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المملكة العربية السعودية

وزارة التعليم

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Project

Google Maps

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README PAGE

One of the most prominent objectives of the project is to highlight several technical and analytical aspects that include preparing it from scratch.
Based on the assumption: Why was the application designed?
Issues that existed previously before the application design and suggested solutions that were included within the application .
Then analyze the requirements and divide them into functional and non-functional depending on several things.
A brief overview of the company producing this application (Google) and the methodology by which the application was designed was mentioned.
Based on the analytical aspect, there must be several models on which the application is based, to know many of them direct stakeholders and their roles, and each role represents a process belonging to a specific database and the chronology of certain operations such as seeing maps and others.
At the end of the project, the team gained experience in technical content analysis and software analysis from the roots.

Maryam Alkhraan

1.Feasibility Study & Project Proposal

1.1. Introduction

An application belonging to Google, which is concerned with geographical maps and can be represented by: When the beneficiary chooses a specific destination, the mechanism is to direct him through the fastest and least crowded road, knowing that it allows displaying data the desired place and the evaluations of other users.

1.2. Problems

Previously, there was a lack of explanatory information about local places, the user's inability to know and access new places, always going by the usual road, regardless of the presence of obstacles such as traffic congestion, and there is difficulty in going to new places because the user prefers to benefit from the experiences of others.

1.3. Background

Google is a global company based in California. They designed the Google Maps application in 2005. It is one of the most famous applications used by millions of people, The application features the ability to share your location in real-time, find parking spots, and other useful features.

1.4. Proposed solutions

Provide explanatory information for local places, direct the user to the intended destination even if it is new to him, the existence of alternative methods available as an option for the user in case of obstacles, provide the user with previous experiences from other users and there is also an evaluation rate of the place (stars).

1.5 Work plan

We have chosen the Agile methodology and the incremental model because it is suitable for Google Maps, as it was initially developed in four countries and then expanded to include all the world, the Agile allows the development of the application flexible and fast, and the incremental model allows The ability to add features without a negative impact on the application.

Step 1	**Specification**	Writing the requirements to be implemented, such as displaying the user interface, displaying maps, the ability to determine the workplace, and viewing locations via satellite
	Modification	Implementation of prerequisites on four countries US, Canada, UK and Ireland
	Validation	Verify and test requirements implementation
	Evaluation	Add modifications and improve the user experience to match their needs
Step 2	**Specification**	After Evaluation , writing the requirements to be implemented such as: improving the user interface, displaying more countries in the map, adding commercial locations
	Modification	Implement the requirements to improve the user interface and add more countries to the map
	Validation	Verify that the requirements are implemented correctly while ensuring that there are no errors
	Evaluation	Adding modifications to the system to suit the needs of the user
Step 3	**Specification**	Writing the requirements to be implemented, such as: Version a mobile application, providing data for traffic, displaying photos and videos for places and tourist attractions, audio search
	Modification	Implement the requirements and the ability to know data for the traffic situation and display photos and videos
	Validation	Verification of requirements implementation with error detection and system testing
	Evaluation	Adding updates and modifications to the system

Step 4	**Specification**	Writing requirements to be implemented such as: ratings for users inside the application, allowing direct modification of business information, internal service
	Modification	Implement requirements to include user ratings and allow information modification
	Validation	Verification of requirements implementation with error detection and system testing
	Evaluation	Taking user feedback , Adding updates and modifications to the system
Step 5	**Specification**	Writing the requirements to be implemented such as: the ability of the user to modify and add changes to the map, add more countries, add points for interactive users
	Modification	Implement requirements and contribute to quality improvement
	Validation	Verification of requirements implementation with error detection and system testing
	Evaluation	Taking user feedback , Adding updates and modifications to the system
Step 6	**Specification**	Writing the requirements to be implemented, the possibility of adding pins to places and saving them, adding the rest of the world to the map, reporting accidents, speed alerts
	Modification	Implementation of new requirements
	Validation	Verify and test requirements implementation
	Evaluation	Adding updates and modifications to the system

