**SYNOPSIS**

**Report on**

**STUDENT REPOSITORY SYSTEM**

**by**

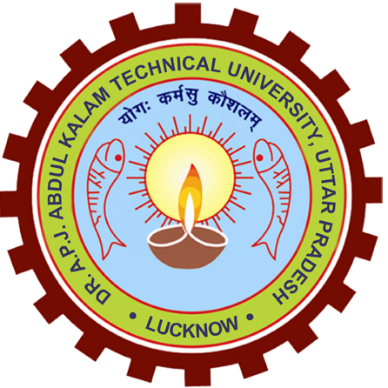
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**ABSTRACT**

Talkalytics is a computer program that helps people understand their WhatsApp conversations better. It works by letting you put in your chat logs from WhatsApp, and then it tells you interesting things about your chats. For example, it can show you how often you or your friends send messages, when you chat the most, and even analyze the words to tell you what topics you discuss the most. You can see all this information in easy-to-read reports and graphs. It's like having a statistics helper for your WhatsApp chats. Plus, it's easy to use and works on most computers. So, if you ever wondered how you and your friends talk on WhatsApp, this program can help you find out!

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1. **INTRODUCTION**

WhatsApp, with its over two billion users worldwide, has become an integral part of our daily lives, facilitating personal conversations, business transactions, and everything in between. The conversations held within these chat threads are a treasure trove of insights, reflecting the dynamics of our relationships, the evolution of language, and even the pulse of societal trends.

At its core, Talalytics is driven by a singular purpose that is to decode the language of digital conversations. We aim to understand how people communicate, the nuances of their interactions, and the patterns that emerge over time. By doing so, we not only provide a window into the digital world but also equip individuals, businesses, and researchers with valuable tools to analyze, learn from, and enhance their communication strategies.

**2. LITERATURE REVIEW**

**2.1 Introduction**

In today's world, we use WhatsApp to chat with friends, family, and colleagues. Have you ever wondered what your chats can reveal about your communication style and relationships? This project, Talkalytics, is here to help you find out.

Why It Matters?

WhatsApp is super popular, and our chats hold a lot of information. The way we talk to each other and the words we use can tell us interesting things about our conversations. This project is all about helping you understand your chats better.

What We Do?

We use smart computer tools to study your WhatsApp conversations. These tools look at things like the feelings in your chats, the words you use most, and who you talk to the most. It's like having a detective for your chats!

What's in it for You?

By using the WhatsApp Chat Analyzer, you can learn cool stuff about your chats. You might find out who your best chat buddy is or discover fun facts about your talking habits. Plus, it's just fun to see what your chats can tell you.

1. **PROJECT OBJECTIVE**

Here are some possible project objectives for my project**:**

1**. Chat Sentiment Analysis**: Develop a tool that can analyze the sentiment (positive, negative, neutral) of WhatsApp chats to help users understand the emotional tone of their conversations.

2. **Communication Pattern Identification**: Create algorithms to identify communication patterns within WhatsApp chats, such as frequently used words, phrases, and topics, to provide insights into users' talking habits.

3**. Relationship Analysis**: Develop a feature that can analyze chat data to determine the strength of relationships among users based on conversation frequency and content.

4. **Keyword Extraction**: Create a tool that extracts keywords and important terms from WhatsApp chats to help users quickly identify key topics in their conversations.

5. **User Behaviour Insights**: Provide users with insights into their chat behaviour, including response times, message length, and activity patterns, to help them better understand their communication habits.

6**. Group Chat Analysis**: Extend the tool's capabilities to analyze group chats, including identifying influential members, tracking information flow, and monitoring engagement levels.

7. **Privacy-Focused Analysis**: Ensure that the project adheres to privacy and ethical standards, allowing users to analyze their chats without compromising sensitive information.

8. **Customizable Reporting**: Create customizable reports and visualizations that allow users to easily interpret and share their chat analysis results.

9. **Integration with External Tools**: Explore integration options with other productivity or analytics tools, such as calendars or task managers, to enhance user productivity and decision-making.

10. **User-Friendly Interface**: Develop a user-friendly interface that is easy to navigate and provides a seamless experience for users analyzing their WhatsApp chats.

