

## Report On Internship

## Restaurant Review Using NLP

### Under The Company

## “1STOP”

**Ratnadeep Supermarket, HSR Layout,  
Bangalore, Karnataka**

Submitted By:

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## 1. INTRODUCTION

Businesses often want to know how customers think about the quality of their services in order to improve and make more profits. Restaurant goers may want to learn from others' experience using a variety of criteria such as food quality, service, ambience, discounts and worthiness. Users may post their reviews and ratings on businesses and services or simply express their thoughts on other reviews. Bad (negative) reviews from one's perspective may have an effect on potential customers in making decisions, e.g., a potential customer may cancel a service and persuade other do the same. The question is to quantify how customers and businesses are influenced and how business ratings change in response to recent feedback.

In this project we used the Natural Language Processing Technique (NLP) for pre-processing the text. NLP is an area of computer science and artificial intelligence concerned with the interactions between computers and human (natural) languages, in particular how to program computers to process and analyze large amounts of natural language data. It is the branch of machine learning which is about analyzing any text and handling predictive analysis. Scikit-learn is a free software machine learning library for Python programming language. Scikit learn is largely written in Python, with some core algorithms written in Cython to achieve performance. Cython is a superset of the Python programming language, designed to give C-like performance with code that is written mostly in Python.

- ❖ Restaurant review analysis is a sentiment analysis used for text analysis, computational linguistics, and biometrics to identify and extract subjective information.
- ❖ Restaurant customers give their ratings and write reviews based on their satisfaction levels.
- ❖ These ratings and reviews help the other customers to make a decision on going to those restaurants.
- ❖ These ratings are also helpful for the restaurant owners to make changes based on their reviews for improving their business Restaurant reviews contain textual information.

## 2. PROBLEM STATEMENT

- ❖ For years food and hospitality businesses are running on the assumption that good food and service is the way to attract more customers.
- ❖ But the advent of science and technology, more importantly, the data created by the use of online platforms has pointed towards new findings and opened new doors: Most consumers nowadays rate a product online, over 1/3rd of them write reviews and nearly 88% of the people trust online reviews.