2.Project requirements

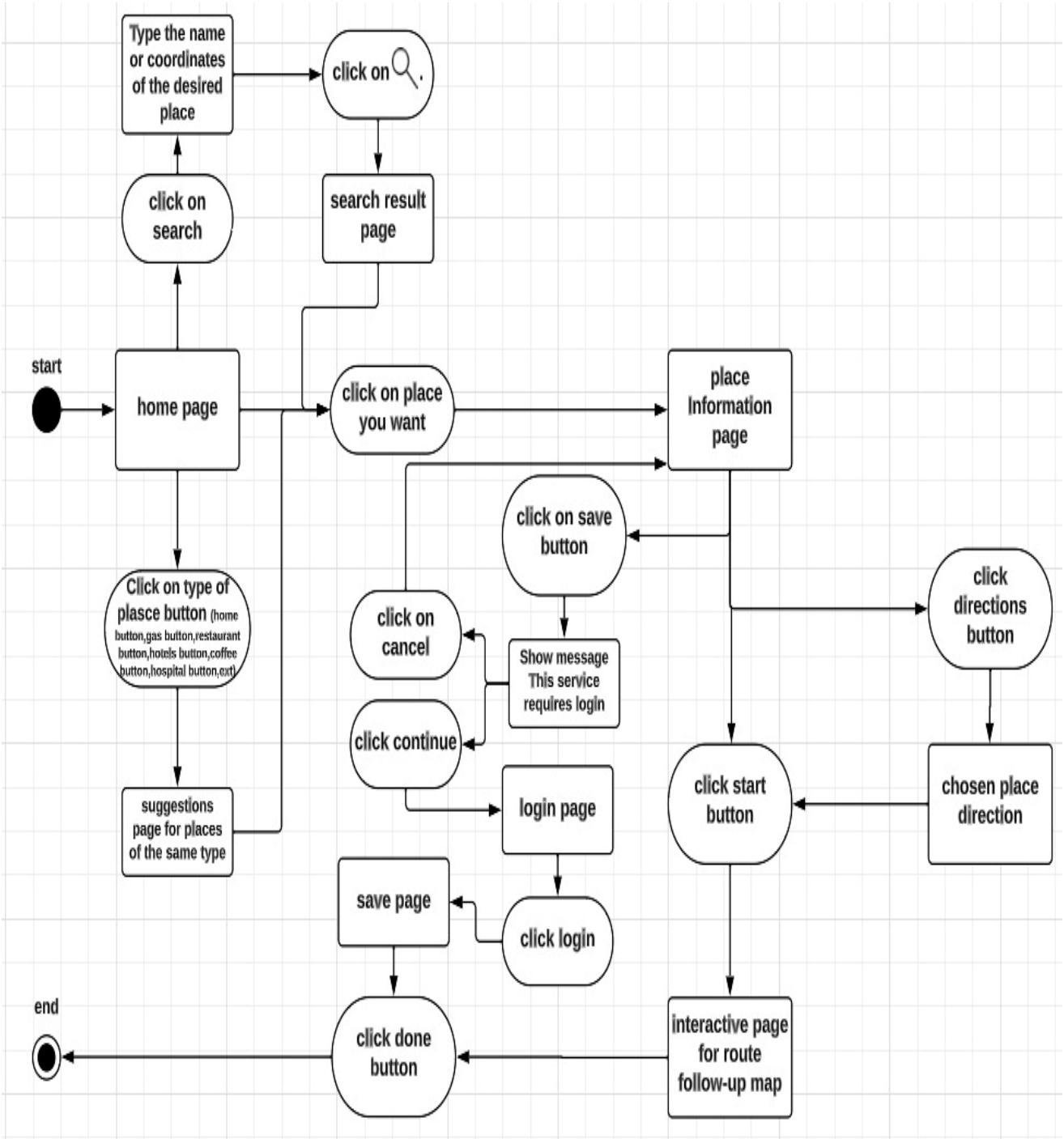
2.1 Functional requirements

ID	Priority	Description
R1	High	Log in by e-mail and password (Google)
R2	High	Allow access to the site
R3	High	Display the map in its interactive nature through icons and others
R4	Intermediate	Search for places by typing text or by voice (voice needs permission to access through privacy)
R5	High	Freedom to choose the means of transportation with knowledge of the duration for each means
R6	High	Send a report about (the presence of maintenance work on the road, traffic surveillance cameras, the place is closed or wrong
R7	Intermediate	Evaluation of the proposed route after arrival
R8	Low	Preference for places through the favorite places box and writing comments about it

