NATURAL LANGUAGE PROCESSING

CODEXCUE

PURPOSE

In the era of the industrial revolution where technology and data are reshaping our world, Natural Language Processing (NLP) stands as a pivotal force, bridging the gap between human communication and artificial intelligence. It transforms the vast seas of human language into actionable insights, making it a cornerstone in today's digital evolution. As we sail through the information age, NLP acts as a compass, guiding us through the complexities of human sentiment and thought, and translating them into the binary simplicity machines understand. It's the linchpin that harmonizes the dialogue between humans and technology, turning unstructured data into a symphony of insights. NLP does not merely process language; it unlocks a treasure trove of knowledge, serving as a beacon for businesses in the fog of information overload and lighting the path toward innovation and personalized experiences. In the grand orchestra of the industrial revolution, NLP plays the crucial instrument, echoing the potential of AI to mirror human understanding and intuition, thus redefining the boundaries of what technology can achieve in understanding the nuances of human language.

PROJECTS OVERVIEW

ALLOCATED PROJECTS

In the **Allocated Project Section** of *Codex Cue* NLP internship program, interns will embark on a journey through the foundational stones of Natural Language Processing, working on three pivotal projects: a *Sentiment Analysis of Social Media Posts*, *Spam Message Filter*, and *Keyword Extraction from Articles*. Each of these projects is designed to equip interns with a solid understanding of how to build systems that can interpret, understand, and generate human language in a way that is both meaningful and actionable.

Sentiment Analysis of Social Media Posts Analyze posts from platforms like Twitter or Reddit to classify sentiments as positive, negative, or neutral. This project introduces basic text processing and classification techniques, making it ideal for you.

Spam Message Filter Develop a model to distinguish between spam and non-spam (ham) messages in emails or SMS. This project focuses on text preprocessing, feature extraction, and working with common classification algorithms.

Keyword Extraction from Articles Implement an algorithm to extract key phrases or topics from news articles or blogs. This project allows you to explore techniques for text summarization and keyword extraction, introducing them to the basics of information retrieval.

GOLDEN PROJECTS

Moving to the **Golden Project Section**, you will tackle two advanced projects: a **Movies Recommendation System** and a **Chatbot Development for Customer Service**. These projects are not only designed to deepen your understanding of NLP but also to refine your skills in machine learning and data analytics, making you industry-ready for entry-level positions. Together, these projects encapsulate the essence of NLP's role in the industrial revolution era, preparing you to harness the power of language processing to drive innovation and efficiency in the tech landscape.

Movies Recommendation System project will teach you how to design algorithms that predict user preferences and recommend content accordingly, a vital component in the customization and personalization of digital services.

Chatbot Development for Customer Service Create a chatbot that can handle customer queries and provide relevant responses in a specific domain, such as banking, retail, or healthcare. This project requires a deeper understanding of NLP concepts like intent recognition, entity extraction, and dialog management.

PROJECT DETAILS

Project Deliverables

Following is a complete list of all project deliverables:

SENTIMENT ANALYSIS FOR SOCIAL MEDIA POSTS

Project 4	Description
IDE	Google Colab, Jupyter Notebook, Visual Studio Code
Language	Python
Dataset Source	Twitter, Reddit, Any type of post data of your choice
Duration	07 Days

Spam Message Filter

Project 4	Description
IDE	Google Colab, Jupyter Notebook, Visual Studio Code
Language	Python
Duration	07 Days

Keyword Extraction From Articles

Project 4	Description
IDE	Google Colab, Jupyter Notebook, Visual Studio Code
Language	Python
Duration	07 Days

Movies Recommendation System

Project 4	Description
IDE	Google Colab, Jupyter Notebook, Visual Studio Code
Language	Python
Dataset Source	Download Dataset From here
Duration	10 Days

ChatBot Development For Customer Service

Project 4	Description
IDE	Google Colab, Jupyter Notebook
Language	Python
Duration	10 Days

INSTRUCTIONS

- **You have to complete least 3 Allocated Projects assigned to you to Earn Internship Completion Certificate**

- **You have to complete the atleast Golden 1 Project to get the Recommendation Letter**

- **You have to complete all allocated projects and golden projects to earn swags and more.**

MOTIVATION

As you embark on this transformative journey with us, we extend our heartfelt wishes for success and express our confidence in your abilities to conquer the challenges ahead. Through the meticulously designed projects in this NLP internship program, you're not just learning; you're preparing to excel in the competitive market. We are optimistic that the skills and insights you'll gain from these projects will not only make you industry-ready but will also propel your career forward at an unprecedented pace. Best of luck, and remember, every challenge is an opportunity to shine brighter in your professional path.

Thank you for your consideration.