1. **PROJECT OUTCOME**

The project outcome of a Chat Analyzer can be summarized as the tangible results and benefits that users and stakeholders can expect from the tool. These outcomes demonstrate the value and impact of the Chat Analyzer. Here are potential project outcomes:

1. **Enhanced Understanding of Conversations:** Users will gain a deeper understanding of their chat conversations through sentiment analysis, keyword extraction, and conversation summarization. They will be able to see the emotional tone, key topics, and essential information within their chats at a glance.

2. **Improved Communication Skills:** The Chat Analyzer will provide users with insights into their communication habits, helping them identify areas for improvement. Users can learn to communicate more effectively and adapt their conversation style based on analysis results.

3. **Relationship Insights:** Users can analyze their interactions with others, whether in personal or professional settings. The tool may identify patterns in communication frequency, sentiment, or engagement, offering insights into the dynamics of their relationships.

4. **Time Management:** Users will be able to track response times and message frequency, which can help them manage their time more effectively in chat-based communication.

5. **Keyword Identification:** The tool will highlight important keywords and terms, making it easier for users to pinpoint critical information within lengthy conversations.

6**. Data-Driven Decision-Making:** Users can make data-driven decisions based on chat analysis results. For example, businesses can refine marketing strategies, and individuals can tailor their communication for specific purposes.

7. **Visualizations:** The Chat Analyzer will present chat analysis results through visualizations, such as sentiment trends, word clouds, and network graphs, making it easier for users to interpret and share findings.

8. **Customized Reports:** Users will have the option to generate customized reports summarizing chat analysis results, which can be used for personal reflection, professional development, or sharing insights with others.

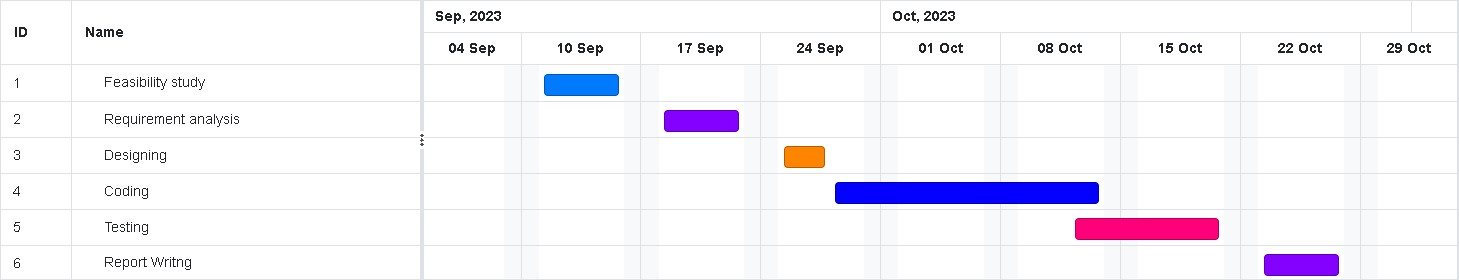
9**. User-Friendly Interface:** A user-friendly interface will make it easy for users to upload chat data, customize analysis parameters, and interpret results without requiring technical expertise.

10. **Education and Recommendations**: The tool may provide educational resources and recommendations based on analysis results, helping users improve their communication skills and relationships.

These project outcomes collectively contribute to the value proposition of the Chat Analyzer, offering users actionable insights, improved communication, and a deeper understanding of their chat conversations.

1. **Proposed Time Duration**

**Gantt chart**



**Feasibility Study**: I have decided to use 4 days for feasibility study and requirement gathering for that I can analyse my capabilities and resources.

**Requirement Analysis:** I have put 4 days for analysis of software requirements and risk and resource management.

**Designing:** In this phase I will focus on designing the blueprint of software and design the look for the application.

**Coding:** Form week 3rd to week 5th, I intend to focus on coding part and will try to follow pre developed prototype of software.

**Testing:** Testing is not a part of only testing phase hence testing will be applied through coding phase.

**Report Writing:** During the process of developing project (software) I will constantly write report on current project**.**

**\*Hence the total time required to develop this project is around 7 weeks.**

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**- spaCy: https://spacy.io/**

**- TensorFlow: https://www.tensorflow.org/**

**- PyTorch: https://pytorch.org/**