Create an Individual AI Report on:
a real-life **AI use-case** with **Natural Language Processing** [NLP] as application domain.

> *AI accommodates & exploits **"complex" human behaviour** by means of automatised regulatory systems that are mechanical, biological, physical and/or cognitive in nature.*
>
> *The necessity to use AI fall into 4 main categories:*
>
> 1. *When humans can't code rules for certain problems.*
> 2. *When you need to scale a solution to millions of cases.*
> 3. *When you can do it, but it's not cost-efficient.*
> 4. *When you have a massive dataset without obvious patterns.*
>
> *An **AI use-case** is any application or tool using Data Science methods combined with computing or statistical algorithms ---required by the AI-model--- that autonomously aids businesses (profit or non-profit) to provide a solution to a given societal or proprietary problem solely based on sampling data set.*
>
> *It comprises a human-centered interface, creating meaningful insights derived from data science principles & methodologies such as:*
>
> - *Human Factors*
> - *Predictive Analytics*
> - ***Natural Language Processing***
> - *Descriptive Data Modeling*
> - *Data Mining*
> - *Machine Learning*
> - *Risk Management*
> - *Advanced statistics*

The final deliverable must be made available on GitHub as a code-based Repository, accompanied by a Binder-demo.

Deliverable Backbone AI Report in GitHub Repository Readme fomat

PART I Problem Selection, Definition & Motivation + Human in the Loop

- Defining Artificial Intelligence (in your own words)
- Why Do you Need AI? (What AI problem/use-case are you trying to solve)
- **Designate Capability Domain & Application Domain ➔ NLP**
- Mission Statement + Definition of Done

PART II AI use-case Description, Preparation & Annotation

- Defining Data Science (in your own words)
- Designate Data Type used:
    - Datasets used
    - Data Labelling Requirements (Yes supervised ML/NO unsupervised ML)
    - Data Pipeline outline
    - Data Visualisation
- Description of Data Product Components & Techniques Involved

PART III AI Model selection, coding, training and testing

PART IV Critical Reflection & Ethical Considerations

- Evaluate whether the selected model solves the problem at hand
- to ensure its suitability to your data-product solution.
- Assess popularity / "ground-breaking-ness"
- Review potential issues & existing documentation

Studied Literature