Software Design Document

Easy Hospital Mode

Version 2.0

20 / 12 /2021

Computes and Information

Bioinformatics Department

Prepared by: <Group 3 Section 4>

SDD-Template and UML

1. Introduction:

The hospital management system (hospital information system) is a set of application tools that helps hospitals in efficiently managing their core services such as patient care and engagement, daily workflows such as appointment booking, staff scheduling, ward management, and associated functions such as Medicare reimbursements, pharmacy, lab, administrative and compliance-related work, etc. It mitigates any lack of coordination, eliminates ineffective processes, and helps hospitals to run profitably. It also provides extremely valuable healthcare analytics that helps hospitals to clearly understand their current business and deploy measures for further improvement.

1.1- Purpose:

The software is for the automation hospital management system. Save money for patient and hospital. The system will be used to get the information from the patient and then storing that data for future usages.

1.2- Product Scope:

The proposed software is the Easy Hospital Mode. The system will be used to get the information from the patient and then storing that data for future usages. The current system in use is a paper-passed system. It is too slow and cannot provide update lists of patients within a reasonable timeframe. The intentions of the system are to reduce over-time pay and increase the number of patients that can be treated accurately. Requirements statement in this document are both functional and nun functional.

1.3 Definitions, Acronyms and Abbreviation:

We use some terms, and we will write it is meaning here

(SRS) Software Requirements Specification.

(HMS) Hospital Management System .

1.4 References:

We use this application as a reference for us and we have taken some function from it

https://itsourcecode.com/free-projects/csharp/hospital-management-system-in-c-with-source-code-2021/

https://en.wikipedia.org/wiki/Hospital_information_system

-https://www.freeprojectz.com/entity-relationship/hospital-management-system-er-diagram

- https://economictimes.indiatimes.com/definition/minimum-viable-product

1.5 Overview:

The Software Design Document is divided into 8 sections with various subsections.

The sections of the Software Design Document are:

1- Introduction

2- System Architectural Design

3- Use Cases

4- Class Diagram

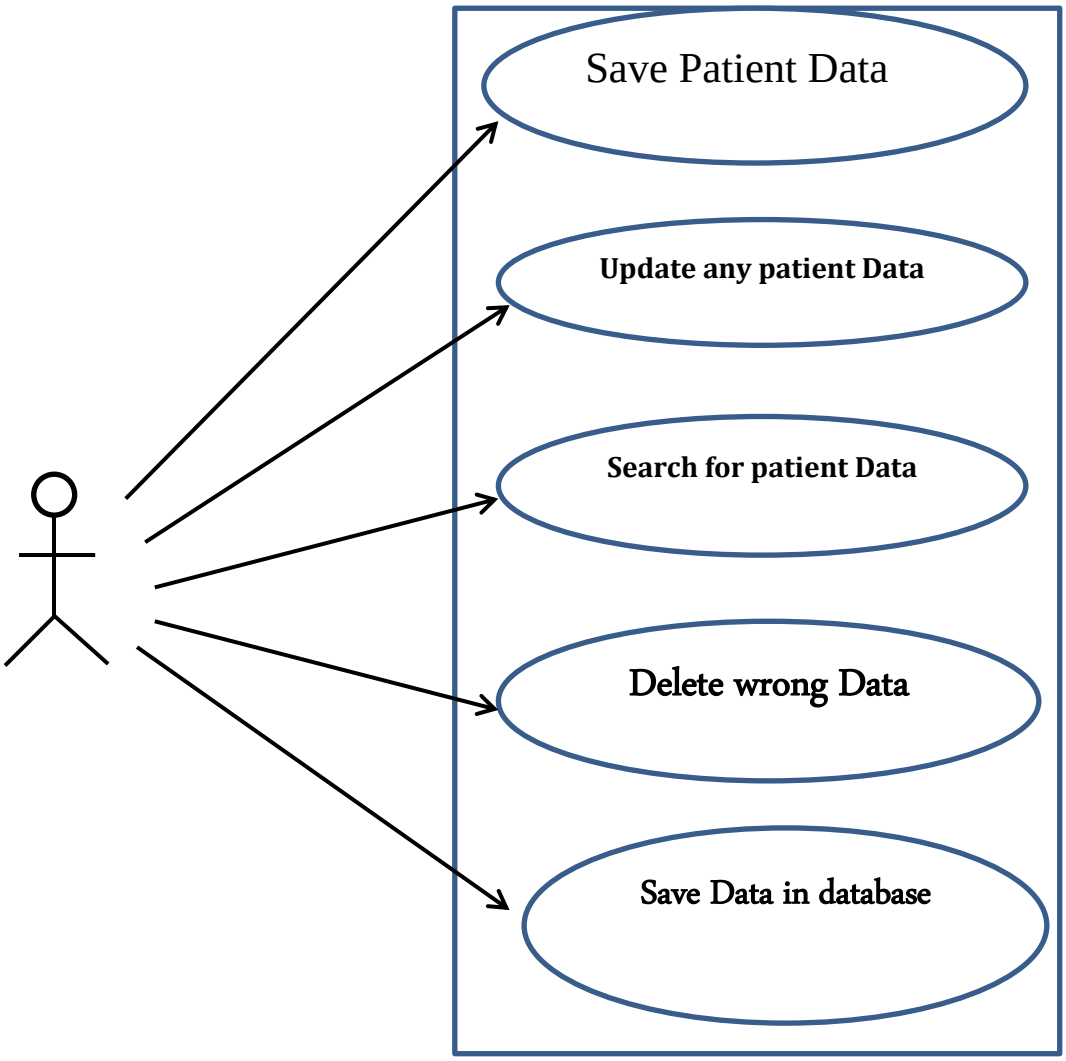
5- Sequence Diagrams

6- Data Design

7- User Interface Design

8- Requirements Matrix

System Architectural Design :



Use Cases

Use-Case Model Survey:

The administrators, front-desk staff will be the main users.

Given the condition that not all the users are computer-literate. Some users may have to be trained on using the system. Front-desk staff: They all have general reception and secretarial duties. Every staff has some basic computer training. They are responsible for patient's check-in or notification of appropriate people. Administrators: They all have post-secondary education relating to general business administration practices. Every administrator has basic computer training. They are responsible for all of the scheduling and updating day/night employee shifts

2.2 List of Use Cases:

The front-desk staff

Save patient Data

Update any patient data

Search for patient data

Delete wrong data

Save data in database**2.3Use Case Diagram:**

2.3.1 Save patient Data Model Use Diagram:

Goal:

Save patient data in the required clinic.

Description and priority:

When you press save in any clinic, Data will be saved at this clinic only.

2.3Use Case Diagram:

2.3.1 Save patient Data Model Use Diagram:

Goal:

Save patient data in the required clinic.

