Phase 1

(Dentist Office System)

Groupe members:

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1. Use Case Diagram for the System
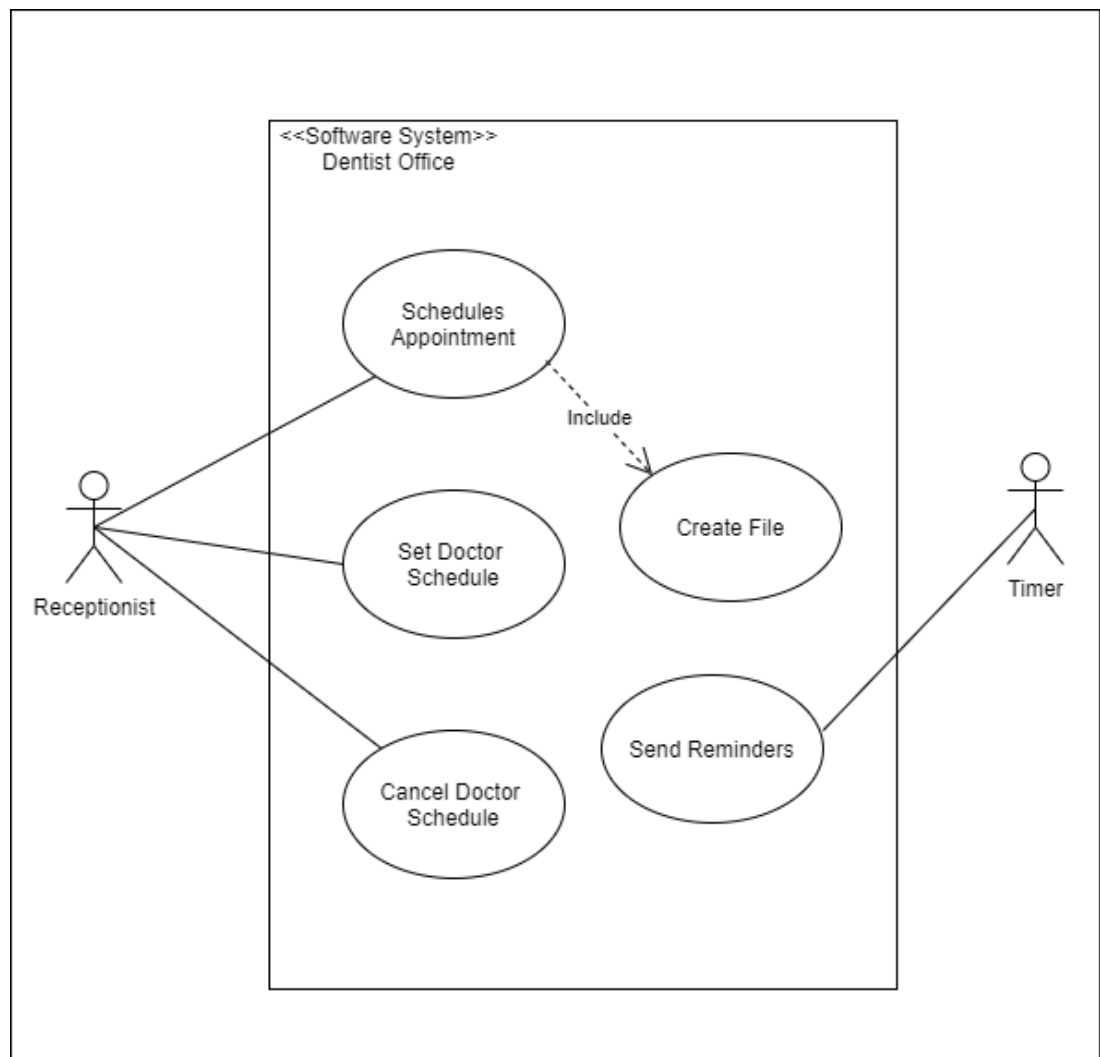
1.1 Description for every use case

Use case Name : Schedules Appointment.

Summary: get info from Patients and save it to the system.

Actor: Receptionist

Precondition: the Patients have a file(inserted info).

Description:

1. The receptionist take patient info.
2. The receptionist schedule appointment for the patient with the desired date and time.
3. The system manages the appointment based on less than 30 minutes of the same doctor.
4. The receptionist save the appointment.

Alternative:

- The patient info may not clear.
- The time and date are not appropriate.

Postcondition: Take Appointments.

Phase 1

Use case name : Create File

Summary: Create a file for each patient upon scheduling first appointment.

