

## Source Code

```
package com.Vaccination.entity;

import jakarta.persistence.Entity;
import jakarta.persistence.GeneratedValue;
import jakarta.persistence.Id;
import jakarta.persistence.JoinColumn;
import jakarta.persistence.ManyToOne;
import jakarta.persistence.Table;

@Entity
@Table(name = "citizen")
public class Citizen {

    @Id
    @GeneratedValue
    private int id;
    private String name;
    private String city;
    private int Doses;
    private String status;

    @ManyToOne
    @JoinColumn(name = "vaccination_center_id")
    private VaccineCenter vaccineCenter;

    public int getId() {
        return id;
    }

    public void setId(int id) {
        this.id = id;
    }

    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }

    public String getCity() {
        return city;
    }

    public void setCity(String city) {
        this.city = city;
    }

    public int getDoses() {
        return Doses;
    }

    public void setDoses(int doses) {
        this.Doses = doses;
    }

    public String getStatus() {
        return status;
    }

    public void setStatus(String status) {
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        this.status = status;
    }

    public VaccineCenter getVaccineCenter() {
        return vaccineCenter;
    }

    public void setVaccineCenter(VaccineCenter vaccineCenter) {
        this.vaccineCenter = vaccineCenter;
    }
}

```

```

package com.Vaccination.entity;
import java.util.List;
import jakarta.persistence.Entity;
import jakarta.persistence.GeneratedValue;
import jakarta.persistence.Id;
import jakarta.persistence.OneToMany;

```

```

@Entity
public class VaccineCenter {
    @Id
    @GeneratedValue
    int id;

    String name;
    String city;

```

```

    @OneToMany(mappedBy = "vaccineCenter")
    private List<Citizen> citizens;

```

```

    public int getId() {
        return id;
    }

```

```

    public void setId(int id) {
        this.id = id;
    }

```

```

    public String getName() {
        return name;
    }

```

```

    public void setName(String name) {
        this.name = name;
    }

```

```

    public String getCity() {
        return city;
    }

```

```

    public void setCity(String city) {
        this.city = city;
    }

```

```

public List<Citizen> getCitizens() {
    return citizens;
}

public void setCitizens(List<Citizen> citizens) {
    this.citizens = citizens;
}

}

package com.Vaccination.entity;

import java.util.Set;

import jakarta.persistence.*;

@Entity
public class User {
    @Id
    @GeneratedValue
    private int id;
    private String email;
    public String getEmail() {
        return email;
    }
    public void setEmail(String email) {
        this.email = email;
    }
    private String username;
    private String password;

    @ManyToMany(fetch = FetchType.EAGER)
    @JoinTable(
        name = "user_roles",
        joinColumns = @JoinColumn(name = "user_id"),
        inverseJoinColumns = @JoinColumn(name = "role_id"))

    public int getId() {
        return id;
    }
    public void setId(int id) {
        this.id = id;
    }
    public String getUsername() {
        return username;
    }
    public void setUsername(String username) {
        this.username = username;
    }
    public String getPassword() {
        return password;
    }
    public void setPassword(String password) {
        this.password = password;
    }
    public String getRoles() {

        return null;
    }
}

```

```
package com.Vaccination.repo;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.Vaccination.entity.Citizen;
import com.Vaccination.entity.VaccineCenter;
import java.util.List;

@Repository
public interface CitizenRepo extends JpaRepository<Citizen, Integer> {
    List<Citizen> findByVaccineCenter(VaccineCenter vaccineCenter);
}
```

```
package com.Vaccination.repo;

import org.springframework.data.jpa.repository.JpaRepository;
import org.springframework.stereotype.Repository;
import com.Vaccination.entity.*;

@Repository
public interface VaccineCenterRepo extends JpaRepository<VaccineCenter, Integer>{
}
```