



Covid Analysis Framework

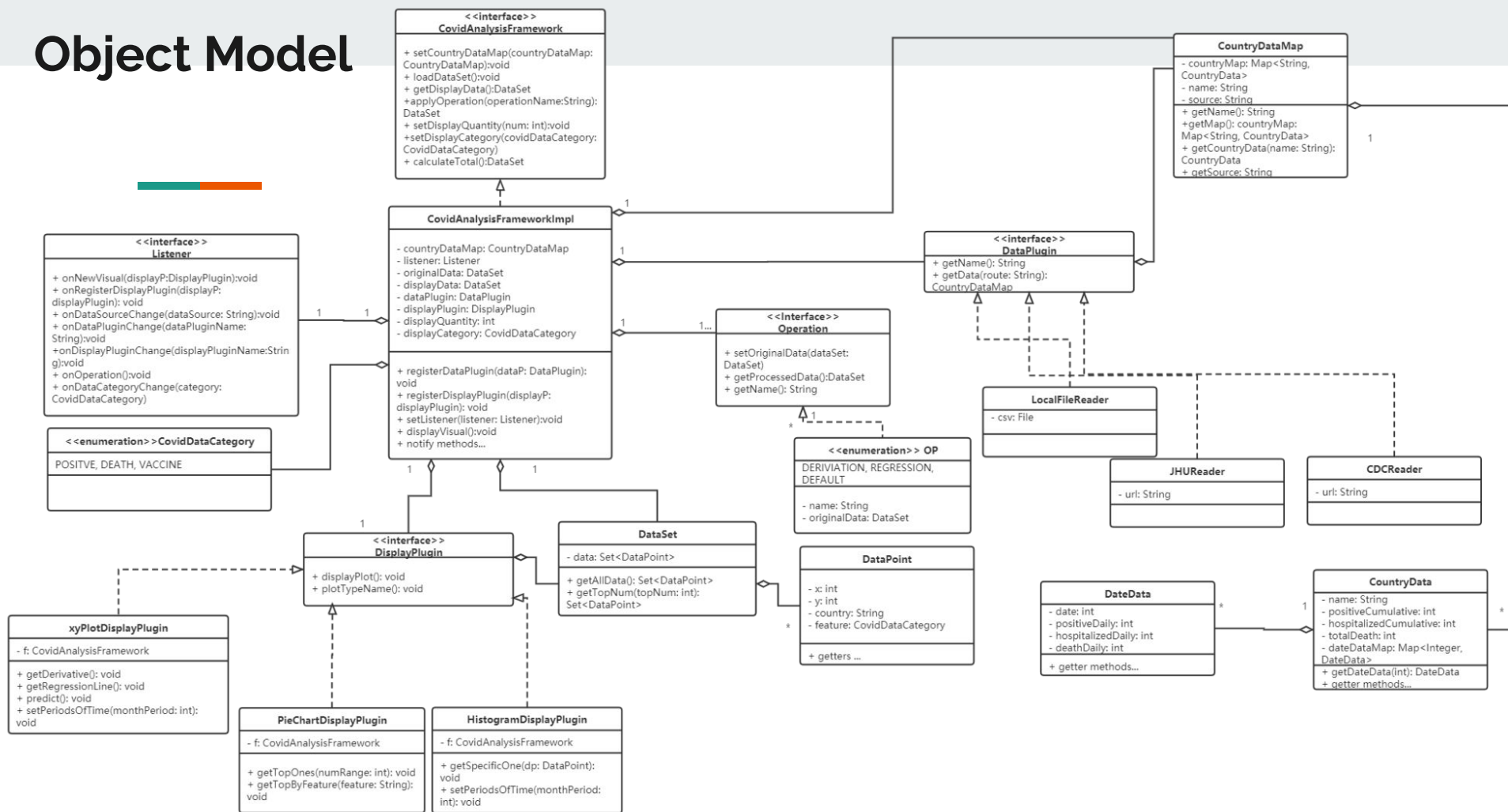
Exploration and Analysis of Covid Cases from Different Countries



Domain

- Covid analysis framework: Black-box framework that reads data from the data plugin, operates calculation on the data, then communicates with display plugin for visualization
- Data plugin domain: API, local file, url links
- Display plugin domain: xy-plot, pie chart, histogram

Object Model





Decisions

1. Key abstractions: CountryDataMap (from DataPlugin) & DataSet (to DisplayPlugin)
2. Reusability of our framework:
 - a. Operation
 - b. Category
3. Flexibility of plugins:
 - a. The only restriction of data/display plugins is the data structure they provide/take in.