Actor: Receptionist

Precondition: none

Description:

1- The receptionist enter the patient info to the system.
2- The system create a file through the info entered.
3- The system store the file which created.

Alternative:

• The receptionist may enter wrong info.
• The patient may gives wrong info.
• The system didn't store patient file.

Postcondition: create file for patient.

Use case name : Set Doctor Schedule

Summary: the Receptionist entered doctor working Schedules in the form on working days for each week.

Actor: Receptionist

Precondition: none.

Description:

1- The reception gets the doctors' working days.
2- the Receptionist entered doctor working Schedules.

Alternative:

• There is a change in working days for doctors.

Postcondition: Knowing the working days for doctors during the week.

Phase 1

Use case name : Cancel Doctor Schedule

Summary: the receptionist can cancel a doctor specific day schedule, or group of days, or the entire schedule.

Actor: Receptionist

Precondition: the receptionist enters doctors working schedule.

Description:

1- The Receptionist access to doctor working schedule.
2- The Receptionist remove a doctor specific day schedule, or group of days, or the entire schedule.
3- The System generate list of patient phone number who affected by cancellation.

Alternative:

- The receptionist couldn't access to doctor working schedule.

Postcondition: Remove schedule completed.

Use case name : Send Reminders

Summary: send reminders by email to patients when their appointment is getting closer.

Actor: Timer

Precondition: he/she have an email.

Description:

1- The system check the patient's email in his/her file.
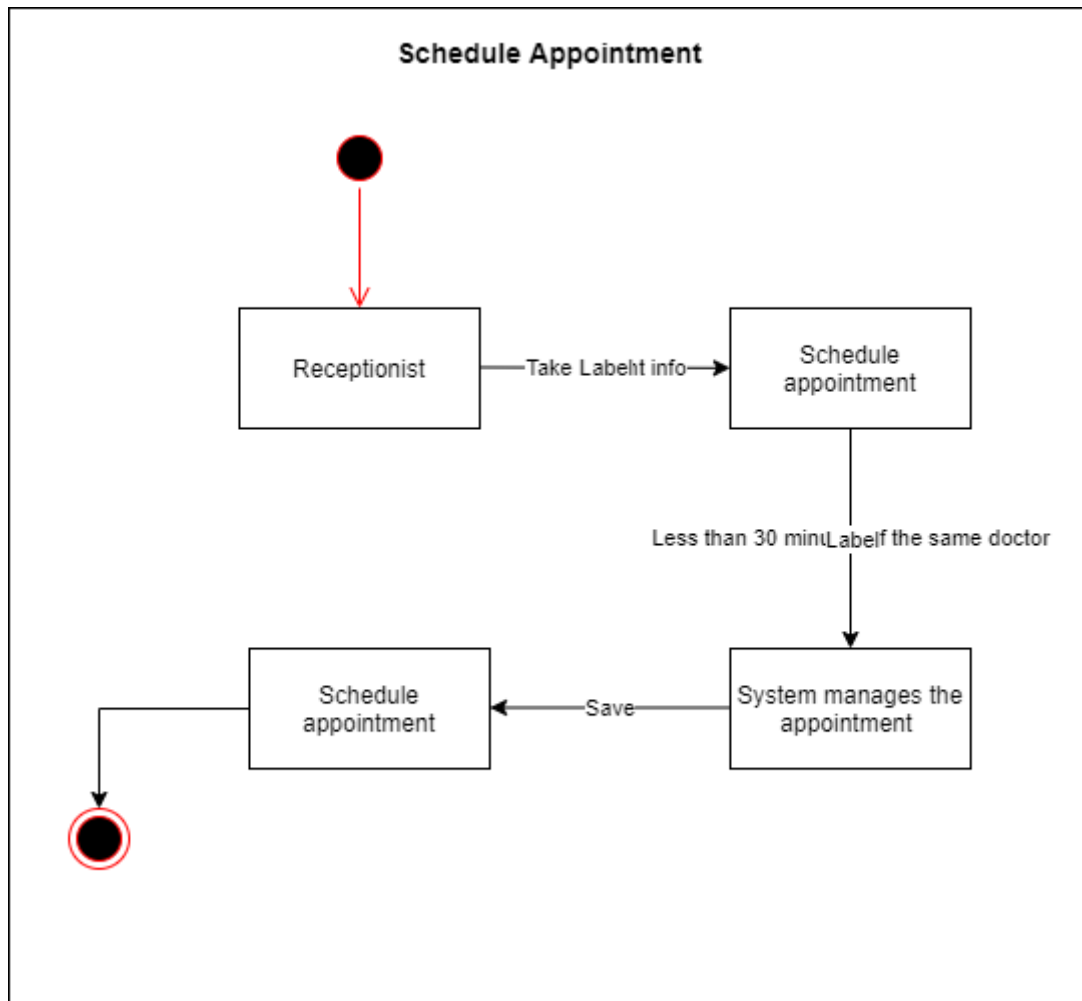2- The system send Reminders by email to patients.