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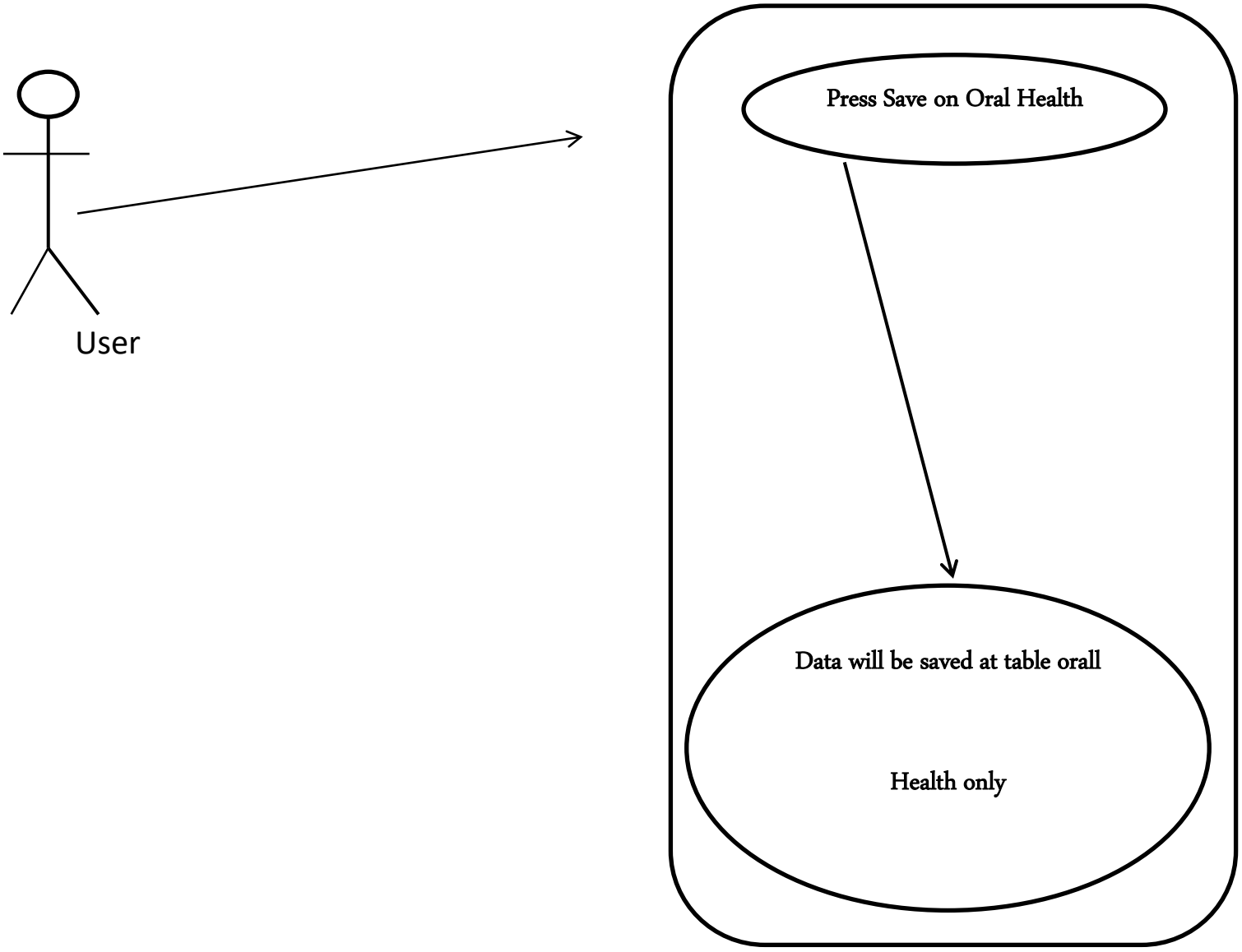


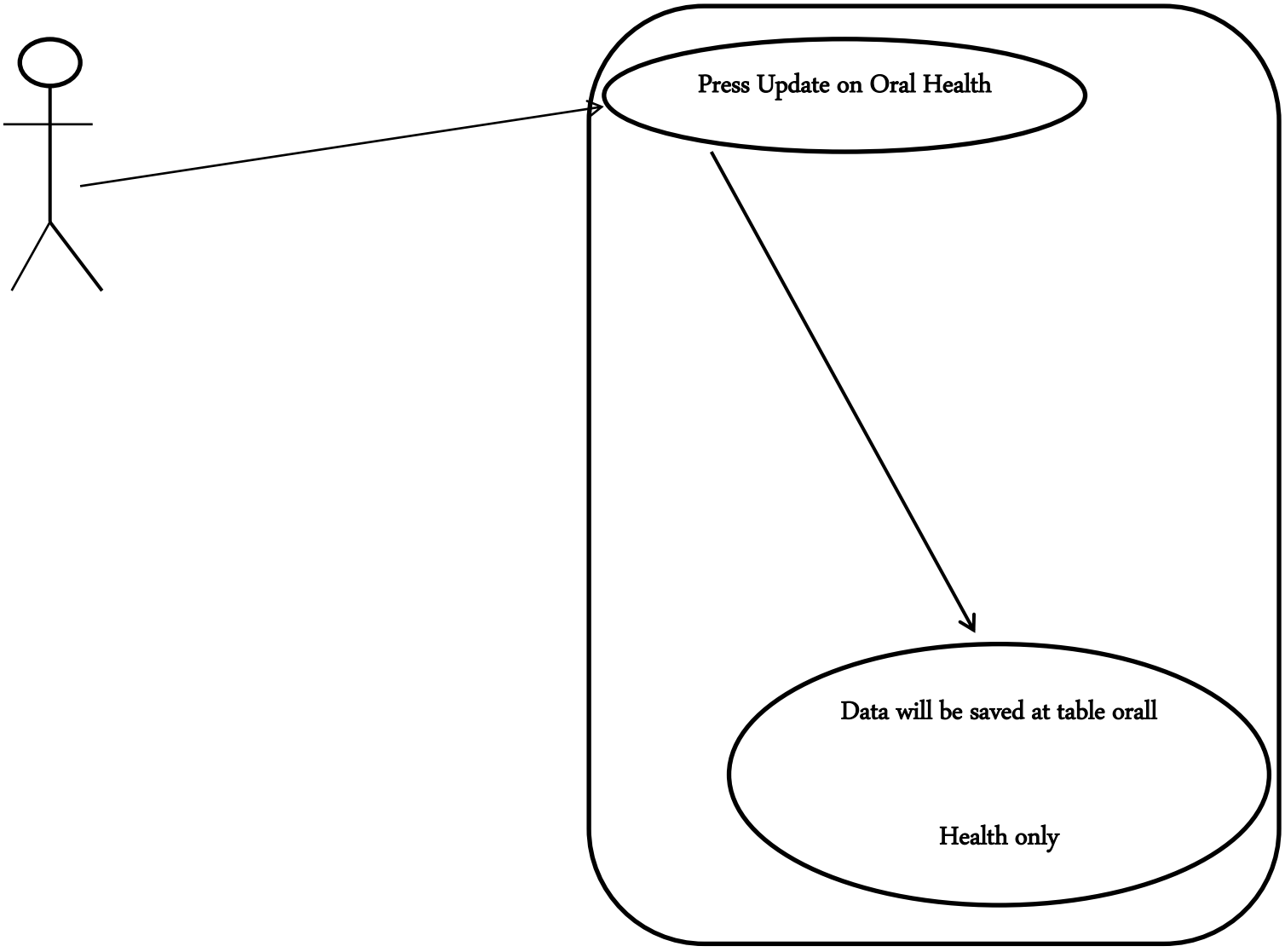
2.3.1 Update patient Data Model Use Diagram:

Goal:

Update patient data in the required clinic.

Description and priority:

When you press Update in any clinic, Data will be Updated at this clinic only.



