CRC Model

Client Booking

Use cases - Application Business Rules Layer

AppointmentBooking

Responsibilities

- client
- clinic
- timePeriod
- vaccineBrand
- appointmentId
- isTimeslotAvailable
- assignVaccineDose
- hasUniqueId
- createAppointment

Collaborators

AppointmentCancellation

Responsibilities

- appointmentId
- clinic
- deleteAppointment

Collaborators

AppointmentViewing

Responsibilities

- appointmentID
- clinic
- appointmentDetails
- getBookedAppointmentString

Collaborators

RecordAdding

Responsibilities

- clinic
- logAppointment
- logWalkIn
- logByDateTime
- logByDate

Collaborators

Client Managements

Use cases - Application Business Rules Layer

BatchAdding

Responsibilities

- clinic
- batch
- addBatch

Collaborators

SetTimePeriod

Responsibilities

- clinic
- setEmployees
- addTimePeriod
- removeTimePeriod
- addMultipleTimePeriods

Collaborators

Database Integration

Data Access - Framework and Drivers

Data Retrieval

Responsibilities	Collaborators
•	•

Data Storing

Responsibilities Collaborators

Database Appointment

Responsibilities	Collaborators
•	•

Database Batch Adding

Responsibilities	Collaborators
•	•

Database Client

Responsibilities Collaborators

Database clinic

Responsibilities	Collaborators
•	•

Database Connectivity Manager

Responsibilities	Collaborators
•	•

Database Retrieval

Responsibilities	Collaborators
•	•

Database Storing

Responsibilities	Collaborators
•	•

Database Table

Responsibilities Collaborators

Database Time Periods

Responsibilities	Collaborators
•	•

Example Retrieval

Responsibilities	Collaborators
•	•

Drivers

Drivers - Framework and Drivers

Command Line

Responsibilities

- commandLinePrompt
- managementSystem
- runCommands
- createAcceptableCommandsString
- getClinicId
- Add batch/TimePeriod/TimePeriods/
- SetEmployees
- removeTimePeriod
- (book/cancel/view)Appointment

Take userInput and passes it to VaccineBookingSystem where it is parsed and get result to be displayed

- DataValidation
- Main

DataValidation

Responsibilities

- getCommand
- getValue
- tryParseInt
- isNonPastDate
- isNonPastDateTime

- CommandLine
- DataValidation

Entities

Entities - Enterprise Business Rules Layer

Appointment

Responsibilities

- appointmentId
- client
- timePeriod
- vaccineBrand
- clientVaccinationBatch
- appointmentTimePassed

- AppointmentBooking
- AppointmentCancellation
- AppointmentViewing
- BookableClinic
- ClinicDecorator

Bookable Clinic (extends ClinicDecorator)

Responsibilities

- appointments
- addAppointment
- getAppointmentRecord
- removeAppointment
- removeAppointmentById
- logPastAppointments
- getAppointmentIds

Collaborators

Client

Responsibilities

- name
- healthcareNumber
- hasAppointment
- approveAppointment
- disapproveAppointment

- AppointmentBooking
- UseCaseManager
- Appointment
- Clinic
- ClinicDecorator
- ServiceLocation
- VaccinationLog

Clinic (implements ServiceLocation)

Responsibilities

- clinicld
- Supply
- log
- timePeriods
- Shifts
- location
- logContainsId
- overriding ServiceLocation

Collaborators

ClinicDecorator - abstract class (implements ServiceLocation)

Responsibilities

- decoratedClinic
- ServiceLocation implementation

- AppointmentBooking
- AppointmentCancellation
- AppointmentViewing
- UseClinicManager
- BookableClinic

ServiceLocation - Interface

Responsibilities

- supplyContainBatchId
- addBatch
- logPastVaccinations
- setShifts
- Add/remove TimePeriod
- getServiceLocation
- getShiftForDate
- shiftAvailable
- containsShift
- checkTimePeriod
- Get timePeriods/ VaccinationLog/ Location/ Supply/ SupplyObj

- BatchAdding
- SetTimePeriod
- UseCaseManager
- BookableClinic
- Clinic
- ClinicDecorator

Time Period

Responsibilities

- datetime
- availableSlots
- bookedSlots
- findAndReservedSlot
- addAvailabilities

- AppointmentBooking
- SetTimePeriod
- UseCaseManager
- Appointment
- Clinic
- ClinicDecorator
- ServiceLocation

User

Responsibilities

Vaccination Log

Responsibilities

- log
- appointmentBasedPrefix
- nonAppointmentBasedPrefix
- addToLog
- getVaccinationRecord
- getClientByVaccinationId
- getDataTimeByVaccinationId
- getVaccinationBrandByVaccinationId
- getRecordString
- containsId
- vaccinationRecord

- Clinic
- ClinicDecorator
- ServiceLocation

Vaccine Batch

Responsibilities

- brand
- quantitiy
- expiry
- id
- reserve
- isExpired
- setReserve
- changeReserve
- getAvailable

- AppointmentBooking
- BatchAdding
- UseCaseManager
- Appointment
- Clinic
- ClinicDecorator
- ServiceLocation
- VaccineSupply

Vaccine Supply

Responsibilities

- batchList
- getAvailbleVaccines
- isEmpty
- toString

- Clinic
- ClinicDecorator
- ServiceLocation

Managers

ManagamentSystem - interace

Responsibilities

- setEmployees
- addTimePeriod
- removeTimePeriod
- addMultipleTImePeriods
- addBatch
- getClinicIds
- getBookableClinicIds
- getSupplyByClinic
- bookAppointment
- cancelAppointment
- viewlAppointment

- VaccineManagmentSystem
- CommandLine
- Main

Controllers

UseCaseManager (implements UseCaseManagerInterface)

Responsibilities

- clinics
- containsClinicWithId
- createSetTimePeriod
- getClinicById
- overriding UseCaseManagerInterface

Collaborators

Main

Retriever

Responsibilities	Collaborators
•	•

Storer

Responsibilities Collaborators

UseCaseManagerInterface - interace

Responsibilities

- getClinicIds
- getBookableClinicIds
- AddClinic
- addBookableClinic
- setEmployees
- addTimePeriod
- removeTimePeriod
- addMultipleTimePeriods
- addBatch
- getSupplyStringByClinic
- bookAppointment
- cancelAppointment
- viewAppointment

- UseCaseManager
- VaccineManagmentSystem
- Main

VaccineManagamentSystem (implements ManagementSystem)

Responsibilities

- useCaseManagerInterface
- Implementing ManagementSystem

- Client
- Clinics

Vaccine Management System

Responsibilities	Collaborators
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