Alternative:

- The entered email was wrong.
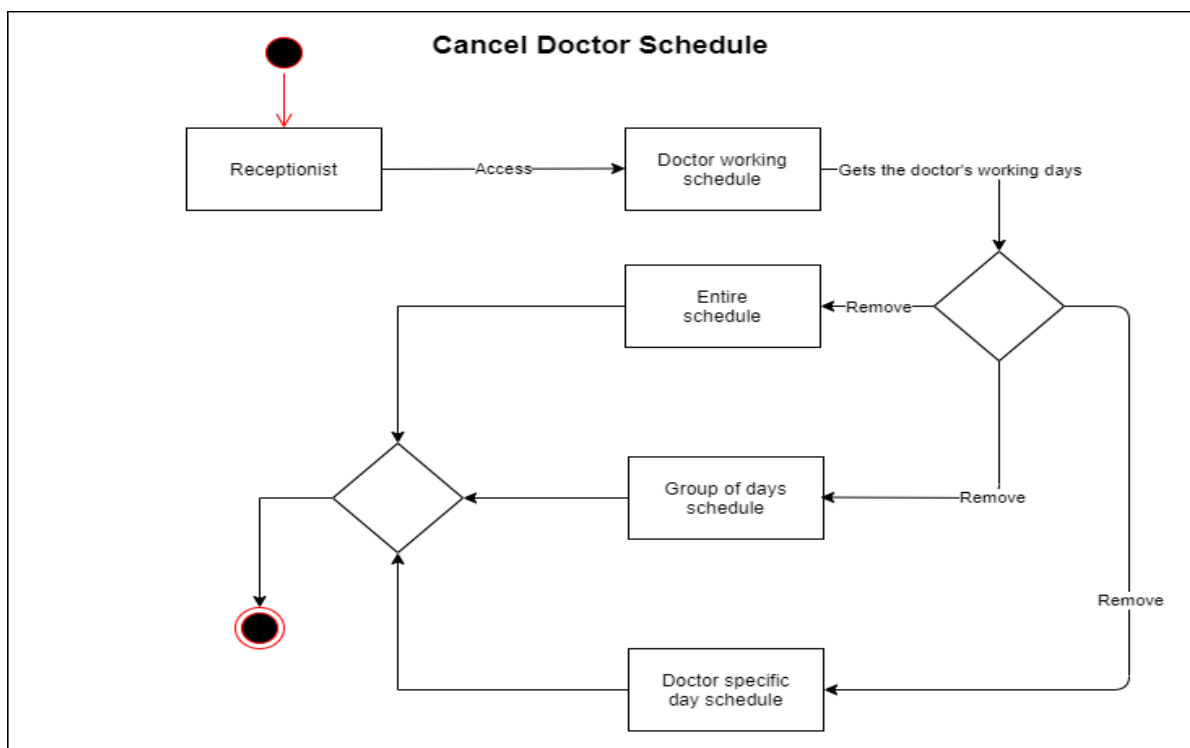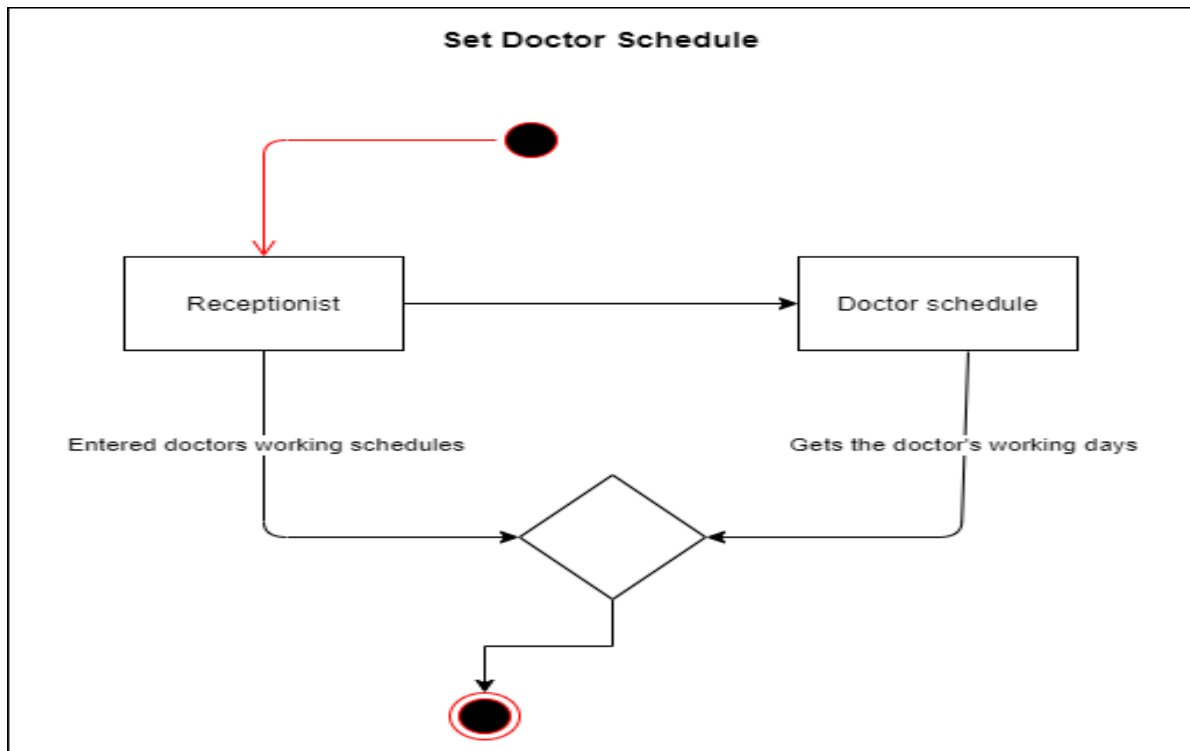- the patient don't have an email.

