

Validation Checklist Lab

Java Web Development Bootcamp

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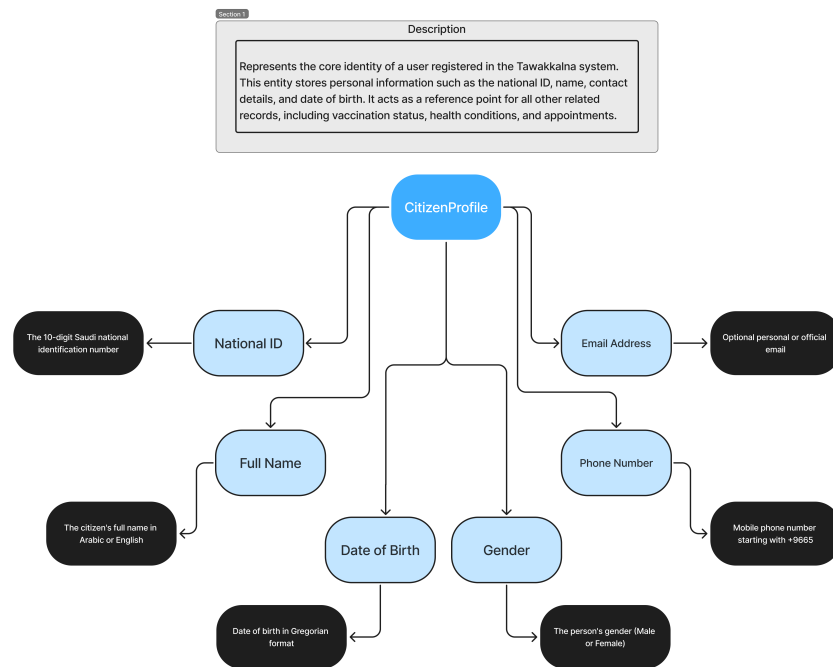
Lab 5 exercise 2 Title:

Validation Checklist for Tawakkalna System Entities

Platform Description – Tawakkalna

Tawakkalna is an official digital platform launched by the Saudi Data and Artificial Intelligence Authority (SDAIA) to support government efforts during the COVID-19 pandemic. It provides a wide range of health, mobility, and identity services for citizens, residents, and visitors within the Kingdom of Saudi Arabia. Through Tawakkalna, users can access services such as vaccination certification, travel permits, health status tracking, appointment booking, and digital identification. The platform plays a critical role in enabling safe movement, ensuring compliance with health regulations, and enhancing the efficiency of public health management.

First Entity: Citizen Profile



Validation:

@Pattern(regex = "[0-9]{10}")

@NotEmpty(message = "National ID is required")

→ String nationalId

@Size(min = 2, max = 100)

@NotEmpty(message = "Full Name is required")

→ String fullName

@NotNull(message = "Date of Birth is required")

@Past

→ LocalDate dateOfBirth

@Pattern(regex = "^(Male|Female)\$", message = "Gender must be 'Male' or 'Female'")

@NotEmpty(message = "Gender is required")

→ String gender

@Pattern(regex = "\\+9665[0-9]{8}", message = "Phone number must be a valid Saudi number")