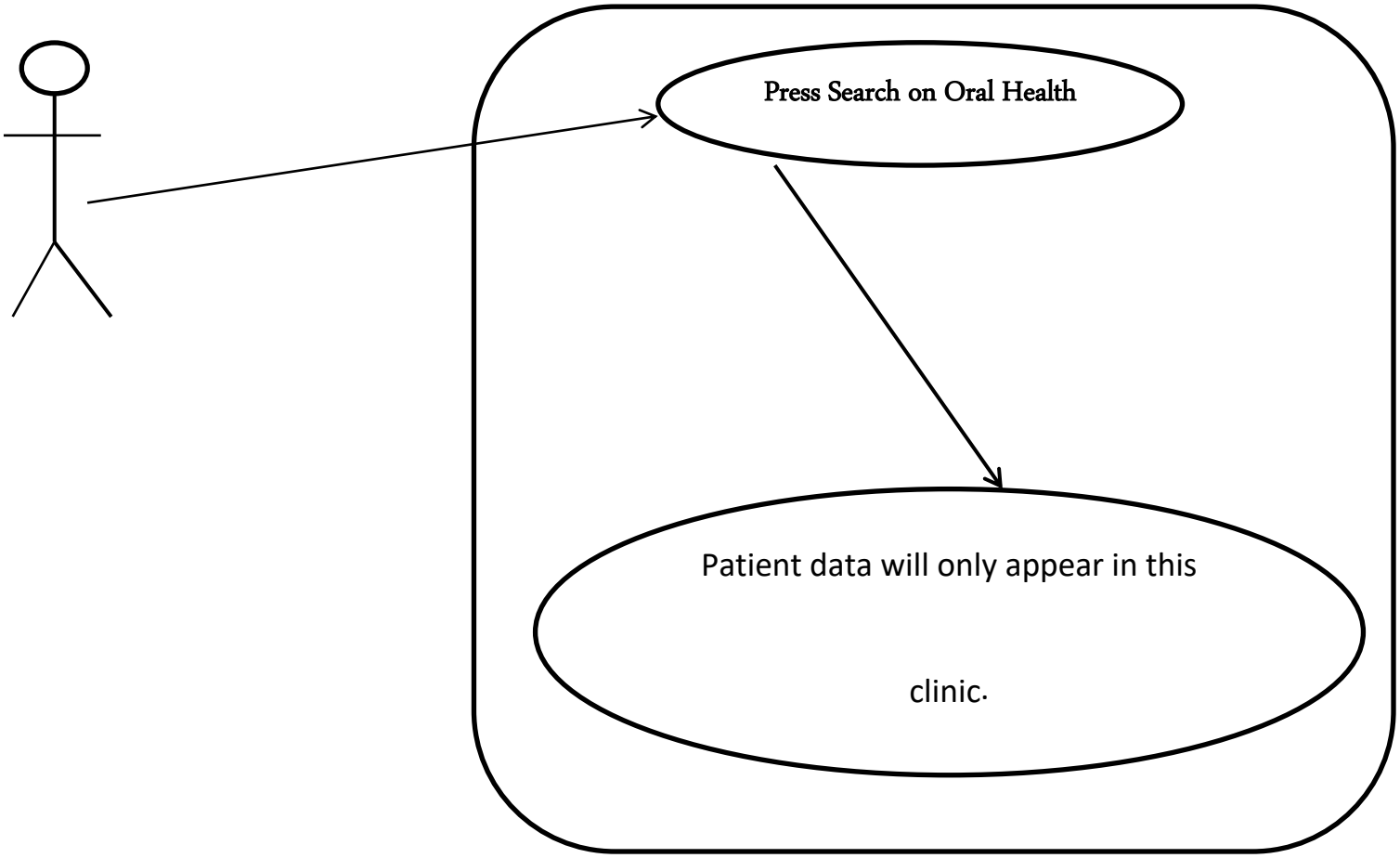
2.3.1 Search for patient Data Model Use Diagram:

Goal:

Search for patient data in the required clinic.

Description and priority:

When you press Search in any clinic, Patient data will only appear in this clinic.



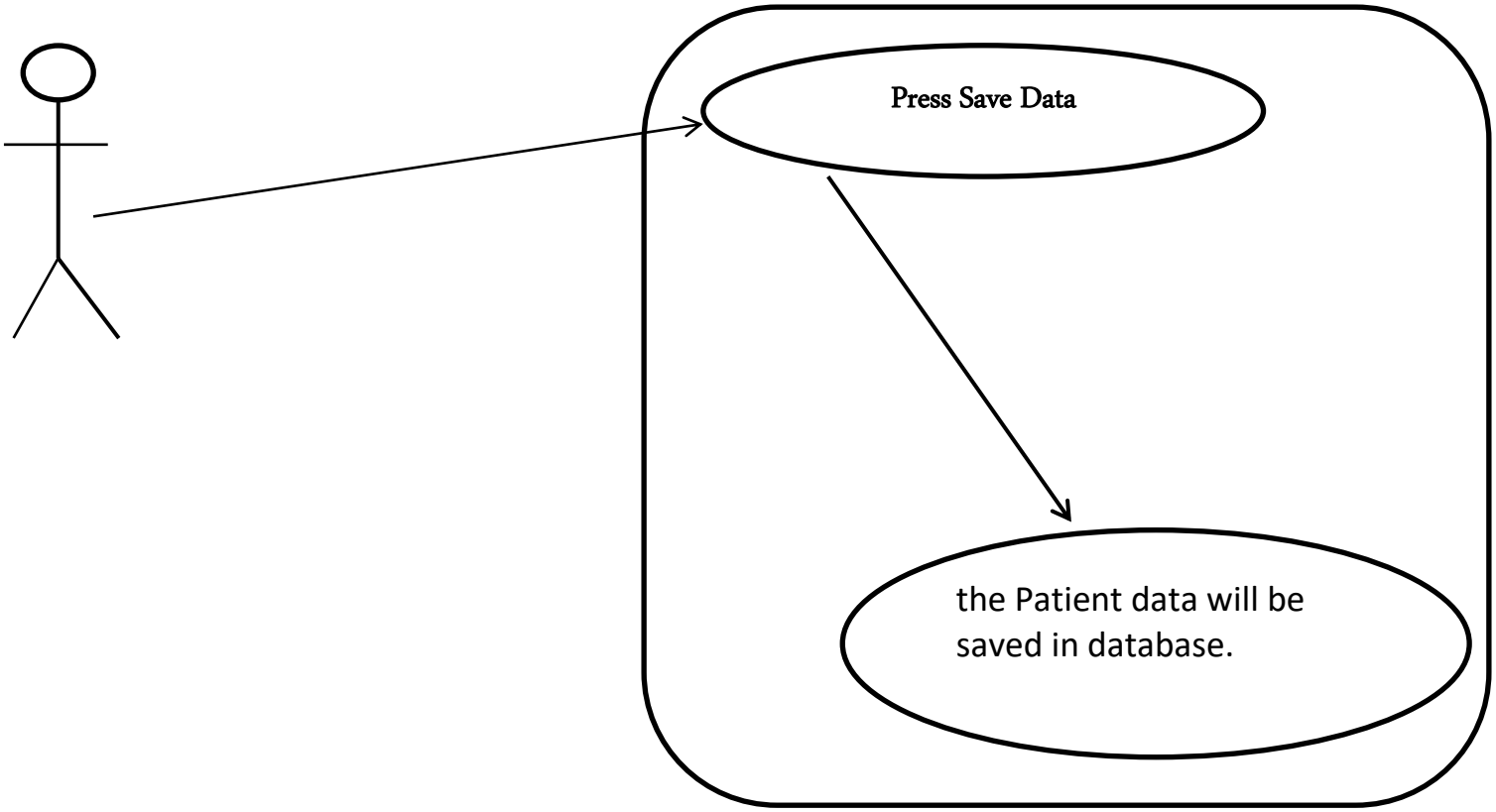
2.3.1 Delete Wrong Data Model Use Diagram:

Goal:

Save patient data in Database.

Description and priority:

When you click on Save data, the Patient data will be saved in database.



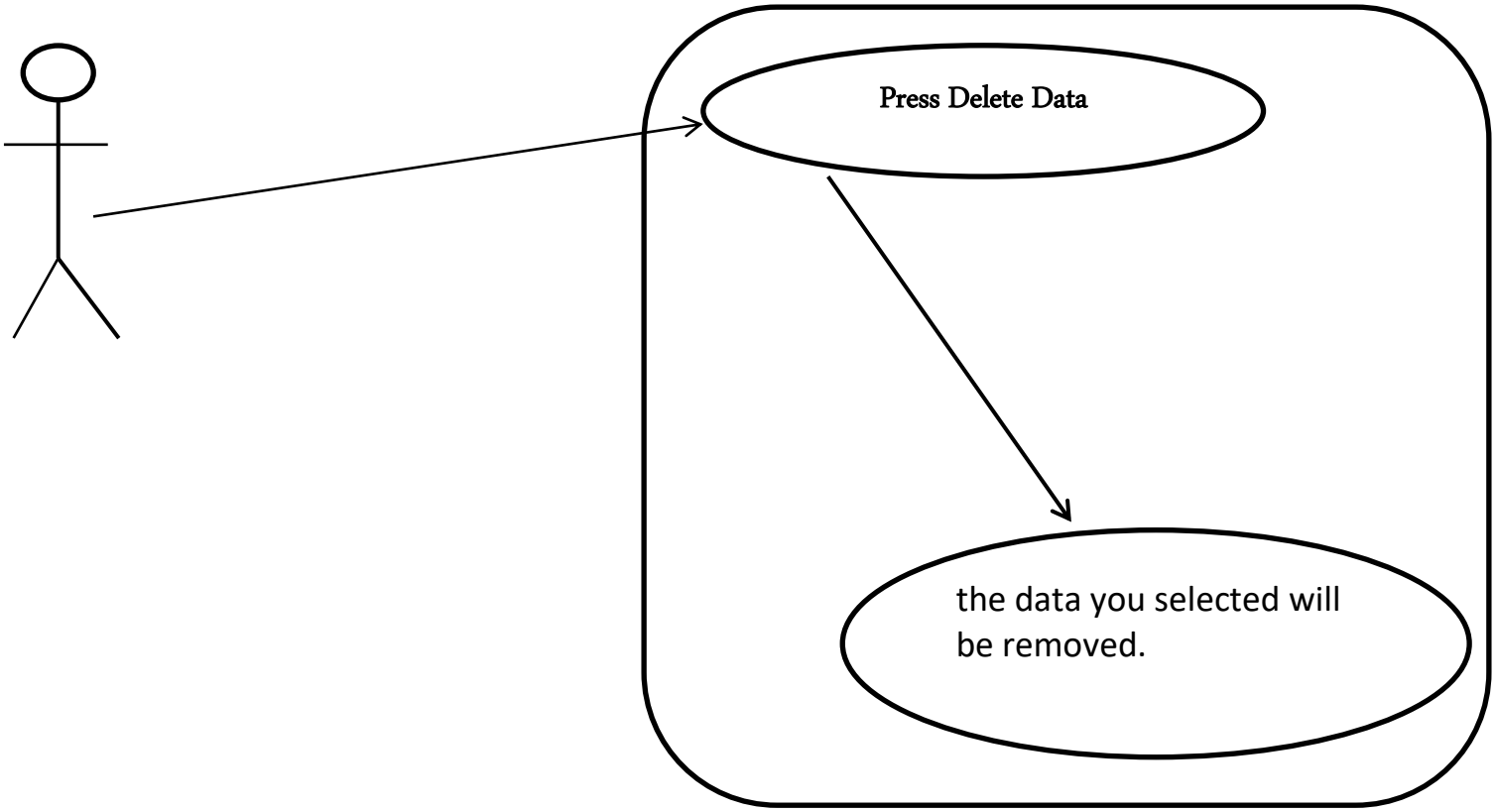
2.3.1 Save Patient Data Model Use Diagram:

Goal:

Delete wrong patient data.

Description and priority:

When you click on delete data, the data you selected will be removed.



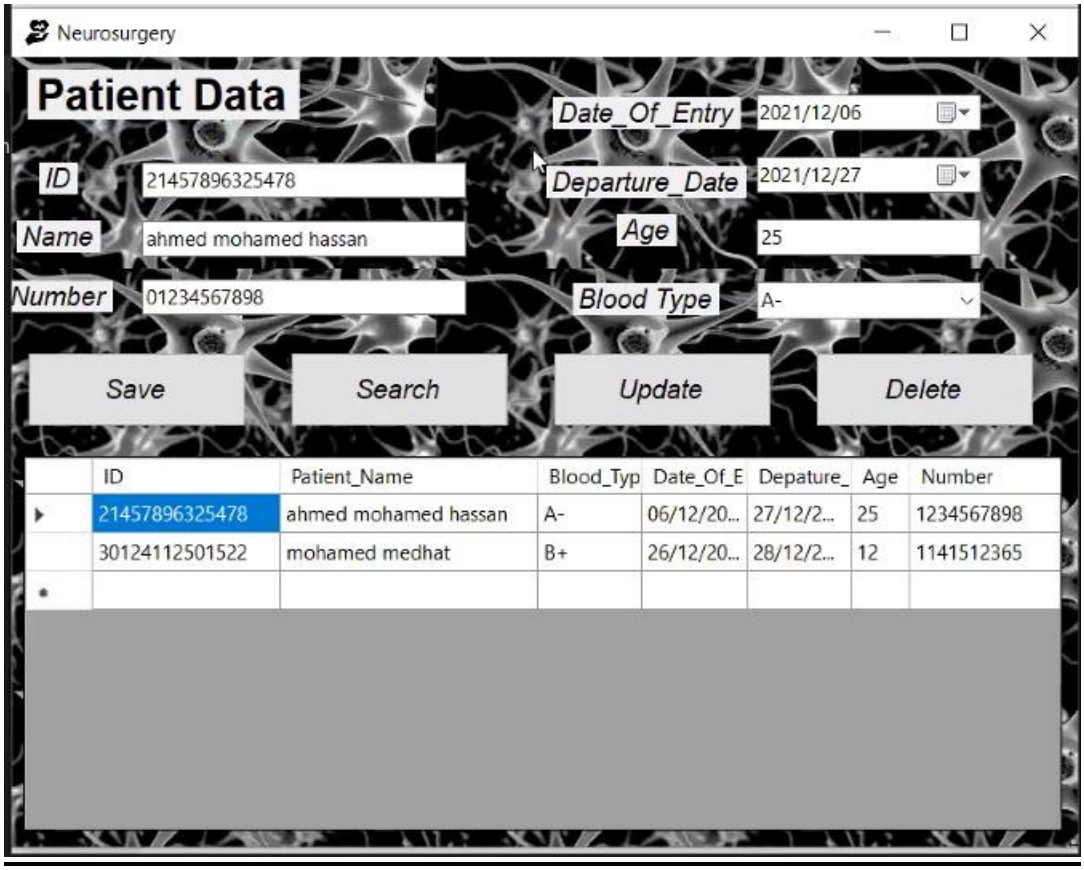
User Interface Design:

Overview of User Interface:

The software provides good graphical interface for the user any administrator can operate on the system, performing the required task such as create, update, viewing the details of the patient data.

Where the interface provides patient registration, email and password to register his data and determine the type of clinic required for treatment.

