Database: Tourist Database Management System

Table Name: StaffInformation

Field Name	Data type	Field Length	Constraint	Description
S.N.	int	255	Primary Key	Unique S.N. to each staff
Name	varchar	255	null	Name of the Staff
Surname	varchar	255	null	Surname of the Staff
Age	int	255	null	Age of the Staff
Address	varchar	255	null	Homeplace of the Staff
Position	varchar	255	null	Position of the Staff in the company
Email	varchar	255	null	Email of the Staff in the company
Password	varchar	255	null	Password for that email

Table Name: ClientInformation

Field Name	Data type	Field Length	Constraint	Description
S.N.	int	255	Primary Key	Unique S.N. to each client
Name	varchar	255	null	Name of the Client
Nationality	varchar	255	null	Birth Country of the Client
Type	varchar	255	null	The type of tourist: Leisure or Business
Destinations	varchar	255	null	A place where the tourist will visit
Pax	int	255	null	Number of people accompanying the tourist
Nights	int	255	null	Number of nights spent in that location
Arrival	varchar	255	null	Date of Arrival of the tourist

|				
Departure	varchar	255	null	Date of Departure of the tourist
Rooms	int	255	null	Number of rooms occupied by the tourist as well as their pax
Email	varchar	255	null	Email address of the client to remain in contact
Expenses	float	-	null	Spending of that client for that place

Table Name: SecretPIN

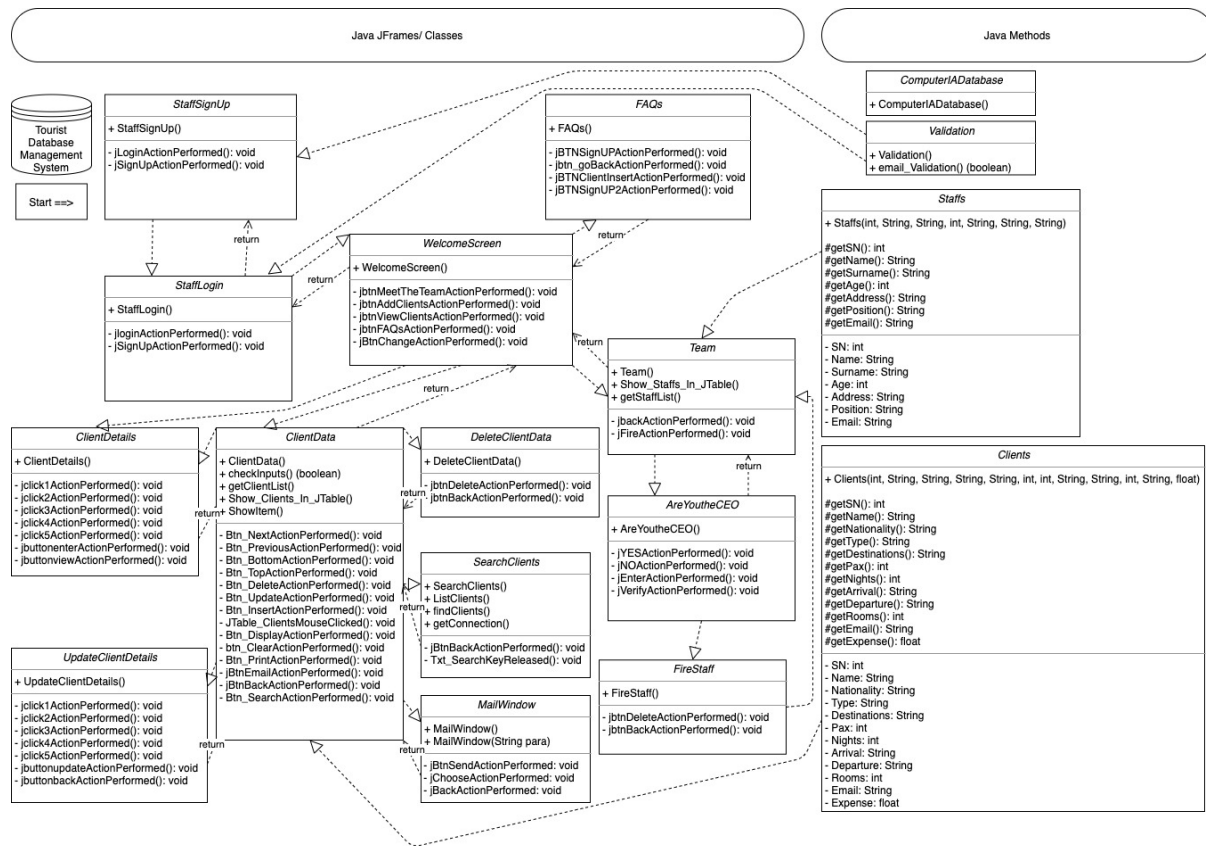| Field Name	Data type	Field Length	Constraint	Description
S.N.	int	255	Primary Key	Unique S.N. to PIN
PIN	varchar	255	null	PIN required to fire staffs from the database