2.2 Non-Functional requirement

ID	Priority	Description
R1	High	Not available when there is no internet
R2	Intermediate	The performance is excellent and flexible, which leads to ease of use
R3	High	Provides protection and privacy for user data
R4	High	Maintenance and periodic updates to improve performance and fix errors

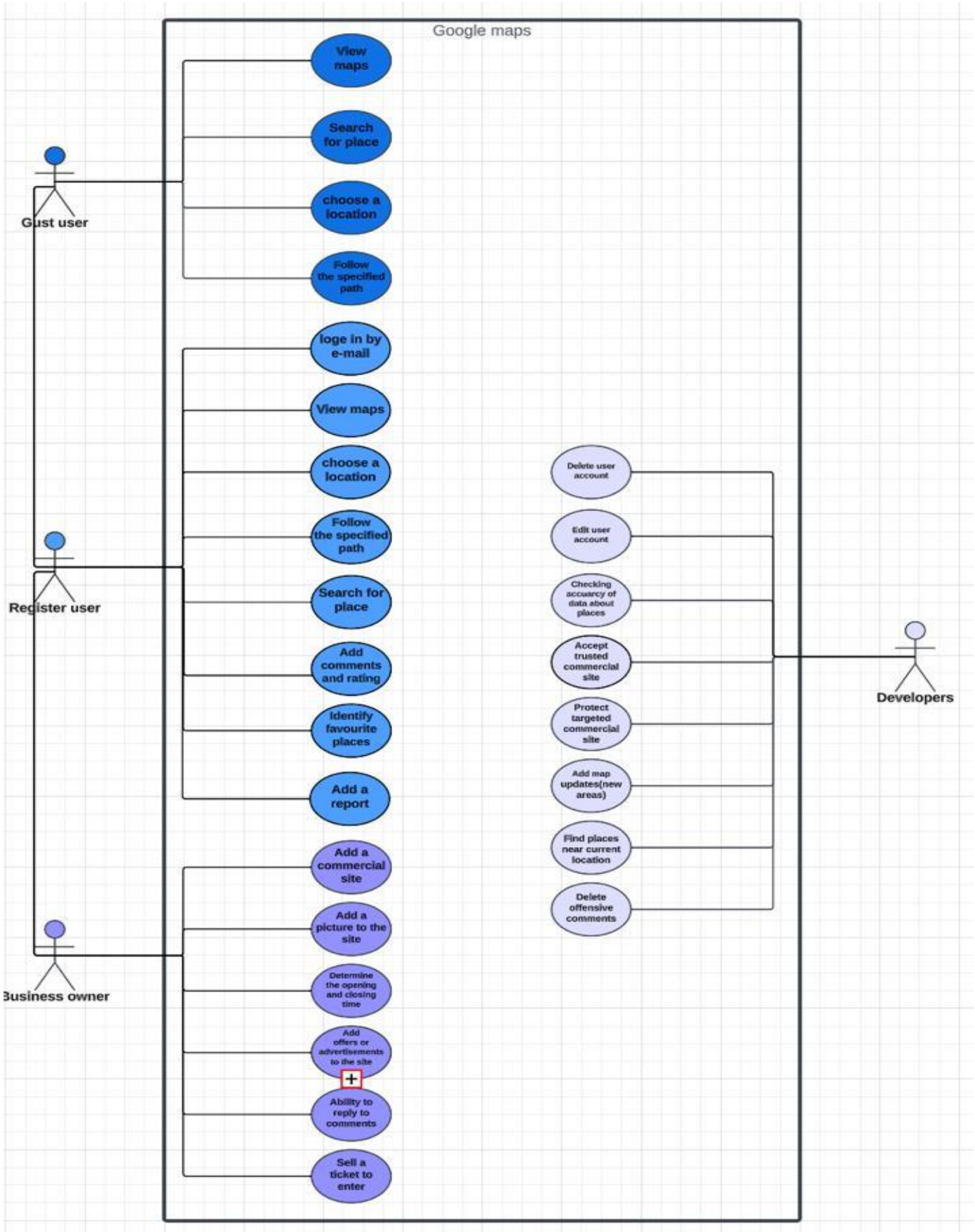
3.Activity diagram



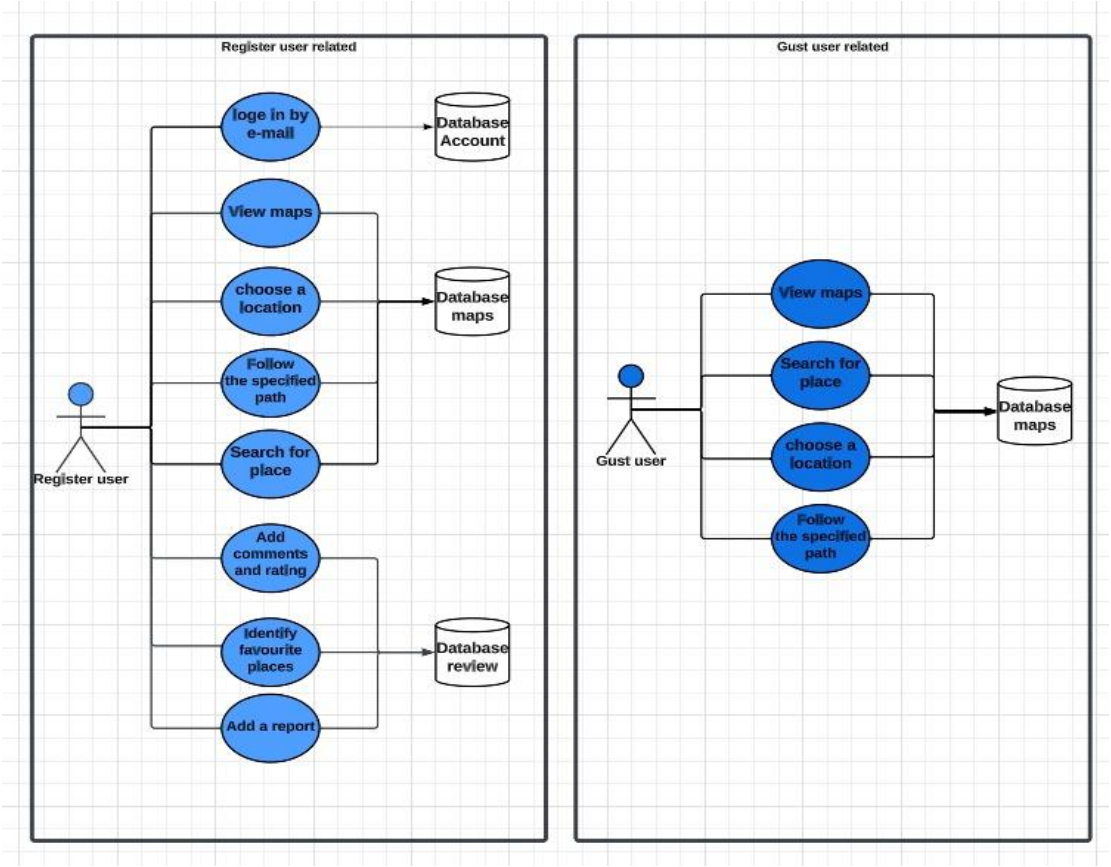
4.Use Case Modelling

Actor	Role
Register user	Loge in by e-mail View map Choose a location Follow the specified path Search for place Add comments and rating Identify favorite places Add a report
Gust user	View maps Search for place Choose a location Follow the specified path
Business owner	Add a commercial site Add a picture to the site Add offers or advertisements to the site Sell a ticket to enter Determine the opening and closing time Ability to reply to comments
Developers	Delete user account Edit user account Checking accuracy of data about places Add map updates(new areas) Find places near current location Delete offensive comments Accept trusted commercial site Protect targeted commercial site

Use Case


Google maps
View maps
Search for place
choose a location
Follow the specified path
loge in by e-mail
View maps
choose a location
Follow the specified path
Search for place
Add comments and rating
Identify favourite places
Add a report
Add a commercial site
Add a picture to the site
Determine the opening and closing time
Add offers or advertisements to the site
Ability to reply to comments
Sell a ticket to enter
Gust user
Register user
Business owner
Delete user account
Edit user account
Checking accuarcy of data about places
Accept trusted commercial site
Protect targeted commercial site
Add map updates(new areas)
Find places near current location
Delete offensive comments
Developers

