reply_timestamp	datetime	'reply_timestamp' datetime
USERS		CREATE TABLE 'user' ('id' INTEGER DEFAULT NULL PRIMARY KEY AUTOINCREMENT, 'username' TEXT DEFAULT NULL, 'email' TEXT DEFAULT NULL, 'password' TEXT DEFAULT NULL);
id	integer	'id' integer
username	text	'username' text unique
email	integer	'email' text unique
password	text	'password' text

CONCLUSION AND FUTURE SCOPE

Conclusion

GST(Goods and Services Tax) now has become the only tax in our country.It was implemented in the year 2017 and due to the short time period many people don't know about its applications and have many doubts regarding it.

People search their doubts over the internet from various websites and just scratch their heads over it.

And hence, we have proposed a solution to make a website in which users can login using their personal account and can ask any question regarding the GST implementation which would be answered by a specialised team using a GUI.

Future Scope

The key attraction would be that users can view all the acts at the same time on our website which would be updated as soon as the original acts are updated.

Payment portal to accept donations by the happy customers.

Live GST News

Articles on GST by experts