## **Sprint-5 Artifact**

Members : Alan Chau, Alex Kuang, Kent Phan, Kevin Ferrer, Ryan Park Features (Analytics to implement):

- Feature 1 : As a User, I want to see bar charts represent the data
- Feature 2 : As a User, I want to see the averages of country/states data
- Feature 3 : As a User, I want to see the standard deviation of specified state in country
- Feature 4 : As a User, I want to see a percentage of specified state in specified country

#### **Test Cases**

- Feature 1: I want to have bar charts represent the data
  - Test Case 1: User inputs country
    - Correct output : Display a bar chart representing countries
  - Test Case 2: No Input
    - Correct output : Display a bar chart representing countries
- Feature 2: I want to see the average of deaths, confirmed, and recovered
  - Test Case 1: User inputs state
    - Correct output: Display the average deaths, confirmed, and recovered
  - Test Case 2: User doesn't input a state
    - Correct output: Display the averages of deaths, confirmed, and recovered for all states
- Feature 3: I want to see the standard deviation of specified state in country
  - Test Case 1: Input of Country and State
    - Correct output: Standard deviation of specified state in specified country
  - Test Case 2: Input Country only
    - Correct output: Standard deviation of Country compared to the rest of the world
  - Test Case 3: Input State only
    - Correct output: Standard deviation of specified state in specified country
  - Test Case 4: No input
    - Correct output: Returns nothing (some message)
- Feature 4: I want to see percentage of specified state in specified country
  - Test Case 1: Input of Country and State
    - Correct output: Percentage of specified state in specified country
  - Test Case 2: Input Country only
    - Correct output: Percentage of that Country compared to the rest of the world
  - Test Case 3: Input State only
    - Correct output: Percentage of specified state in specified country
  - Test Case 4: No input
    - Correct output: Returns nothing (some message)

### **TODO LIST**

Done list of last sprint

- Set up backend functions
  - Return top 5 countries with most deaths
    - Alan, Kent, Ryan
  - Return top 5 states with most cases
    - Alan, Kent, Ryan

- Return top 5 states with most deaths
  - Alan, Kent, Ryan
- Return top 5 states with most recovered
  - Alan, Kent, Ryan
- Frontend GUI
  - Kevin
- Setup Frontend + Backup Endpoints
  - Kevin
- Charts and display analytics
  - Alex

### **TODO task list for the next sprint:**

- Backend functions
  - Standard Deviation
    - Alan, Kent, Ryan
  - Averages
    - Alan, Kent, Ryan
  - Percentages
    - Alan, Kent, Ryan
- Pie Chart
  - Alex
- Frontend GUI
  - Kevin
- Setup Frontend + Backup Endpoints
  - Kevin

# **GUI Design**

	Introduction	n						
	Country		State/Province		Туре		Date	
Submit Button								
	Country State		e/Province	Туре		Date		Amount
	Insert			Edit		Delete		Backup
	Top 5 Deaths (co	untry) Bar Char	Avg C	onfirmed (state)	Avg Recovered (state)			Avg Deaths (state)
		Std Dev Confire	ned (state)	Std Dev Reco	vered (state) Std Dev Deat		ths (state)	
	Percentages Conf		firmed (state)		covered (state)	Percentages De	Percentages Deaths (state)	
	Data							