Related in use case



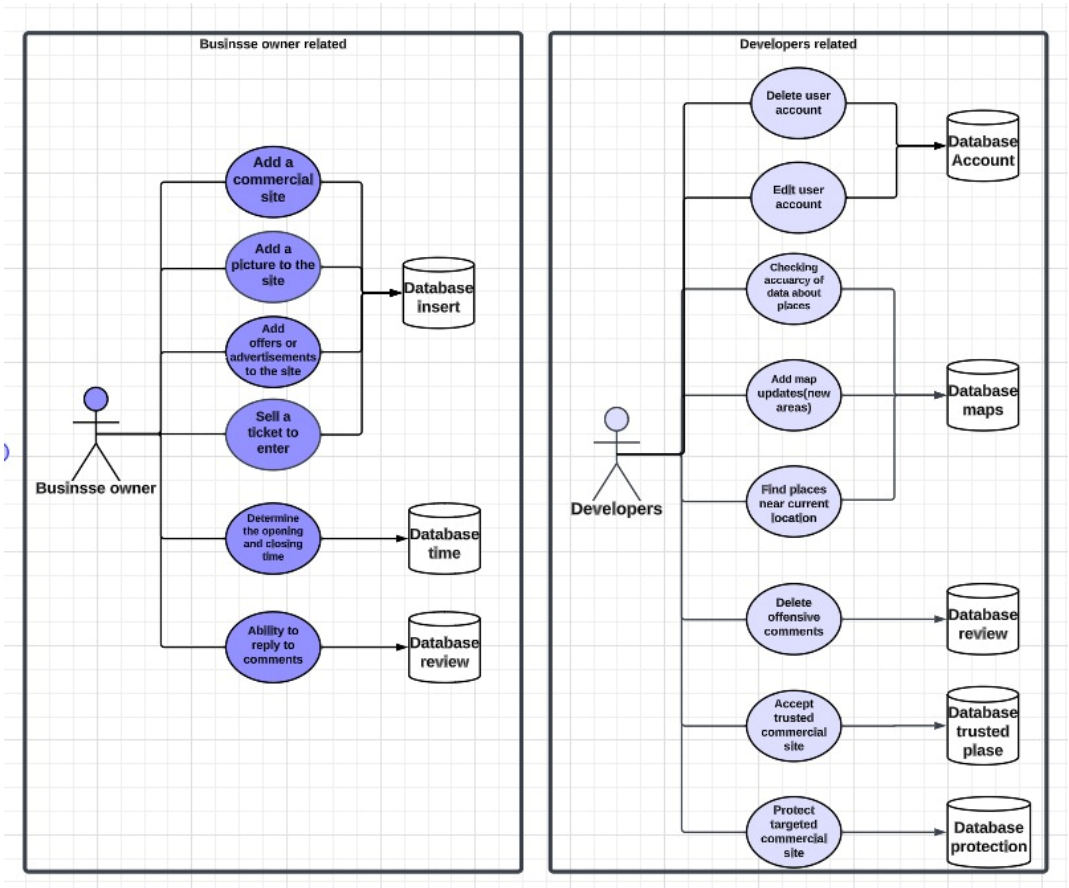
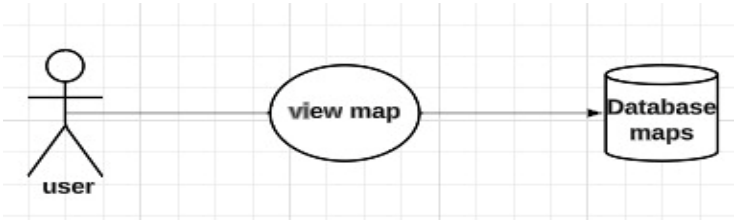