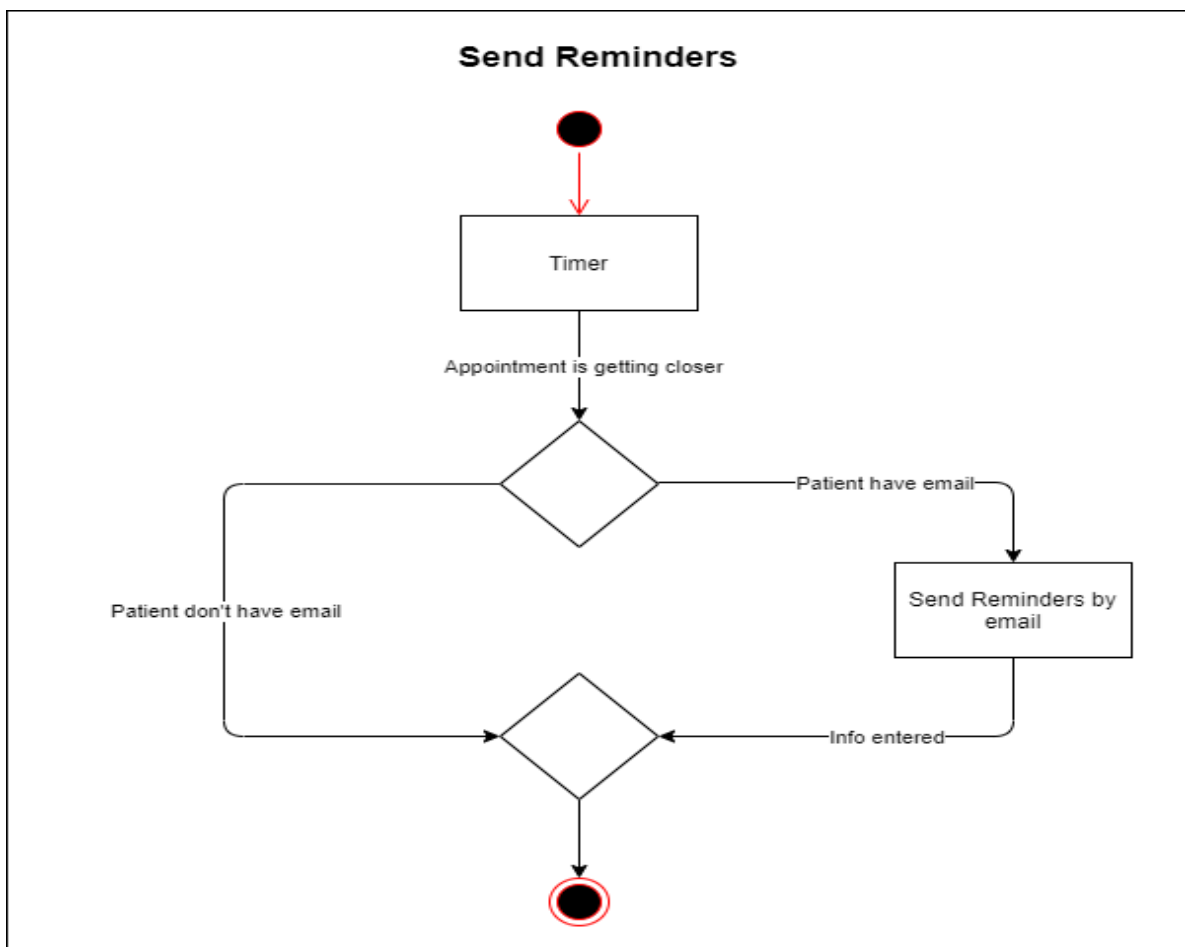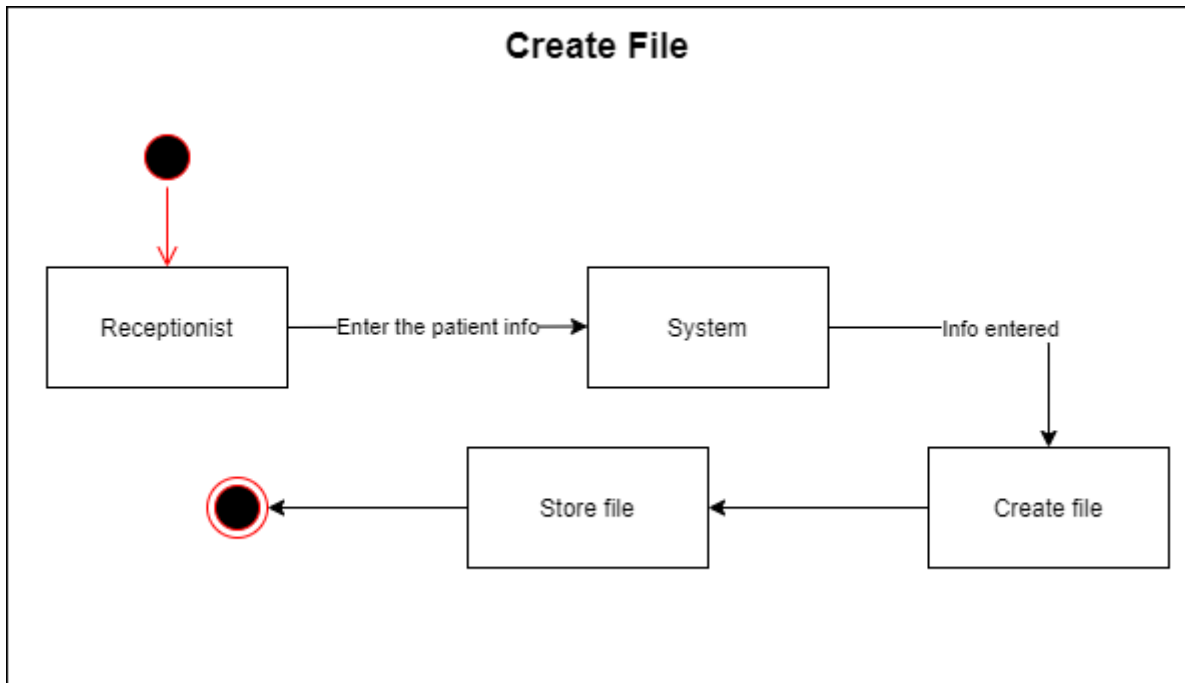**Postcondition:** send a reminder message for patient.

