Senay Alemayehu

CIDM6330- spring2022

Clinic Order sorter and scheduler App

This product is for small clinics and doctor's offices that usually send patients to different locations for different exams. The clinic physician providers see different patients for different reasons. After the visits, doctors often order multiple types of exams, consults and referrals.

This sorter and scheduler will sort and categorize similar types of exams that need to be send for that specific area.

What problem will be addressed

Usually when a physician orders exams all exams are put in in a single order slip. That slip includes patient's information, name of physician, and list of all the exams and referrals; like labs, xrays, MRI, CT, referral to physical therapy, referral to neurologist…. The list of possible exams and referrals is as wide as all the health problems and risks that we may face.

Once these referrals and exams are ordered, clerical staff manually will sort and organize as a list to send to appropriately. This can take missing and skipping some items.

Another problem that clinics face is coordination with third party providers. It is difficult to schedule patients with third party providers with the system at hand. This will enable more efficient and effective work flow.
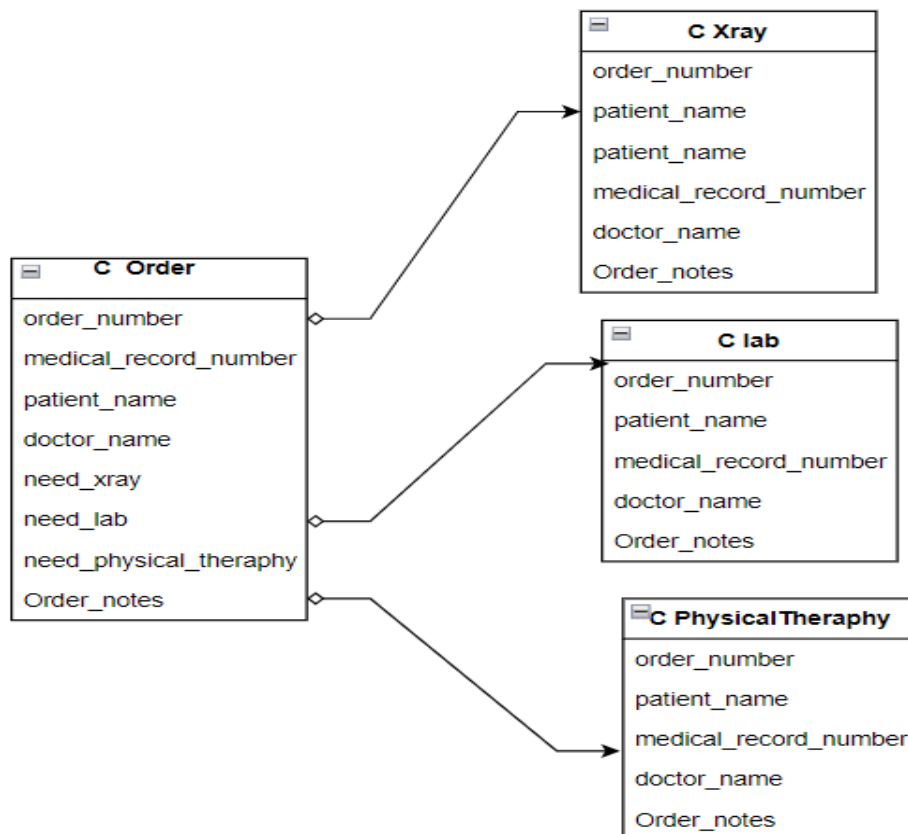
What are the goals for the project?

The project will be divided into two stages. Each stage will solve specific problem but together will enable the organizations to fully automate ordering, sorting and scheduling issues.

Stage#1 Ordering and Sorting

The first part of the application will be to accept orders and sort them to the appropriate categories of tables

This model in UML:

C Xray
order_number
patient_name
patient_name
medical_record_number
doctor_name
Order_notes

C Order
order_number
medical_record_number
patient_name
doctor_name
need_xray
need_lab
need_physical_theraphy
Order_notes

C lab
order_number
patient_name
medical_record_number
doctor_name
Order_notes

C Physical Theraphy
order_number
patient_name
medical_record_number
doctor_name
Order_notes

The system will accept order information with boolean entry of need_(procedure or referral) .It "True" the order will be sent to the appropriate category.

This will allow for each patient to have a separate order to be sent out.

The system will also be designed to accommodate multiple types of records (the above UML only includes xray, Lab, and Physical theraphy)

This system will use verbs like,

Schedule: initial processes of scheduling (sorting to different categories)

add(order):will add a new order

get(order): will pull order specific order

Will use also database create table and INSERT TO to add a nee category

Stage#2

This will be the next part of the project where each patient's exam will be systematically schedule on separate time slots of third party providers. This requires coordination on receiving available time slots.

This part of the project will be done in the future