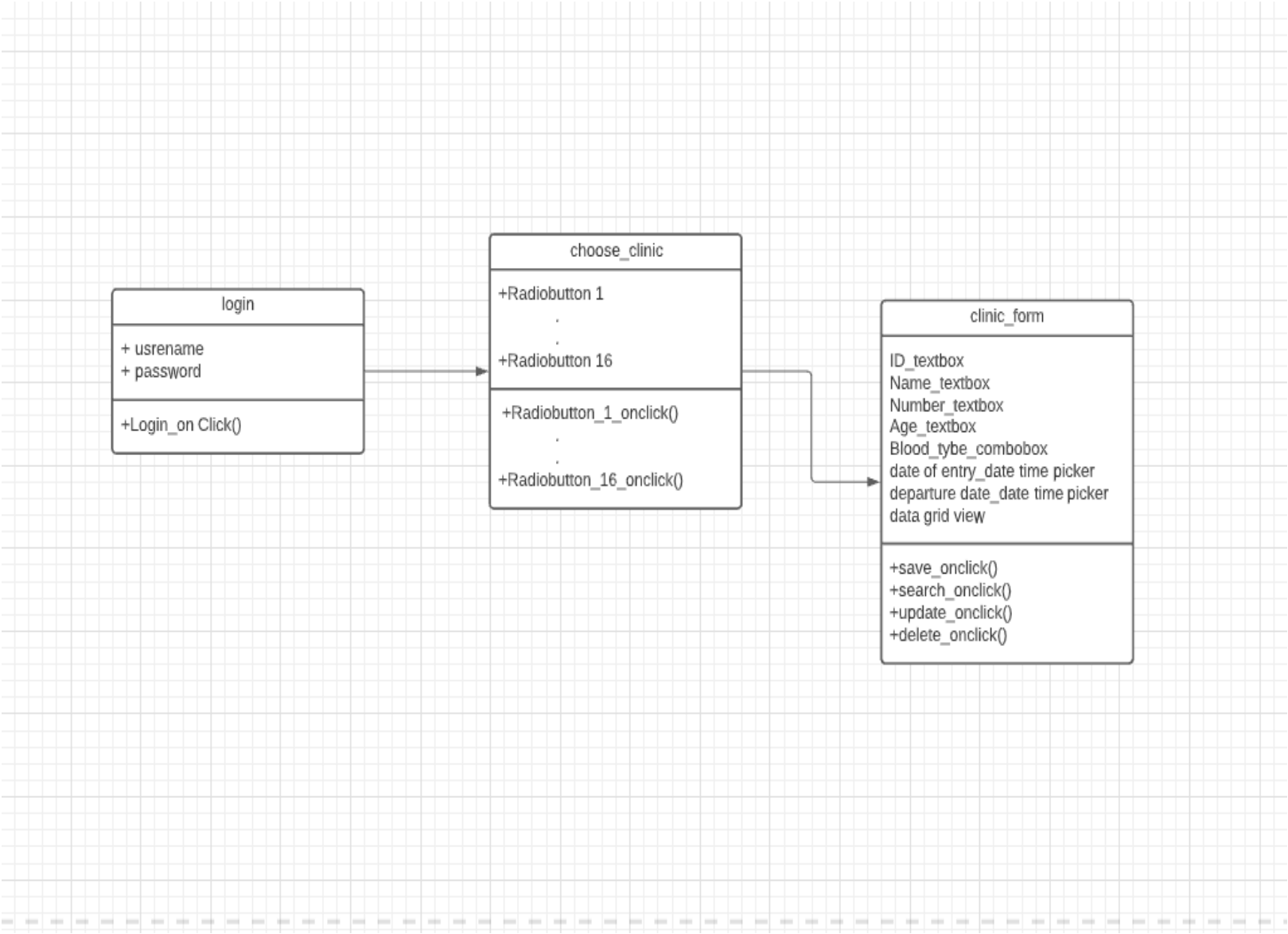
Screen Images


Neurosurgery
Patient Data
Date_Of_Entry
2021/12/06
ID
21457896325478
Departure_Date
2021/12/27
Name
ahmed mohamed hassan
Age
25
Number
01234567898
Blood Type
A-
Save
Search
Update
Delete
ID
Patient_Name
Blood_Typ
Date_Of_E
Depature_
Age
Number
21457896325478
ahmed mohamed hassan
A-
06/12/20...
27/12/2...
25
1234567898
30124112501522
mohamed medhat
B+
26/12/20...
28/12/2...
12
1141512365

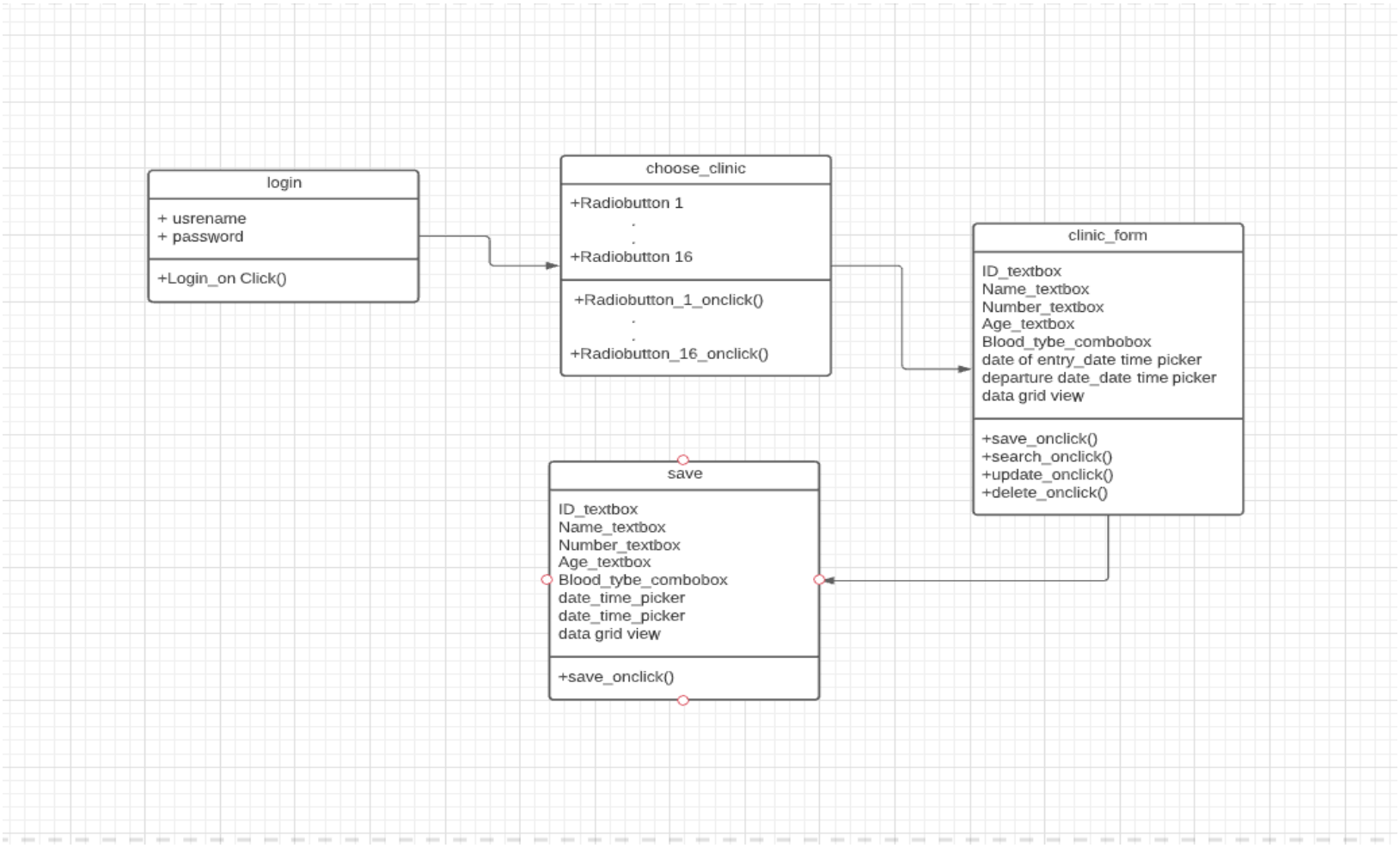

Main_form
Choose Clinic
Neurology
Facial Plastic Surgery
Dermatology
Neurosurgery
Otology
Ophthalmology
Rhinology
Oral Health
Cardiology
Hepatology
Pulmonology
Gastroenterology
Urology
Plastic Surgery
Orthopedics
Gynecology

