Laboratory #11 Handlig Covid data

Wrocław, 02.01.2021

Structured and Object Oriented programming
Laboratory
Assignment 11

The file ecdc_covid19_cases.csv contains data about the Covid19 pandemic.

The data is in the following format:
dateRep,year_week,cases_weekly,deaths_weekly,countriesAndTerritories,geoId,countryterritoryCode,popData2019,continentExp,notification_rate_per_100000_population_14-days

Example:
25/01/2021,2021-03,1763,27,Algeria,DZ,DZA,43053054,Africa,8.02
18/01/2021,2021-02,1689,29,Algeria,DZ,DZA,43053054,Africa,7.96
11/01/2021,2021-01,1736,35,Algeria,DZ,DZA,43053054,Africa,8.16

Task 1

Implement a class CovidDataQA:

```java
public class CovidDataQA {
    private CovidData completeData;
    public CovidDataQA(String fileName) {
        // enter your code here
        // populate completeData with all proper lines
        // from the fileName file
    }
    public Vector<String> getAllCountries() {
        // enter your code here
        return null;
    }
    public boolean setConditions(String command) {
        // enter your code here,
        // return false for not proper command
    }
    public boolean answerQuestion(String question) {
        // enter your code here,
        // return false for not proper questions,
        // display data for proper questions and return true
    }
    public String toString() {
        // enter your code here,
        // replace xxx with calculated numbers
        return "total number of: deaths  xxx  cases xxx";
    }
    public static void main(String[] args) {
        // the name of the file to process: args[0]
        // enter your code here
        // read input file and handle questions
```

```
        }
}
```

Possible condition formats:

- Set week nn   // one week
- Set week nn,[nn]+ // a sequence of weeks separated by ; or , or /t
- Set week nn-mm // all weeks from nn till mm inclusive
- Set week // all weeks

Possible question formats:

- Show cases // country, week number, number of cases \n
- Show deaths // country, week number, number of deaths \n
- Show conditions //
- Quit // stop

Task 2
Implement a program that uses the CovidDataQA class to answer questions about Covid pandemic.

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