Table 1

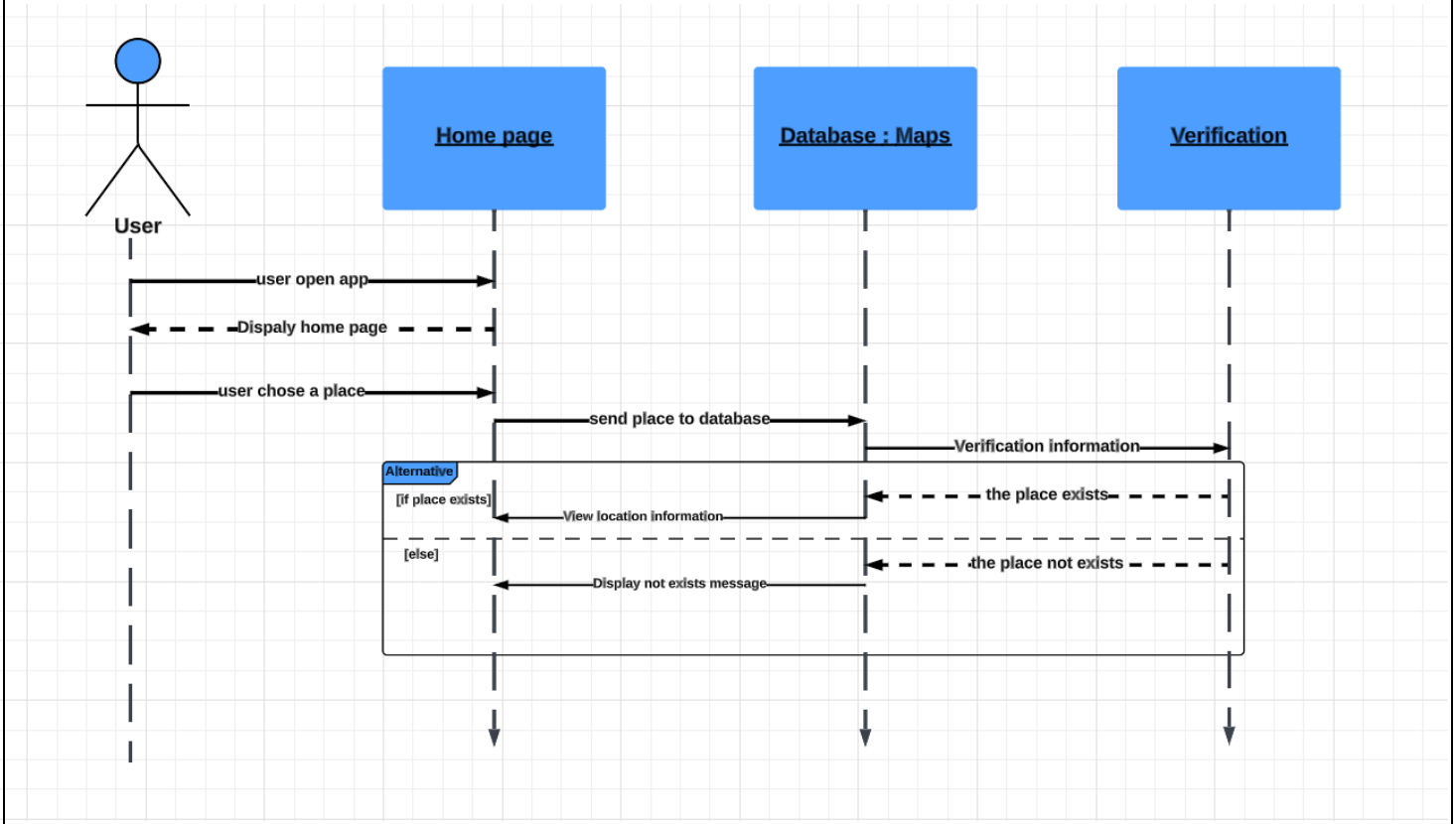


User: view maps	
Actor	User and Database of maps.
Description	When the user enters the site to start benefiting from it, he can view the global map and through it he can determine where to go and his current location.
Data	Map, user location.
Stimulus	User wants to view the map
Response	User can show and view the map.
Comment	There may be a delay in downloading the map due to the interne Viewing the map is beneficial to the user through many aspects, including displaying nearby places, displaying roads and alternative roads, viewing icons that facilitate knowing the background of the place and a lot of things .