Framework:

 edu.cmu.cs.cs214.hw5.core:

CovidAnalysisFramework

Listener

edu.cmu.cs.cs214.hw5.gui:

CovidAnalysisFrameworkGui

Plugin:

edu.cmu.cs.cs214.hw5.plugin:

Data Plugin

Display Plugin

Resources:

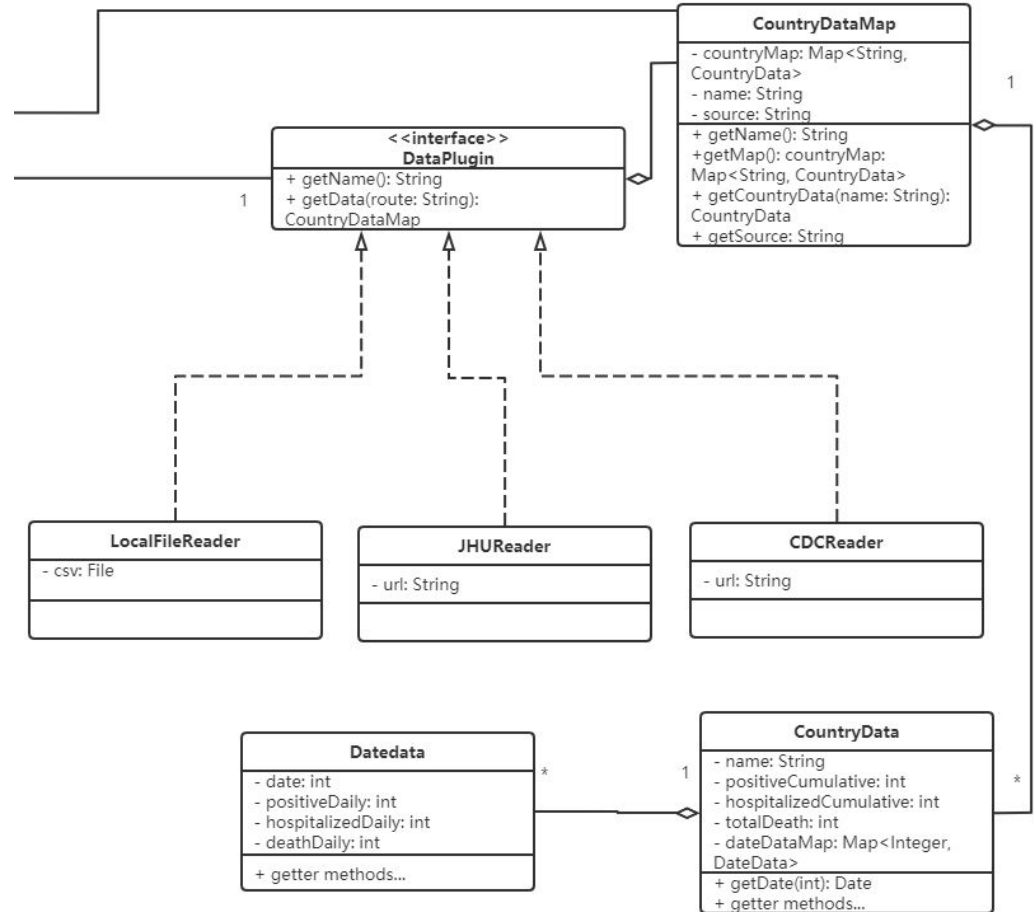
META-INF.services:

edu.cmu.cs.cs214.hw5.core.Team9.DataPlugin

edu.cmu.cs.cs214.hw5.core.Team9.DisplayPlugin

Data Plugin Interface

1. Obtain data: return a map of each country's covid data according to the user input (url string/local file route)
2. The data of each country consists of cumulative data and daily data



Main Features of Display Plugin