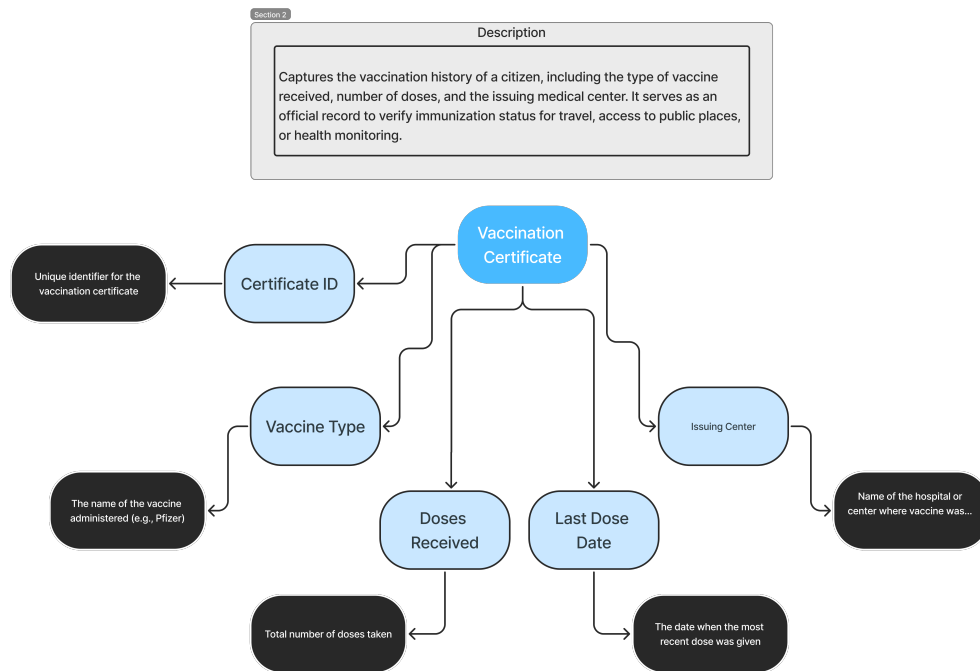
@NotEmpty(message = "Phone Number is required")

→ String phoneNumber

@Email

→ String email

Second Entity: Vaccination Certificate



Validation:

@NotEmpty(message = "Certificate ID is required")
→ String certificateId

@Pattern(regexp = "[0-9]{10}\$")
@NotEmpty(message = "National ID is required")
→ String nationalId

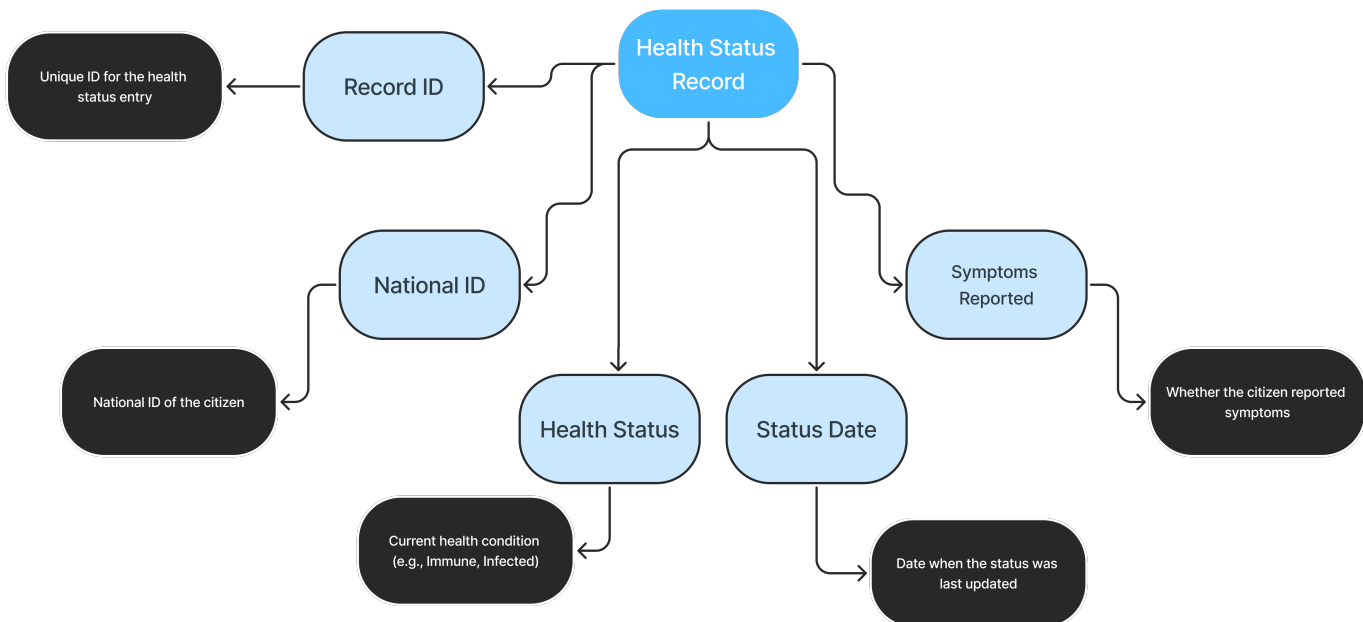
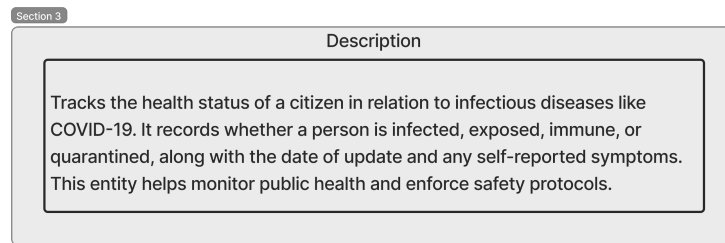
@NotEmpty(message = "Vaccine Type is required")
→ String vaccineType

