

PESUDOCODE FOR VACCINATION CENTRE

FUNCTION main():

 WHILE True:

 PRINT "1. Register Vaccination Center"

 PRINT "2. Register Citizen"

 PRINT "3. Schedule Vaccination"

 PRINT "4. Update Vaccination Status"

 PRINT "5. Exit"

 INPUT choice

 IF choice == 1:

 CALL registerVaccinationCenter()

 ELSE IF choice == 2:

 CALL registerCitizen()

 ELSE IF choice == 3:

 CALL scheduleVaccination()

 ELSE IF choice == 4:

 CALL updateVaccinationStatus()

 ELSE IF choice == 5:

 BREAK

 PRINT "Thank you for using the application!"

```
FUNCTION registerVaccinationCenter():  
    PRINT "Enter Vaccination Center Details:"  
  
    INPUT centerName  
    INPUT centerLocation  
    INPUT centerCapacity  
  
    // Save center details in the database  
  
    PRINT "Vaccination Center registered successfully!"
```

```
FUNCTION registerCitizen():  
    PRINT "Enter Citizen Details:"  
  
    INPUT citizenName  
    INPUT citizenAge  
    INPUT citizenLocation  
  
    // Save citizen details in the database  
  
    PRINT "Citizen registered successfully!"
```

```
FUNCTION scheduleVaccination():  
    PRINT "Enter Citizen ID:"  
  
    INPUT citizenID
```

```
// Check if the citizen is already scheduled for vaccination
```

```
IF citizenScheduledForVaccination(citizenID) == True:
```

```
    PRINT "Citizen is already scheduled for vaccination!"
```

```
ELSE:
```

```
    // Find the nearest vaccination center with available slots
```

```
    nearestCenter = findNearestVaccinationCenter(citizenLocation)
```

```
    IF nearestCenter == NULL:
```

```
        PRINT "No vaccination centers available at the moment!"
```

```
    ELSE:
```

```
        // Schedule the citizen for vaccination at the nearest center
```

```
        scheduleCitizenForVaccination(citizenID, nearestCenter)
```

```
        PRINT "Citizen scheduled for vaccination at " + nearestCenter
```

```
FUNCTION updateVaccinationStatus():
```

```
    PRINT "Enter Citizen ID:"
```

```
    INPUT citizenID
```

```
    // Check if the citizen is scheduled for vaccination
```

```
    IF citizenScheduledForVaccination(citizenID) == False:
```

```
        PRINT "Citizen is not scheduled for vaccination!"
```

ELSE:

PRINT "Enter Vaccination Status (Completed/Partial/Not Vaccinated):"

INPUT vaccinationStatus

// Update the citizen's vaccination status

updateCitizenVaccinationStatus(citizenID, vaccinationStatus)

PRINT "Vaccination status updated successfully!"

FUNCTION citizenScheduledForVaccination(citizenID):

// Check if the citizen is scheduled for vaccination in the database

// Return True if scheduled, False otherwise

FUNCTION findNearestVaccinationCenter(citizenLocation):

// Query the database to find the nearest vaccination center with available slots

// Return the nearest center or NULL if no centers are available

FUNCTION scheduleCitizenForVaccination(citizenID, vaccinationCenter):

// Update the citizen's record in the database to mark the scheduled vaccination

FUNCTION updateCitizenVaccinationStatus(citizenID, vaccinationStatus):

// Update the citizen's record in the database with the provided vaccination status