

CEN 4725/ CEN 4726 Natural User Interaction – Assignment 3

Due 4/22/2020 11:59pm via Canvas

For this assignment, we will be implementing a speech interface that will provide up-to-the-date information about the covid-19 virus. To accomplish this, this project has several components that will work together to provide a complete experience. They include: Google Dialogflow for natural language and intent recognition, Coronavirus-tracker API (<https://coronavirus-tracker-api.herokuapp.com/>), and a UI client that connects the two. This assignment is geared towards having you apply concepts presented throughout the semester.

This is an individual assignment and all work should be done independently.

High-level Requirements:

- Enable user to speak a question regarding coronavirus statistics and receive the most up-to-date information
- Response must be spoken back to user
- Data must be pulled from the coronavirus-tracker-api (<https://coronavirus-tracker-api.herokuapp.com/> and <https://github.com/ExpDev07/coronavirus-tracker-api>)
- User Interface and interactions with the interface should be as intuitive and natural as possible by following design practices discussed in class (Must be visual, no smart speakers).
 - This is intentionally open ended

Speech/Intent Level Requirements

1. User should be able to ask for latest worldwide cases, deaths, and recovered
2. User should be able to ask for number of cases by country
3. User should be able to ask for statistics for any state or county in the US
4. **(Grad requirement or UG for extra credit)** User should be able to ask for number of new cases, deaths, and recovered from a given time period for any country. For example, "How many new cases in the US since yesterday?"

What to hand in:

A zip file that includes the following:

1. A readme that has the following sections:
 - a. Name
 - b. Level (Undergrad or Grad)
 - c. Program Description
 - d. Tools used to develop (include OS)
 - e. Dependencies
 - f. How to compile
 - g. How to Run
2. All source code
3. A video showing the functionality of your assignment

Grading Criteria

The assignment will be graded on the following criteria:

1. Completeness (50%)
2. Quality of interaction (25%)
3. Quality and complexity of interface (25%)

Note: All services (including DialogFlow) needed to complete this assignment are free. Students should not need to pay anything to complete this assignment.