@Min(1)
@Max(5)
→ int dosesReceived

@NotNull(message = "Last Dose Date is required")
@PastOrPresent
→ LocalDate lastDoseDate

@Size(min = 2, max = 100)
@NotEmpty(message = "Issuing Center is required")
→ String issuingCenter

Third Entity: Health Status Record



Validation:

```
@NotEmpty(message = "Record ID is required")
→ String recordId
```

```
@Pattern(regex = "[0-9]{10}")
@NotEmpty(message = "National ID is required")
→ String nationalId
```

```
@Pattern(regex = "(Immune|Infected|Exposed|Quarantined)")
@NotEmpty(message = "Health Status is required")
→ String status
@NotNull(message = "Status Date is required")
@PastOrPresent
→ LocalDate statusDate
```

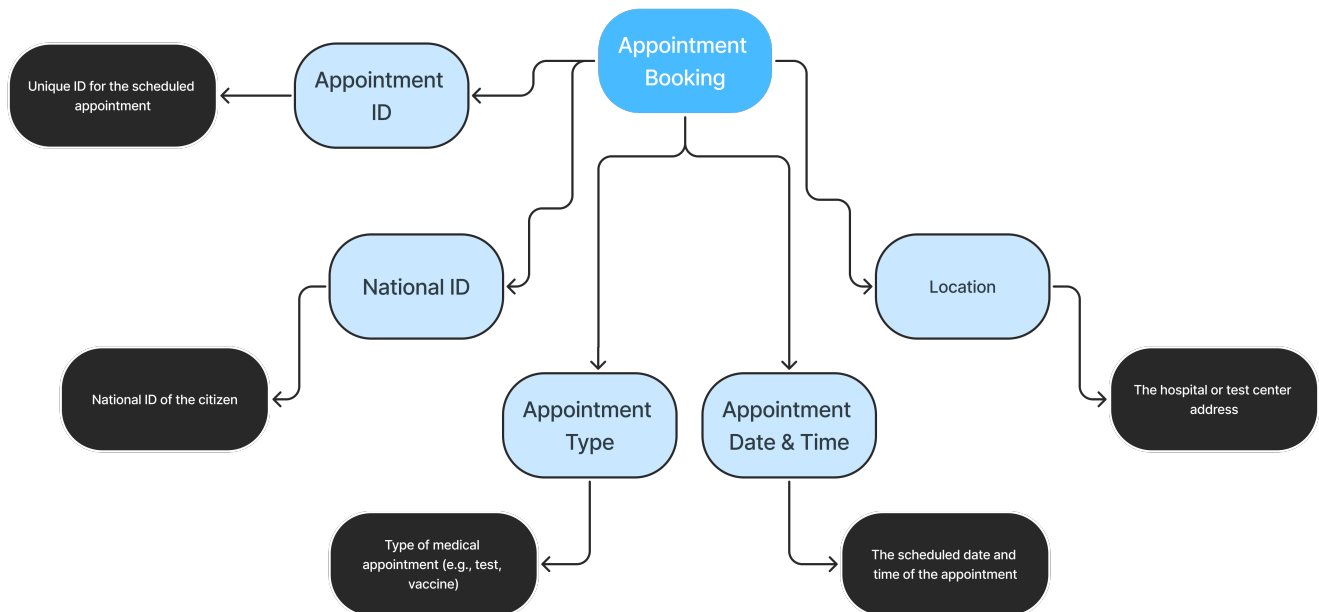
```
(no validation)
→ boolean symptomsReported
```

Fourth Entity: Appointment Booking

Section 4

Description

Manages scheduled appointments for health-related services such as COVID testing or vaccination. It includes details like the type of appointment, date and time, and location. This ensures efficient service delivery and avoids overcrowding at medical facilities.



