CRC Model

Entities

Appointment

Responsibilities

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

Collaborators

- AppointmentBooking
- AppointmentCancellation
- AppointmentViewing
- BookableClinic
- ClinicDecorator

Bookable Clinic (extends ClinicDecorator)

Responsibilities

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

Collaborators

- UseCaseManager

Client

Responsibilities

- **name**
- **healthcareNumber**
- **hasAppointment**
- approveAppointment
- disapproveAppointment

Collaborators

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

Clinic (implements ServiceLocation)

Responsibilities

- **clinicId**
- **Supply**
- **log**
- **timePeriods**
- **Shifts**
- **location**
- logContainsId
- overriding ServiceLocation

Collaborators

- UseCaseManager

ClinicDecorator - abstract class (implements ServiceLocation)

Responsibilities

- **decoratedClinic**
- ServiceLocation implementation

Collaborators

- 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

Collaborators

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

Time Period

Responsibilities

- **datetime**
- **availableSlots**
- **bookedSlots**
- findAndReservedSlot
- addAvailabilities

Collaborators

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

Vaccination Log

Responsibilities

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

Collaborators

- Clinic
- ClinicDecorator
- ServiceLocation

Vaccine Batch

Responsibilities

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

Collaborators

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

Vaccine Supply

- **batchList**
- getAvailbleVaccines
- isEmpty
- toString

- Clinic
- ClinicDecorator
- ServiceLocation

Use Cases

AppointmentBooking

Responsibilities

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

Collaborators

- UseCaseManager

AppointmentCancellation

Responsibilities

- **appointmentId**
- **clinic**
- deleteAppointment

Collaborators

- UseCaseManager

AppointmentViewing

Responsibilities

- **appointmentID**
- **clinic**
- appointmentDetails
- getBookedAppointmentString

Collaborators

- UseCaseManager

RecordAdding

Responsibilities

- **clinic**
- logAppointment
- logWalkIn
- logByDateTime
- logByDate

Collaborators

- UseCaseManager

BatchAdding

Responsibilities

- **clinic**
- **batch**
- addBatch

Collaborators

- UseCaseManager

SetTimePeriod

Responsibilities

- **clinic**
- setEmployees
- addTimePeriod
- removeTimePeriod
- addMultipleTimePeriods

Collaborators

- UseCaseManager

Controllers

ManagamentSystem - interace

Responsibilities

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

Collaborators

- VaccineManagmentSystem
- CommandLine
- Main

UseCaseManager (implements UseCaseManagerInterface)

Responsibilities

- **clinics**
- containsClinicWithId
- createSetTimePeriod
- getClinicById
- overriding UseCaseManagerInterface

Collaborators

- Main

UseCaseManagerInterface - interace

Responsibilities

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

Collaborators

- UseCaseManager
- VaccineManagmentSystem
- Main

VaccineManagamentSystem (implements ManagementSystem)

Responsibilities	Collaborators
● **useCaseManagerInterface** ● Implementing ManagementSystem	● Client ● Clinics

Frameworks 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

Collaborators

- DataValidation
- Main

DataValidation

Responsibilities

- getCommand
- getValue
- tryParseInt
- isNonPastDate
- isNonPastDateTime

Collaborators

- CommandLine
- DataValidation

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