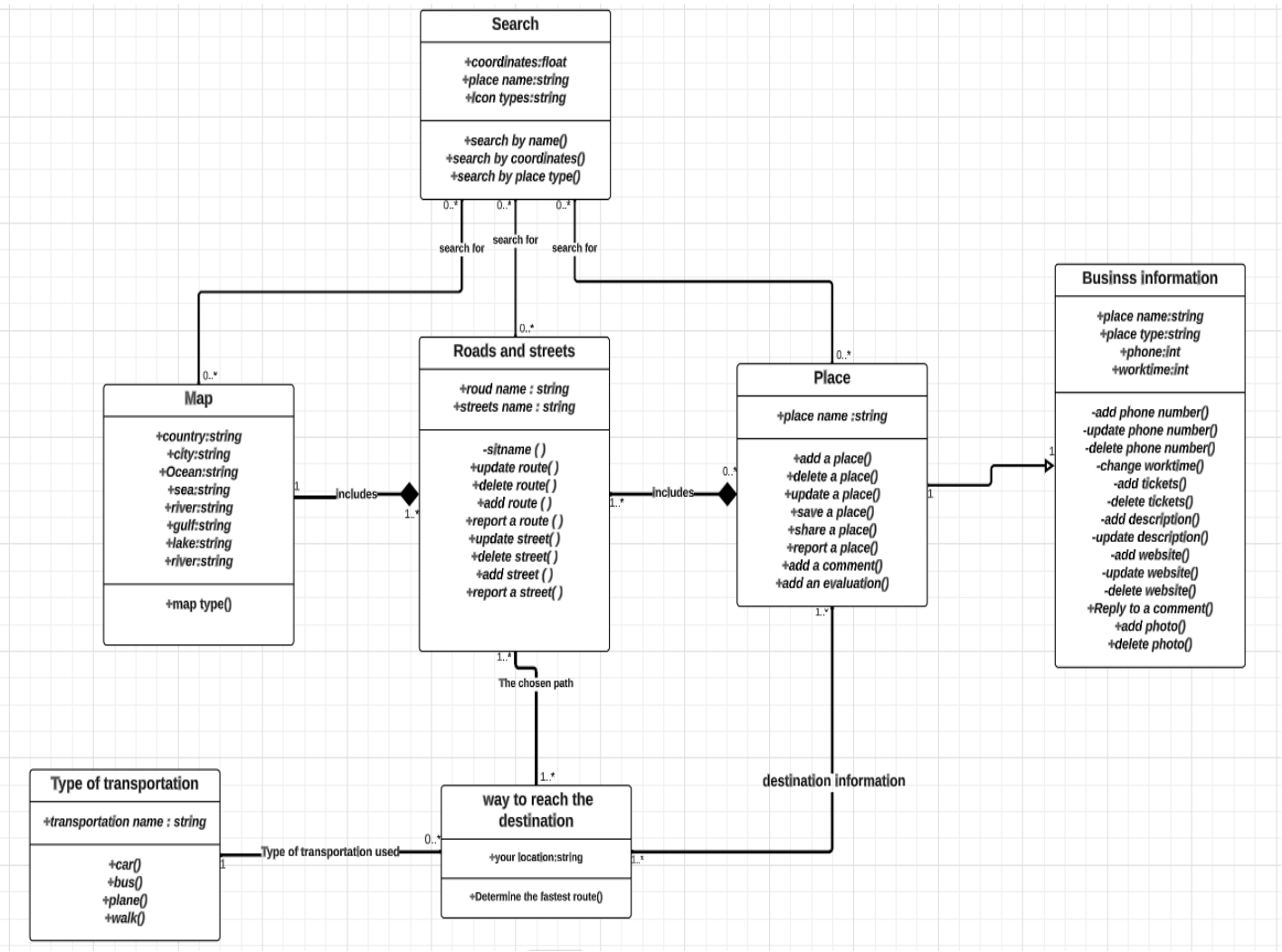
Table 2

Business owner: add a commercial site	
Actor	Business owner and Database of review.
Description	Business owners can view and reply user comments and opinions about the business.
Data	Business owner account, user suspension
Stimulus	Improving the level of service and responsiveness to customers.
Response	The customer gets an answer about his inquiry, gaining the trust of customers

5. Sequence Diagrams



6. Class Diagram



References

-Sequence diagram

-Class Diagram

-UML