3.2.3.2 Class Diagram

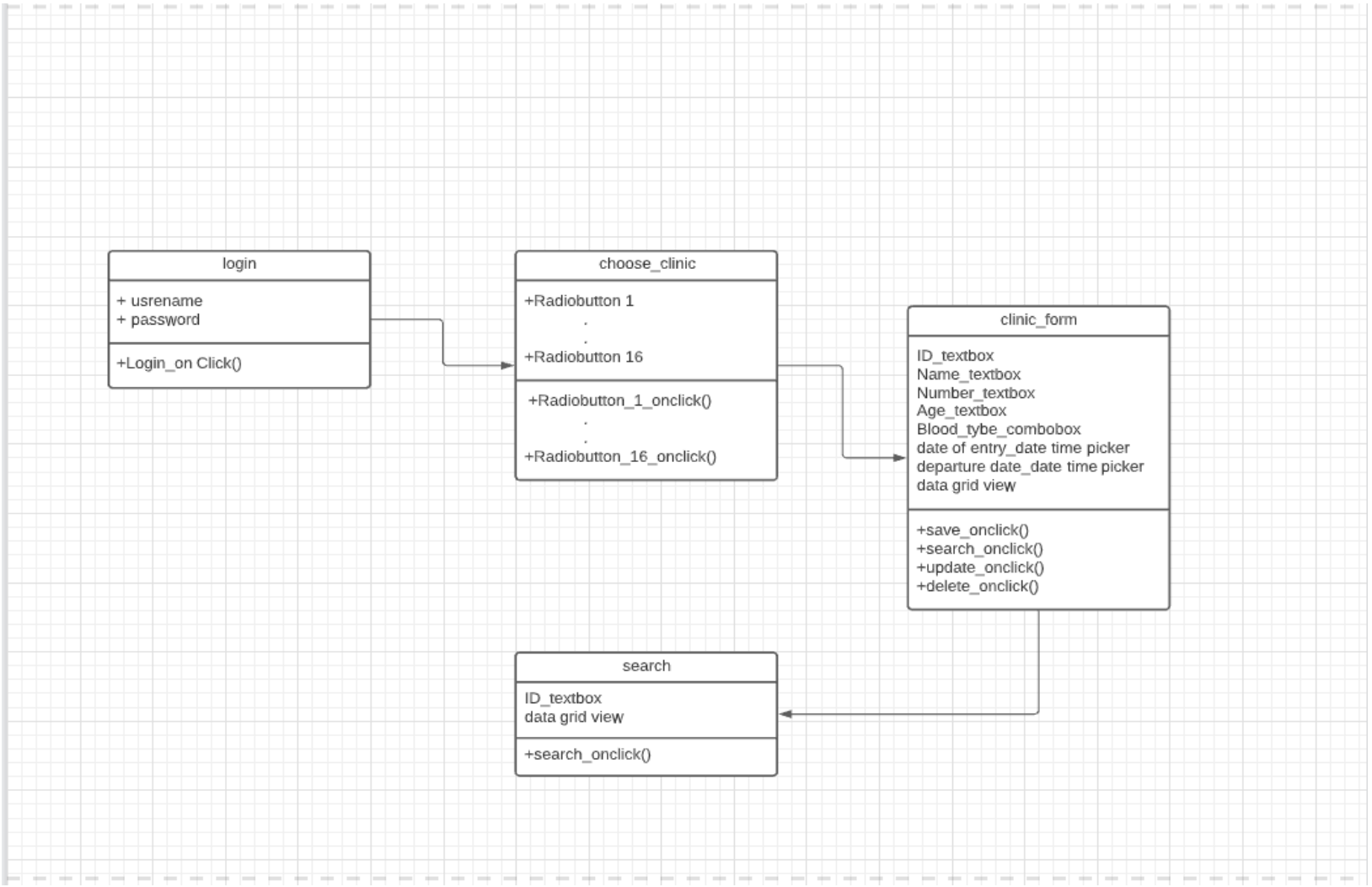
1- class for clinic form



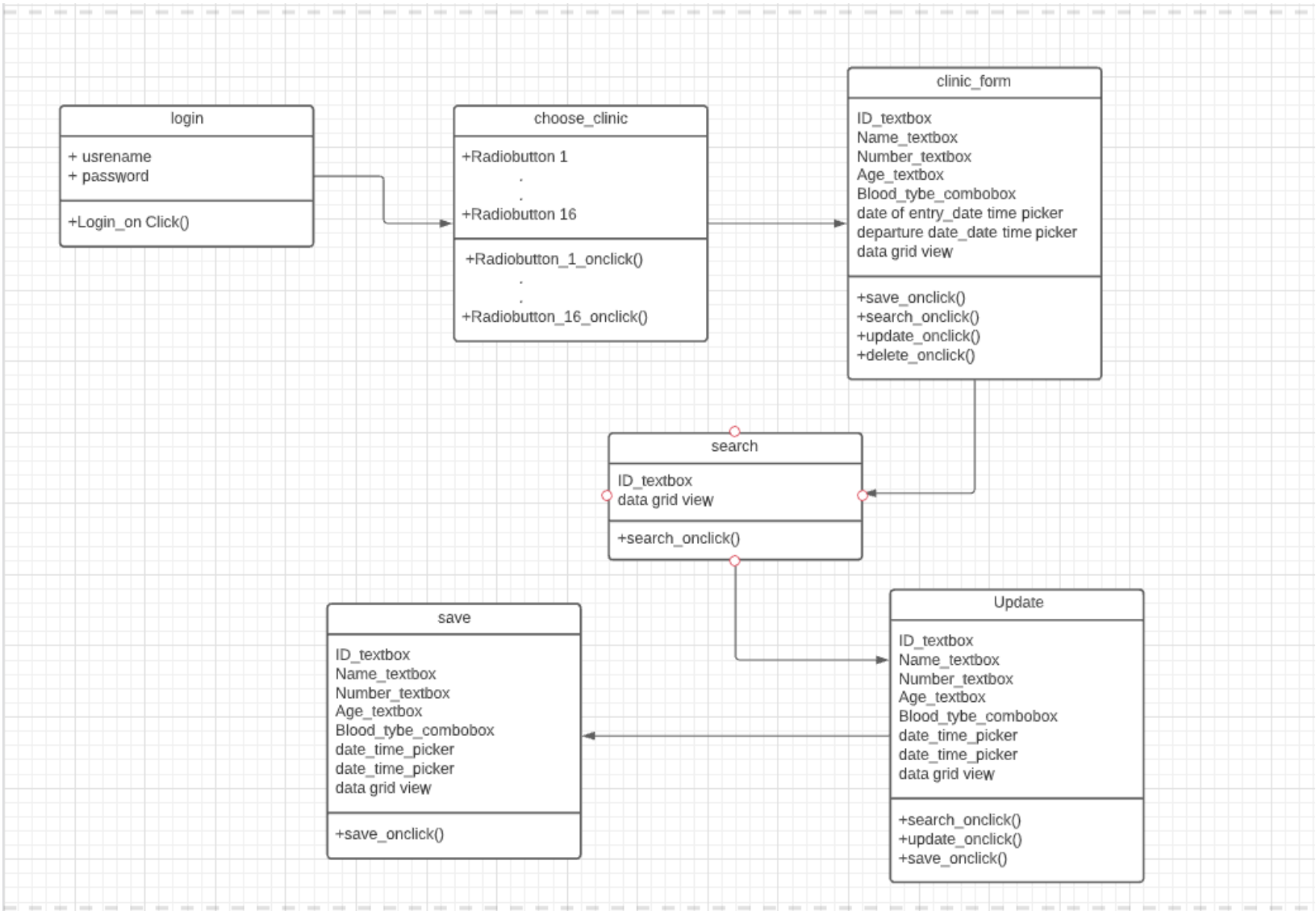
2- class for Save



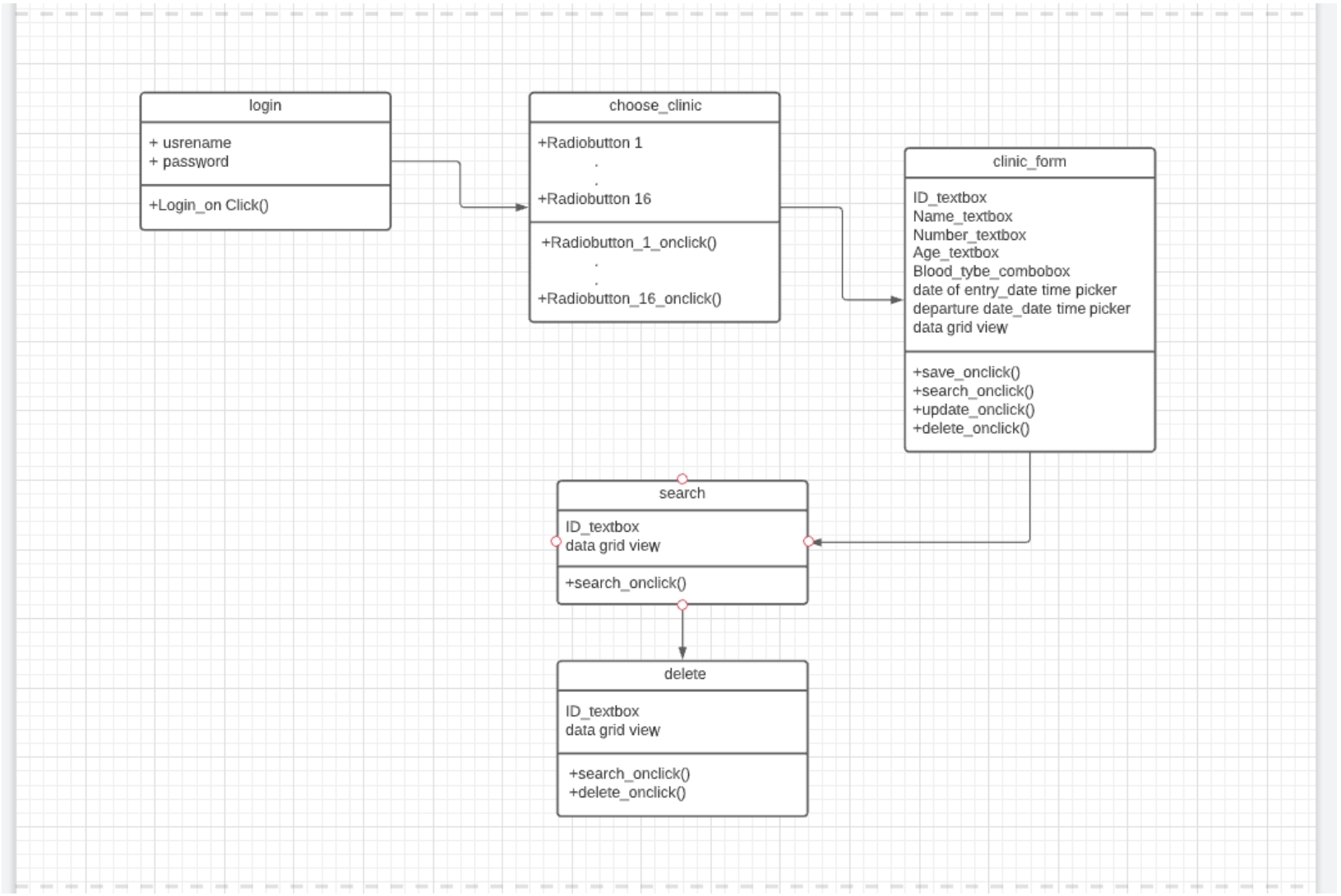
