

# Intent Detection - Assignment

## Overview

Most popular Conversational AI systems involve intent detection as a vital part of their Natural Language Understanding (NLU) pipeline. The virtual agent needs to “understand” what the user’s intent is in order to respond appropriately. Hence, in this assignment we ask you to build a machine learning model which can accurately predict intent of the user.

## Goals

There are 3 specific goals of this assignment:

1. We want to understand:
  - a. How can you frame this problem as a Machine Learning problem?
  - b. What are the possible pros/cons of the formulations which you considered before solving this problem?
2. We want to see if you can build an end to end working machine learning model which can predict the intent of the user. You’ll need to submit code for your model with instructions on how we can reproduce your results.
3. We want to understand:
  - a. Why do you think your results make sense?
  - b. How can you improve your model? Why do you think those improvements will actually improve the results? Please note that with this assignment, we’re not looking for SOTA results on this problem from you. We’re more concerned about your approach to the problem and your ability to defend your decisions.

## Dataset

PFA

## Deliverables

We would like you to submit:

1. All of your code which we can use to reproduce your results (Primarily Goal 2)
2. 1 page report for Goal 1 and Goal 3, and anything else which you might want to discuss