

# Customer Review Summarizer



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# Introduction to Customer Review Summarizer

What is Customer Review Summarizer all about?

This presentation will answer those doubts and provide a comprehensive overview of the **Customer Review Summarizer** project, outlining key objectives, methodologies, and anticipated outcomes to enhance understanding and engagement.

# Project Overview

The **Customer Review Summarizer** project aims to enhance decision-making by providing concise insights from extensive customer feedback.

Key aspects of the training program include:

- Understanding the challenges of information overload
- Learning to utilize summarization tools effectively
- Familiarizing participants with the project goals and methodologies
- Engaging in hands-on exercises to solidify knowledge

This training will equip participants with the skills needed to leverage customer reviews, improving both consumer experience and business outcomes.

# Problem Statement

## Understanding the Importance of Summarization

In today's digital landscape, **customer reviews** are abundant, leading to information overload. Summarizing these reviews aids in effective **decision-making**, enhancing user experience and driving informed choices.

# Project Goals

## Clear Objectives for Customer Review Summarizer

The primary goals of the Customer Review Summarizer project include enhancing decision-making through effective information synthesis, reducing information overload, and providing users with concise, actionable insights.

# Methodology Overview

## Data Sources and Summarization Techniques

The Customer Review Summarizer utilizes diverse data sources, employing advanced summarization algorithms to condense extensive customer feedback into **clear and actionable insights** for improved decision-making.



# Key Features

## Functionalities of the Tool

- Summarization of reviews
- User-friendly interface
- Real-time analysis
- Multi-platform support



# Technical Stack Overview

## Key Tools and Technologies Used

The Customer Review Summarizer project utilized a robust tech stack, including:

- Python for data processing
- Google Colab for project implementation
- Kaggle for CSV dataset
- TensorFlow for machine learning
- TextRank and TF-IDF scoring to produce rapid, reliable summaries of major customer feedback points
- ROUGE-score metrics and manual inspection for assessing
- summary quality and faithfulness

and various libraries to enhance functionality and performance.



# Challenges and Future

## Overcoming obstacles and planning enhancements

The project faced significant challenges, including AI Token and Model Limitations, data inconsistency and algorithm performance.

Future improvements aim to enhance summarization accuracy and user interface design for better user engagement.

# AEG Project Overview



The Automated Essay Grader (AEG) is an AI powered system designed to evaluate and score written essays automatically based on linguistic quality, coherence, content relevance, and structure



Uses Python, Flask / FastAPI, HTML, CSS, JavaScript / Streamlit, Scikit-learn, TensorFlow / PyTorch, NLTK, spaCy, BERT/RoBERTa, SQLite / Firebase Firestore, Matplotlib, Seaborn, Plotly, Render / Streamlit Cloud / Hugging Face Spaces



This project provided comprehensive experience in Natural Language Processing (NLP), including text preprocessing, feature extraction, and model fine-tuning using transformer architectures.

# FAQ Chatbot Project Overview



The FAQ Chatbot, also known as the Intelligent Query Assistant, is an AI driven conversational system designed to answer frequently asked questions in a natural and interactive manner. Serves as a digital assistant for organizations, educational institutes, or businesses to automate information dissemination and user interaction.



Uses: Python, Flask / FastAPI, React.js / Streamlit / HTML, CSS, JavaScript, spaCy, NLTK, Hugging Face Transformers, Sen-tence Transformers, BERT, DistilBERT, or OpenAI GPT APIs for contextual understanding and response generation, SQLite / Firebase / MongoDB, FAISS / Chroma / Pinecone, Plotly / Chart.js



This project provided in-depth exposure to Natural Language Processing (NLP), Information Retrieval, and Conversational AI. I



# Thank You



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**X**

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