Validation:

@NotEmpty(message = "Appointment ID is required")

→ String appointmentId

@Pattern(regexp = "[0-9]{10}\$")

@NotEmpty(message = "National ID is required")

→ String nationalId

@NotEmpty(message = "Appointment Type is required")

→ String appointmentType

@NotNull(message = "Appointment Date & Time is required")

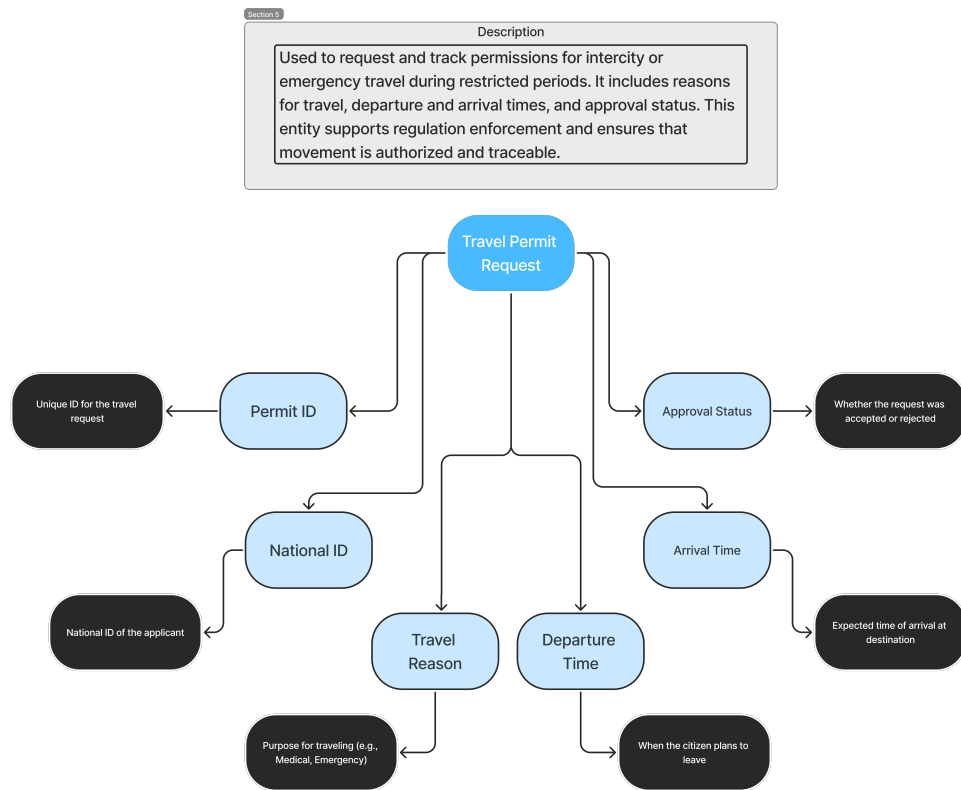
@Future

→ LocalDateTime appointmentDateTime

@NotEmpty(message = "Location is required")

→ String location

Fifth Entity: Travel Permit Request



Validation:

@NotEmpty(message = "Permit ID is required")
→ String permitId

@Pattern(regexp = "[0-9]{10}\$")
@NotEmpty(message = "National ID is required")
→ String nationalId

@NotEmpty(message = "Reason is required")
→ String reason

@NotNull(message = "Departure Time is required")
@FutureOrPresent
→ LocalDateTime departureTime

@NotNull(message = "Arrival Time is required")
@Future
→ LocalDateTime arrivalTime

(no validation)
→ boolean approved