Flowchart of the Software

The following flowchart shows the working mechanism of the software in a simplified manner
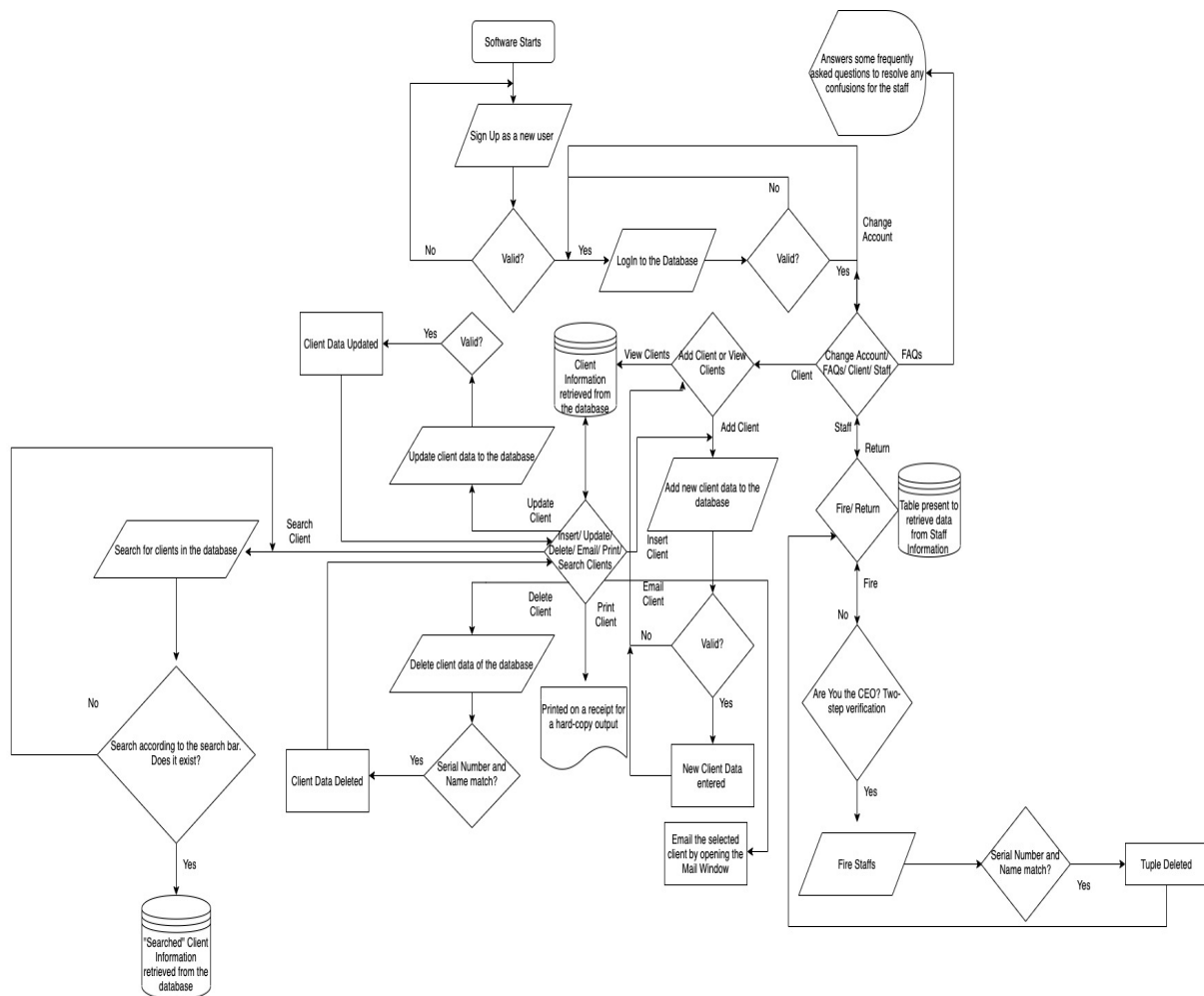
Unified Modeling Language (UML) Diagram of the Software

The following UML diagrams shows frames, classes, attributes and functions of the program

Testing plans

Testing segments	Testing process	Examples
UNIT TESTING		
Testing GUI frames	Check buttons, functions, searching, text fields and see if they work as planned	Use the functions to test them
Database connectivity and CRUD operations	Check if database connects and operations like Create, Read, Update and Delete work	Test the operations individually and check at the necessary locations if it worked
Multi-user	Test if multiple users are able to use the database	Login from different accounts and see if the main user is notified
Search testing	Test if searching the required client is done with user-demanded criteria	Have all the criteria tested and see if the criteria met client comes up
Email	Check if a mail can be sent with editable subject and message	Use Java Mail API and check if mail has arrived in the inbox
Numbers	Test to see if expenses are shown	See if the expense of clients with other details are shown
DRY RUN TESTING		
Error and functionality	Run the code and check for errors	Take pen & paper and trace the code and check logical errors
FUNCTIONAL TESTING		

BLACK BOX TESTING		WHITE BOX TESTING	
USER-ACCEPTANCE TESTING	**SYSTEM TESTING**	**UNIT TESTING**	**INTEGRATION TESTING**
Check if it easy for the user to use it Check with the client if their requirements are met or not	Run the system with all its features to see if it is working correctly running or not	Check each segment of the code during the process of developing it to catch errors on the spot	Check if the connected frames and functions are working and check for faults in the interactions