You must develop a search facility for both the 'Vaccinations' and 'Vaccines' tables in the database that I have provided you with. The structure of both tables is as follows:

```
public class Vaccinations implements Serializable {
26
         @GeneratedValue(strategy =GenerationType.AUTO)
         Long id;
         String country;
         @Temporal(javax.persistence.TemporalType.DATE)
         int total vaccinations;
         int people vaccinated;
         int people_fully_vaccinated;
         int daily_vaccinations;
         double total vaccinations per hundred:
         double people_vaccinated_per_hundred;
double people_fully_vaccinated_per_hundred;
42
         double daily_vaccinations_per_million;
43
         String vaccines:
         String source name;
         String source_website;
```

```
public class Vaccines implements Serializable {

27

28

@Id

29

@GeneratedValue(strategy =GenerationType.AUTO)

private Long id;

31

private String vaccine;

32

private Double cost per dose;

33

private String efficacy;
```

```
∄ ID

■ DAILY_VACCINATIONS

■ ■ DAILY_VACCINATIONS_PER_MILLION

■ PEOPLE_FULLY_VACCINATED

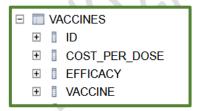
■ PEOPLE_FULLY_VACCINATED_PER_HUNDRED

■ PEOPLE_VACCINATED_PER_HUNDRED

■ SOURCE_NAME

■ SOURCE_WEBSITE

 \blacksquare \quad \boxed{ \ } \quad \boxed{ \ } \quad \texttt{TOTAL\_VACCINATIONS\_PER\_HUNDRED}
 UACCINES
```



Note, that Spring will create the structure of the DB tables based on the entity classes I have provided you with. I am also distributing a SQL script that you must include in *src/main/resources* within your project. The script, which you must call 'data.sql', will be executed every time you restart your project.

The user should be allowed to search based on an 'iso_code' and a date range. The application should respond by displaying a paginated list (there are 3081 records in the vaccinations table) of all the records that match the search criteria – displaying:

- country
- iso_code
- v_date;
- total_vaccinations
- people_vaccinated

The search results page should offer the user the opportunity to 'drill down' on an individual search record. On the subsequent (drill down) page you must display all corresponding fields from the

Vaccinations table as well as the vaccines that were administered in that jurisdiction on the specified date. For each vaccine you must display the vaccine (name), the cost_per_dose and the efficacy.

Note, that more than one vaccine may have been administered in each country on any given day.

For example, vaccines 1 and 3 (Pfizer/BioNTech and Oxford/AstraZeneca) were administered in the UK on 13/12/2020.

Your application must be localised for two locales – Ireland\English and another locale of your choosing. The user must be permitted to switch locales at any time using a suitable GUI component/widget. All locale sensitive information must be localised to the selected locale.

All errors and/exceptions must be handled within your application and any subsequent error pages must be localised as well. The information within the database does not have to be localised.

Stipulations:

- 1. You must use Spring Boot for this assignment.
- 2. You must use Maven to manage your dependencies.
- 3. You must use the H2 Database.
- 4. You must use the CrudRepository.
- 5. You must commit your work regularly to Github (I am using Github classroom to mange this assignment).
- 6. You must upload your final solution to Moodle.
- 7. You must use a view technology/template other than JSP/JSTL.
- 8. A company logo (jpg image) is provided for each of the eight vaccine providers. You must use these images appropriately in your solution.

Note:

- 1. There is starter code, an SQL script and some images available for this assignment on GitHub.
- 2. All hardcoded strings must be removed from your views and localised accordingly.
- 3. Consider using <u>Springs Pagination</u> for presenting search results.