1.2 Activity Diagram for each use case description

Set Doctor Schedule

Receptionist

Doctor schedule

Entered doctors working schedules

Gets the doctor's working days

Cancel Doctor Schedule

Receptionist —Access→ Doctor working schedule —Gets the doctor's working days

Entire schedule ←Remove—

Group of days schedule ←Remove—

Remove

Doctor specific day schedule

Create File

Send Reminders

2. System Context Model
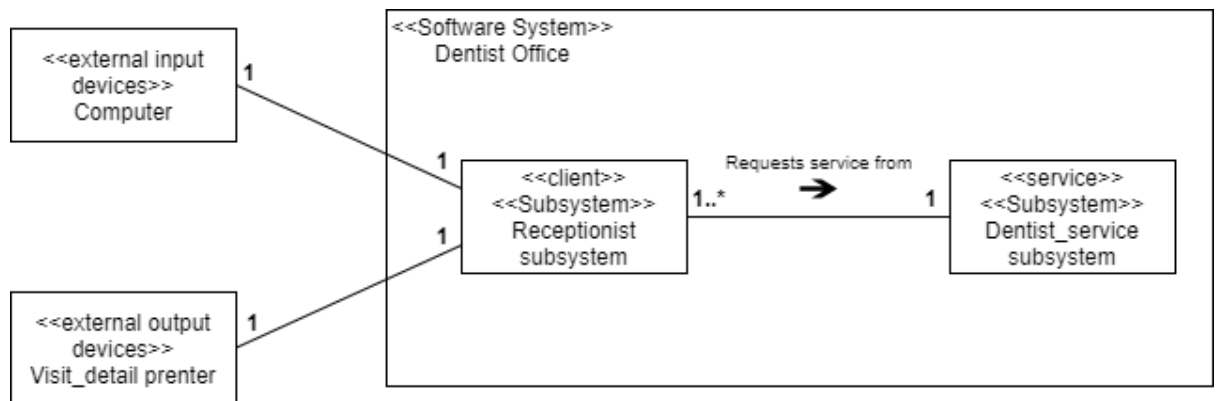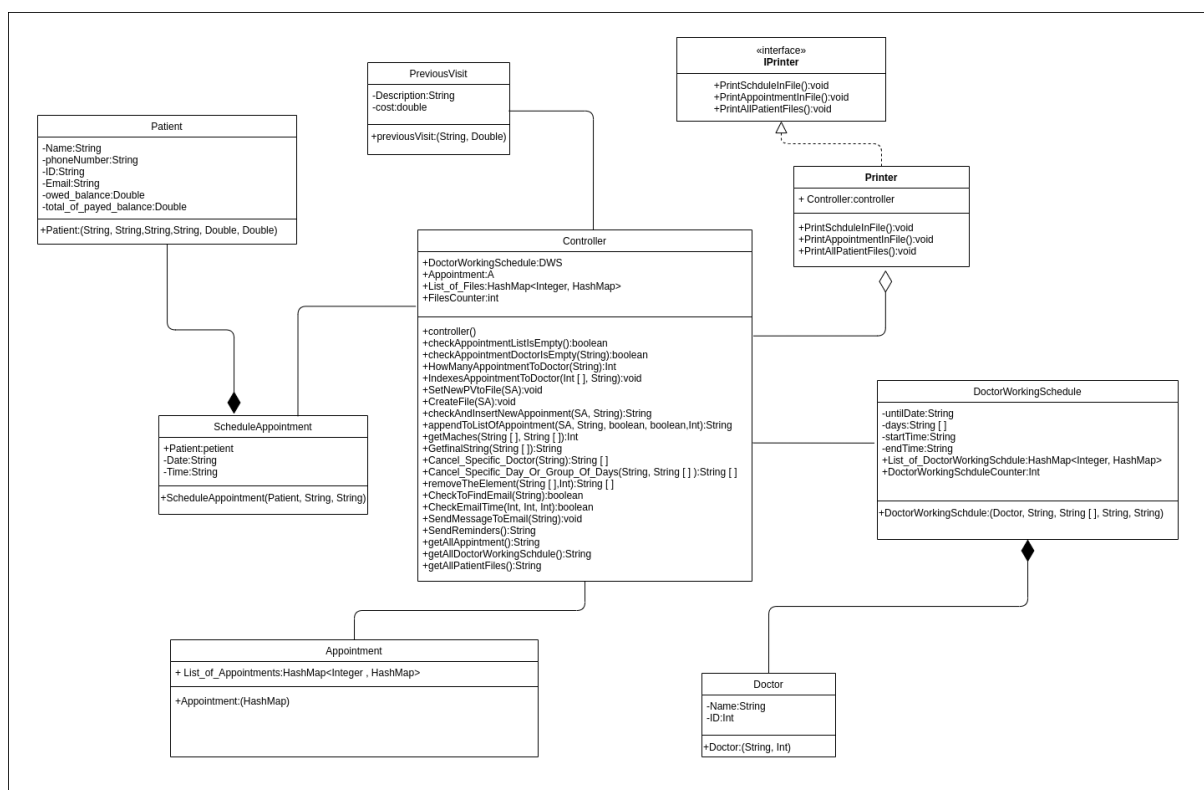

3. Boundary Class Diagram
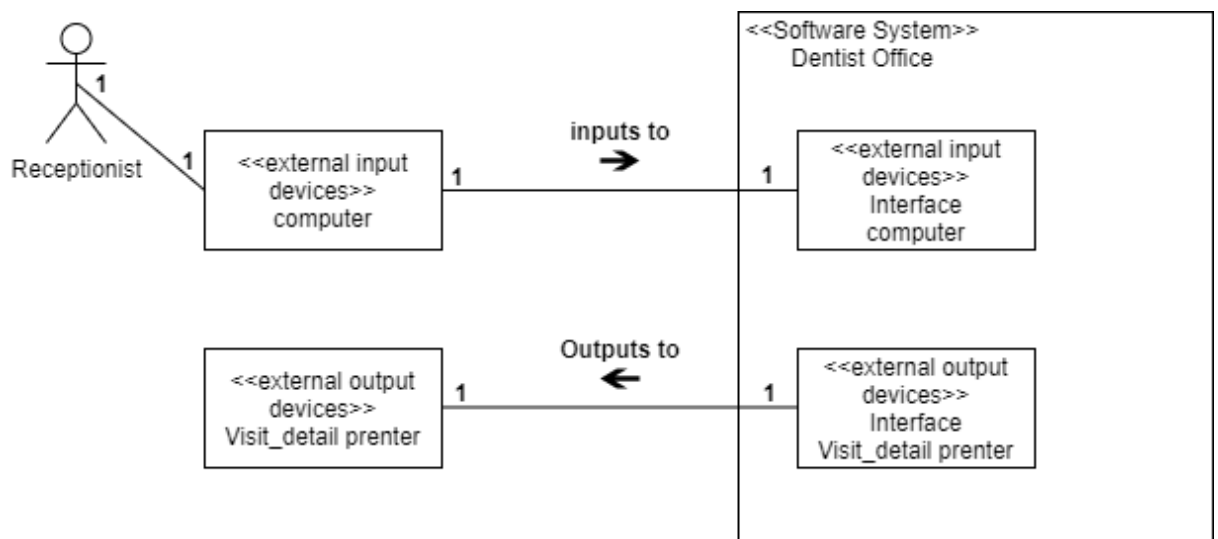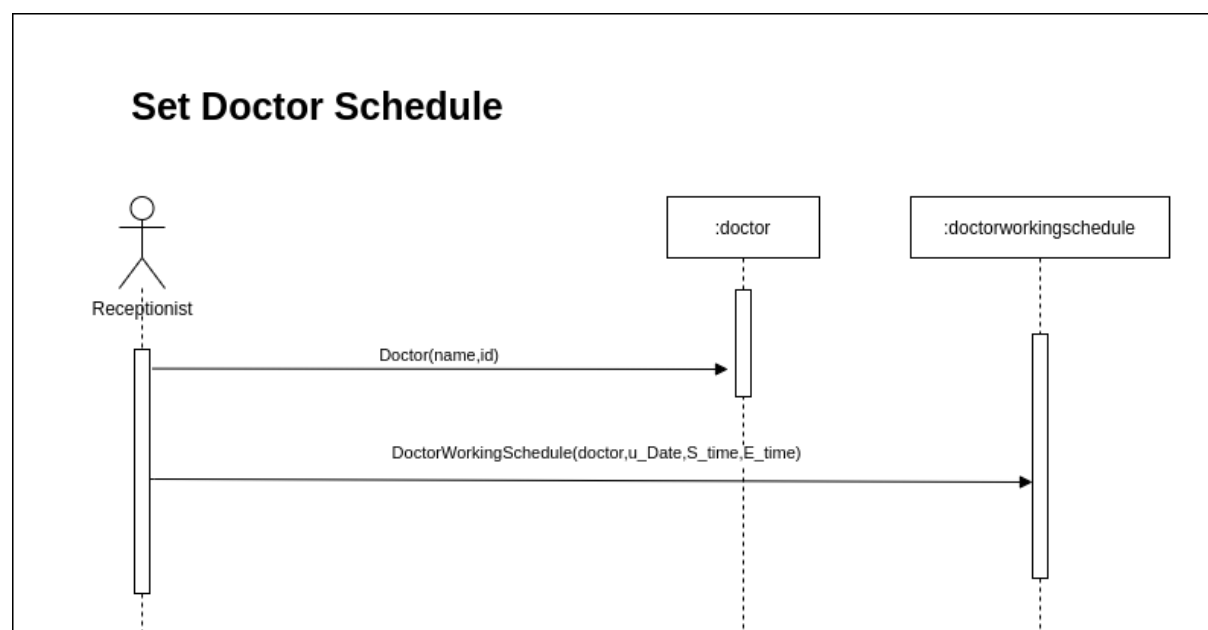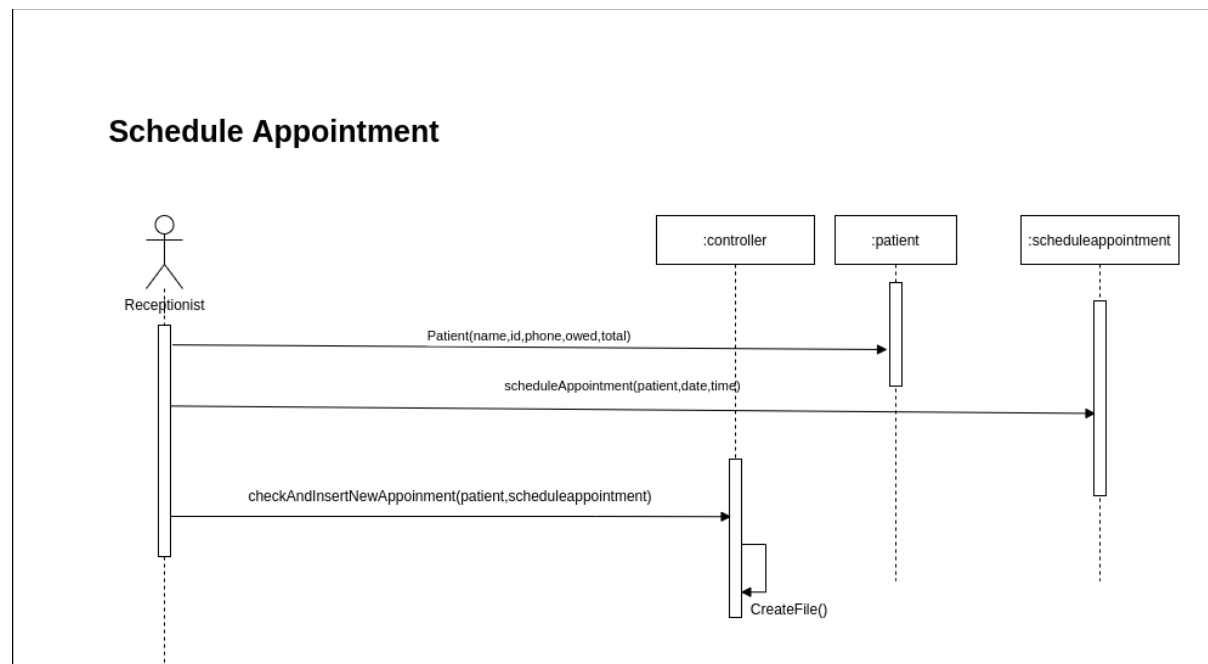
4. Class Diagram:

Note:

- **we merge point 4 , 5 and 7 in one solution**
- **we draw the design based on Data Centred Pattern**

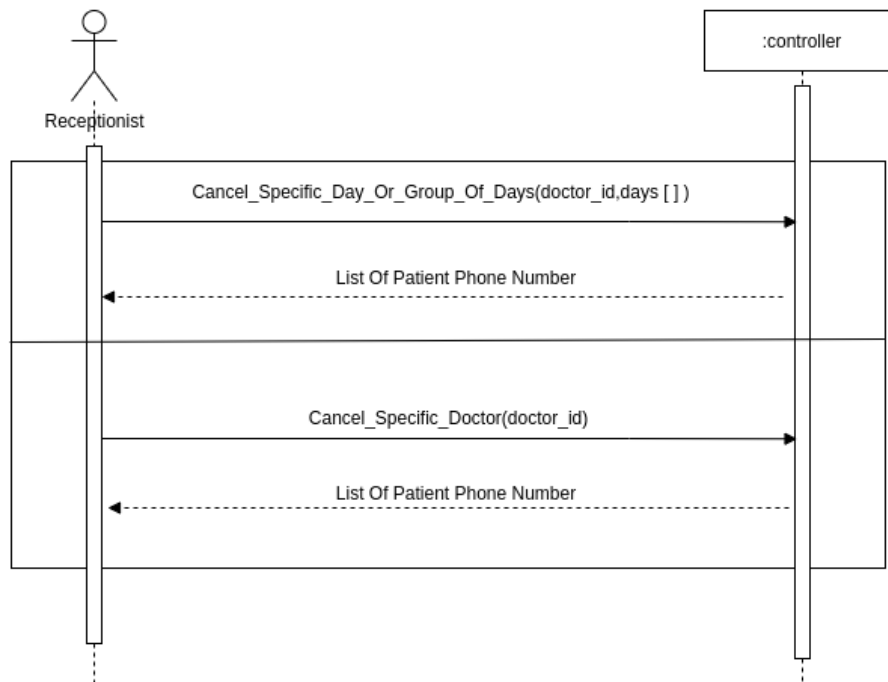# 5. sequence diagram for every use case :

Schedule Appointment

Set Doctor Schedule

Phase 1

Cancel Doctor Schedule

Send Reminders