3- class for Search



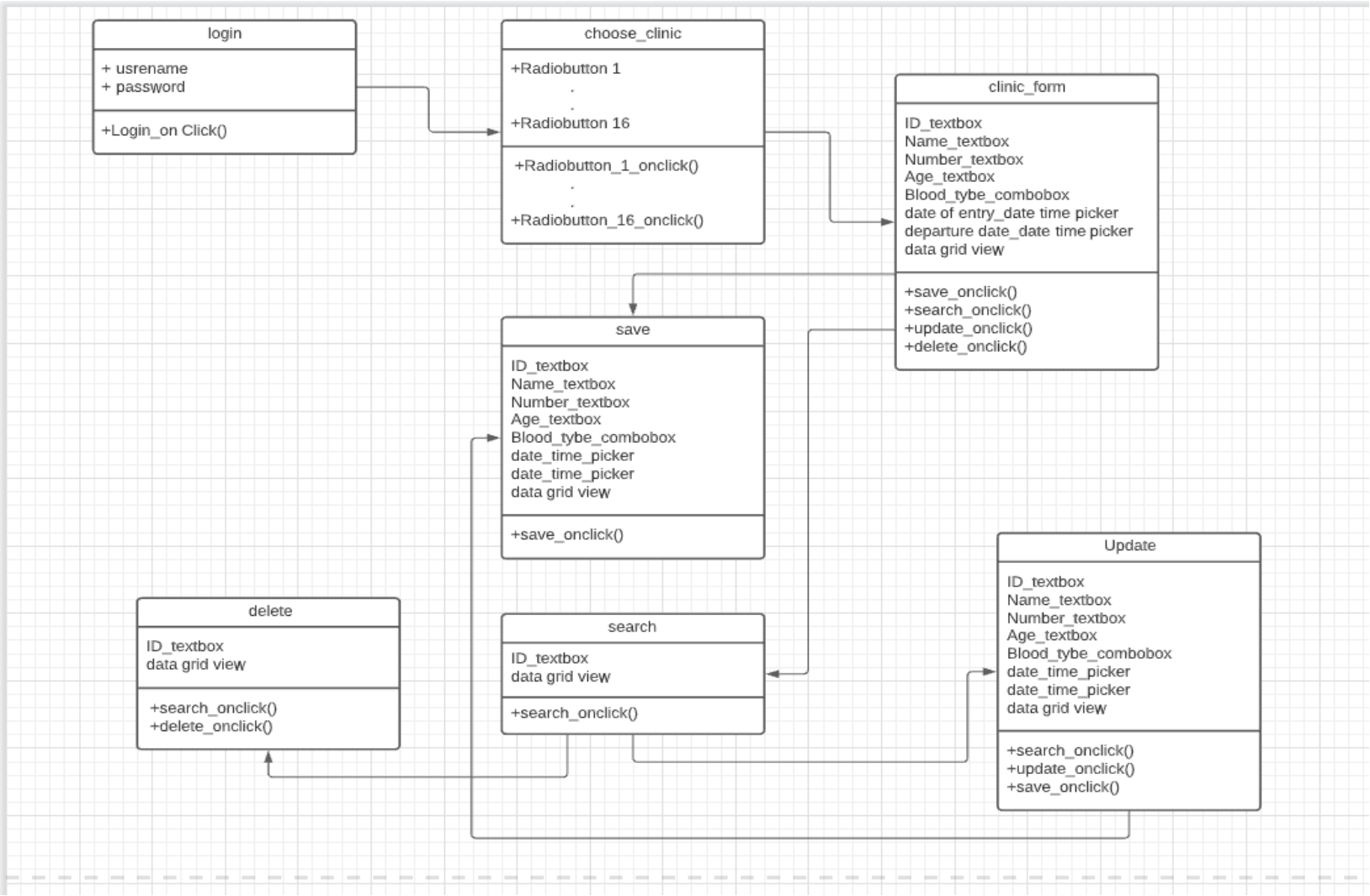
4- class for Update



5- class for Delete

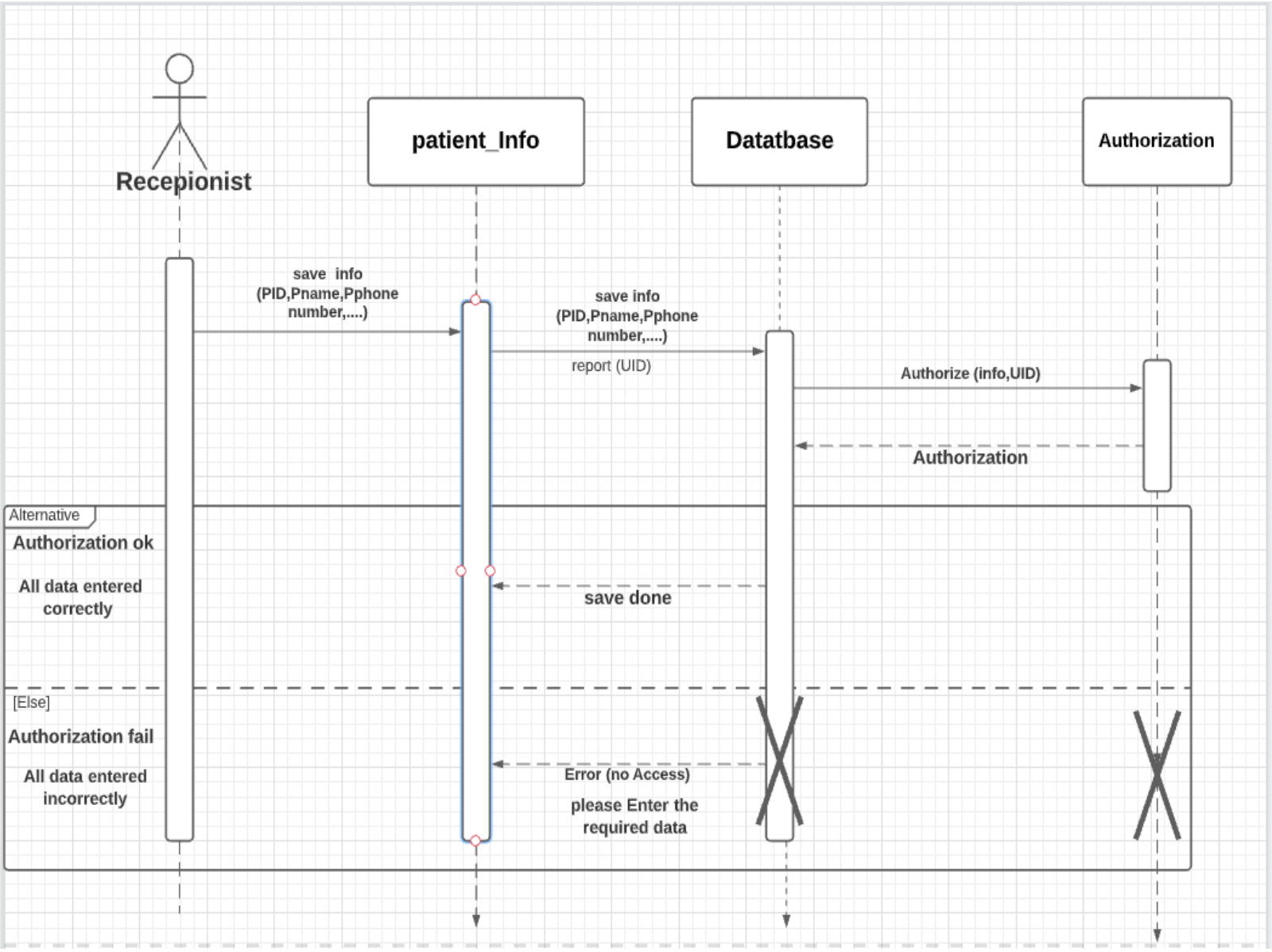


6- class for All

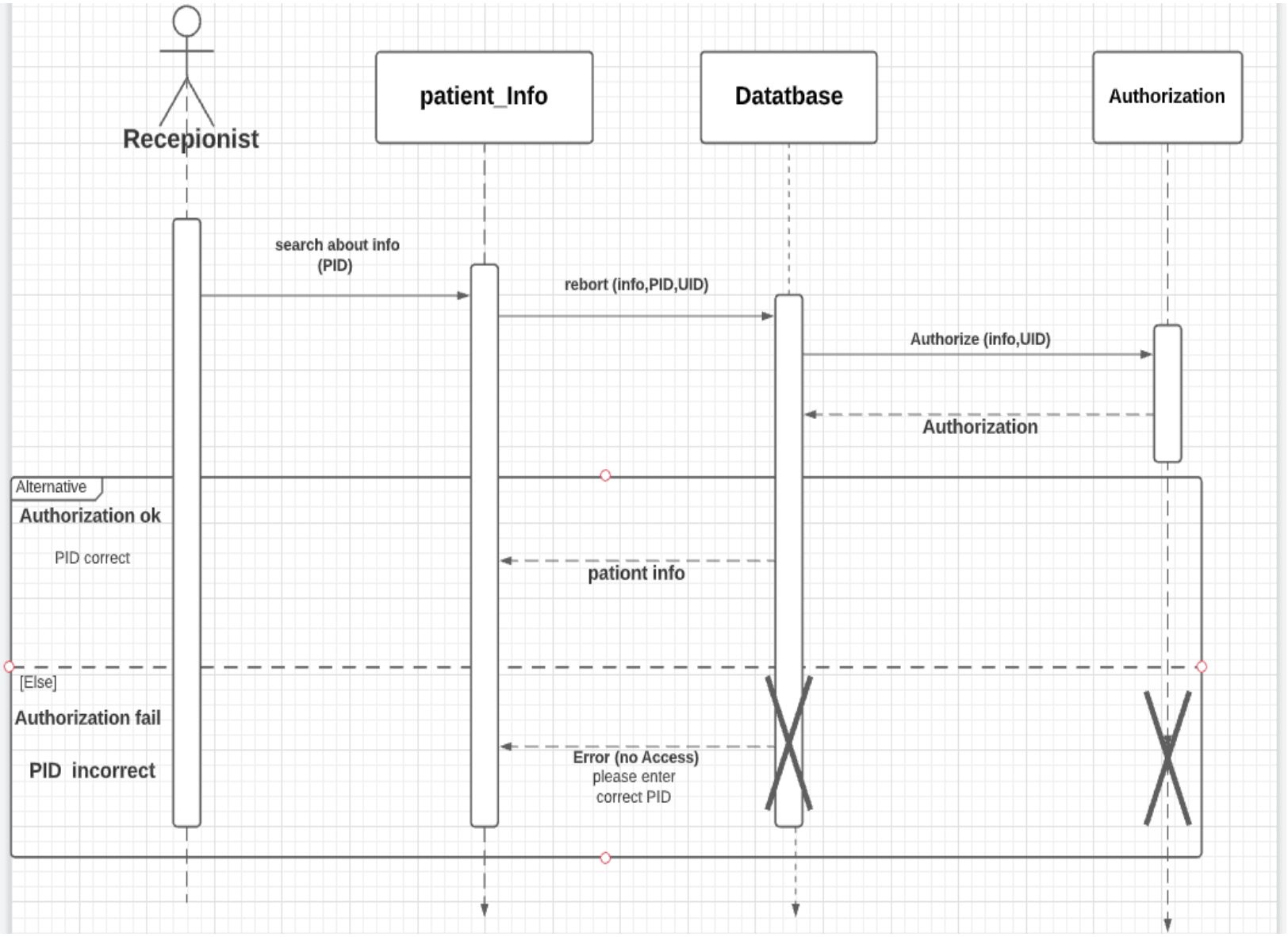


