**Project Assignment A**

The first part of the final project is an **2 minute movie**, which should explain the central idea/concept that you will investigate in your final project. You're making the movie so that the TAs and I can give you feedback, and so that other groups can steal your ideas (and you can steal ideas from them). The movie must contain the following

* An explanation of the central idea behind your final project (what is the idea? which datasets do you need to explore the idea?, why is it interesting?)

**What is the idea**: Covid19 is an health issue as much as an economic issue: both the spreading of the virus and a plunging economy will kill a high number of people. There is a fatal trade-off between the 2 issues.

So far the main talk around different Covid19 strategies focuses only on fixing the health issue, but we haven’t seen enough emphasis or data analysis about how different strategies affect the economy.

**Which datasets do you need to explore the idea**: we need both Covid19 data and economic data (stock market indices; restaurant tables usage; electricity consumption; etc.)

**Why is it interesting**: We are trying to fill the gap in the current debate to find the best strategy to fix both the health and the economic issues to lower the overall damages caused by Covid19.

* A mock up of the visualization that you wish to build. (Anything is fine here. Pen and paper, MS Paint, Inkscape, D3, anything.).

Put a picture here: cartoon from Lars?

* Make sure you answer the questions
  + What genre is it? (for *Genres*, see section 4.3 of the Segel and Heer paper)

We plan to make a visualization, that frames different stages of the Covid19 crisis and so it can be seen as a mix between a Comic Book, Interactive Video, Interactive Slideshow and ideally it will also include Annotations so that we can satisfy a balance between author-driven and reader-driven approach.

* + Why is that genre right for telling the story you want to communicate with the data

The phenomenon that we are trying to describe has 4 dimensions: time; space, deaths, economy

* An outline on the elements you'll need to get to your goal.

**Covid19 data** (infections, deaths, recovery), we have them on a daily basis

**Economic data**: stock markets (we have them); open restaurant tables (we have them)

* The implementation plan.

Our visualization (video) should show how death rates and stock market behave over time for each Country to check for clusters. And check if these clusters correspond to different Countries’ strategies (test-track-isolate VS herd immunity)

Our aim is for our visualization to be able to identify the best policy suggestions to contain the health and economic issues arising from Covid19.

Following the Introduction of Sagel-Heer:

“*Crafting successful “data stories” requires a diverse set of skills. Gershon and Page [12] note that effective story-telling “require[s] skills like those familiar to movie directors, beyond a technical expert’s knowledge of computer engineering and science.*”

We can achieve all the above including the following features:

* **Martini Glass Structure**: visualization structure begins with an author-driven approach, initially using questions, observations, or written articles to introduce the visualization (occasionally no text is used at all, as the visualization instead relies on an interesting default view or annotations). Once the author’s intended narrative is complete, the visualization opens up to a reader-driven stage where the user is free to interactively explore the data
* Consistent visual platform
* Progress bar / time bar
* Close-Ups to zoom in on particular Countries
* Zooming
* Hover Highlighting / Details, Annotations or Accompanying Article (to detail each Country data) for adding **Details-On-Demand** features that are typical of a **Drill-Down Story**.
* Interactivity
* Tacit Tutorial
* Comment Repetition
* Summary / Synthesis
* A walk-through of your preliminary data-analysis, addressing
  + What is the total size of your data? (MB, number of rows, number of variables, etc)

**Size**: 0.5-1 MB

**Number of rows**: 300+ (one row of data for each Country in the world, plus data at State level for some Countries)

**Number of variables**:

* 3 variables for Covid19;
* 3-5 variables for economic indicators;
  + What are other properties? (What is the date range? Is it geo-data?, then a quick plot of locations, etc.)

**Data Range**: daily data from 22nd January 2020 onward

**Geo-Data**: we have Latitude and Longitude of the capital of each Country so we can visually plot data for Countries

**Quick Plot of locations**: we would love to make an interactive map in Bokeh that allows the user to drill down the data for each Country. Ideally showing how the data evolve over time

**Add something here about the Segel & Heer article** about why we are going for this particular data visualization

* + Show the fundamental distributions of the data (similar to the work we did on SF crime data for lecture 3)

Need to work on this one:

But other than that, there are no constraints. And we do appreciate funny/inventive/beautiful movies, although the academic content is most important. Note that we'll display the movie to the entire class.

(The maximum length is 2 minutes, but its OK if the movie is shorter.)

Handing in the assignment: Simply upload your video to [youtube](http://youtube.com/) or another video hosting site (the higher the resolution the better) and submit the link to [peergrade](http://peergrade.io/).