3.2.3.3: Sequence Diagrams:

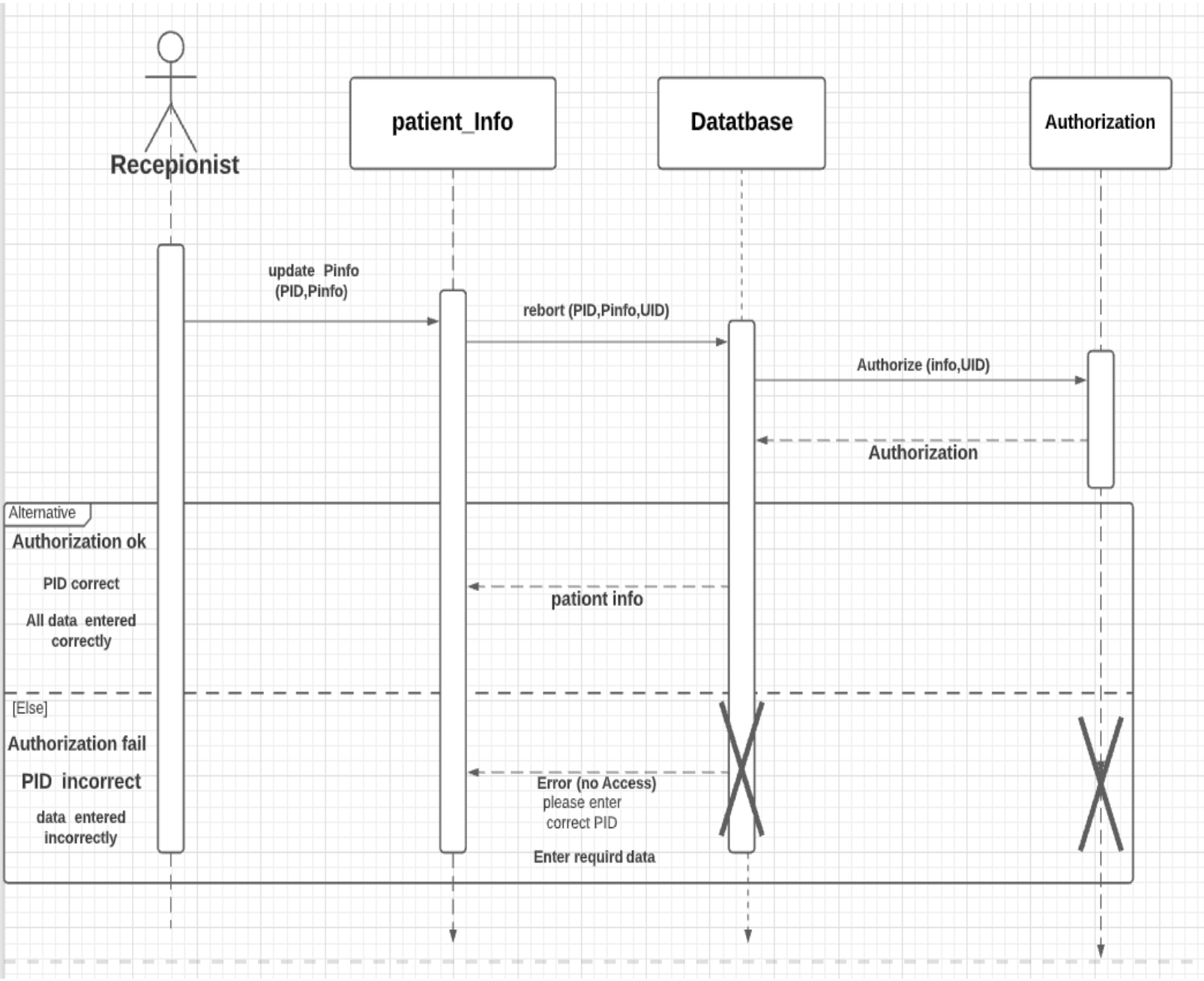
1- Save Sequence Diagram



2 – Search Sequence Diagram



3 – Update Sequence Diagram



4- Delete Sequence Diagram