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| 1. Title | <i>Rantify</i> |
| 2. Team Name | <i>Team E.S.G.</i> |
| 3. Team Members | 1)Aakash Singh – DBMS 2)Aayush Gupta (Team-Lead) - AI, BACKEND 3)Akash Sinha- AI, BACKEND 4)Parkhi Saini – UI, FRONTEND 5)Yash Chowdhury -UI, FRONTEND |
| 4. Abstract | <p>Introduction/Background: <i>Keeping yourself mentally healthy is the need of the hour. With pressure levels higher than ever, we need to have a place to express ourselves and vent it all out as and when we need to. “Ranting” has been scientifically proven to improve your mood and even improve efficiency. Music has been known, time and time again, to improve our mood and help us stay happy. Keeping in that same theme, we combined these two and created Rantify.</i></p> <p>Objectives: <i>We aim to provide people with a platform where they can open up, relax and vent out their hectic lifestyles. By using these rant, we determine their current mental state and provide them with music playlists to help them loosen up and discover new music as well. We also provide them with blogs and article based on their mood so that they can connect more freely with what they are feeling.</i></p> <p>Methods: <i>Our users will be logging in to the app to rant out. They can log in so that we can save their history with us. A form will be filled by them for us to know about their choices better. After analyzing their rant our app would be suggesting them a playlist especially made for them keeping in mind their current mental state. We will be maintaining a log of these rant, just like a diary entry and allow people to read these entries(with the user’s permission) anonymously.</i></p> <p>Keywords: <i>Sentiment analysis Mental health Natural language processing Music DBMS</i></p> |
| 5. Introduction, Review of Literature and Background | <p><i>Depression is a common illness worldwide, with an estimated 3.8% of the population affected, including 5.0% among adults and 5.7% among adults older than 60 years. Approximately 280 million people in the world have depression. At its worst, depression can lead to suicide. Over 700 000 people die due to suicide every year. Suicide is the fourth leading cause of death in 15-29-year-olds.</i></p> <p><i>From time to time, music has been known to Improve Cognitive Performance, Reduce Stress, Improve Your Memory, Reduce Symptoms of Depression, and in general get you in a good mood. Our brains trigger particular emotions, memories, and thoughts, which often leads to more positive effects on mental health.</i></p> |

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| | <p>On the other hand, Social media is inundated with rants and raves about everything.</p> <p><i>“People feel much freer to sound off online,” said Shoshana Bennett, PhD, a California-based psychotherapist. “It’s much easier to rant without an audience looking at you in person. It’s more comfortable to unload, as you’re hidden behind a screen.”</i></p> <p><i>Ranting, in general has been proven, time and time again to improve your mood and even cure depression.</i></p> <p><i>Now what if we combine these two? In today’s hectic environment, with new social pressures and stigmas popping out of nowhere every day, we need to have a safe space where we can just kick back, relax and talk about our day, while getting a customized playlist especially curated keeping in mind our current mood.</i></p> |
| 6. Objectives: Project Aim | <p>Project Aim</p> <p><i>Keeping the issues discussed above in mind, we present to you, Rantify. We aim to provide people a safe space where they can log in, talk about their day, and we keep a track of these “rants”, just like a diary entry and if they feel like it, provide them with a special playlist by analyzing their mental state. And if you are in a good mood, then Voila! you have a playlist to sing along to and go to your happy place.</i></p> <p><i>Sometimes knowing what is going in other people’s lives gives us great insights into our own. People really can benefit from this, and we provide them with a forum of other people’s entries.</i></p> <p><i>We’ll also be suggesting the user some articles from trusted sources by analyzing the keywords from the rant to entertain the user.</i></p> <p><i>Not to mention, sometimes people just want to explore new music and what’s better than getting a custom playlist according to your mood.</i></p> |
| 7. Methods and Materials | <p>Study/Project Design:</p> <p><i>We are going to be using Python as our primary programming language. We aim to create an application that would refer to a database keeping a track of all our entries as well as containing training data for our AI models. We will be conducting sentiment analysis using AI models in python. The GUI will be made using Tkinter Library. The users will be required to log in to the application to use it. We will be using Spotify API to embed the Spotify player into the application.</i></p> <p>Hardware Specification:</p> <p><i>Any and every device which can run python and has the necessary modules can run this application.</i></p> <p>Outcome Measures:</p> <p><i>The outcome we expect is for the user to listen to ad-free music-synchronized according to their mood and choices. The user will also be allowed to express their thoughts anonymously or read the rants of other people. We also aim to give the user some articles and blogs related to how they are feeling.</i></p> <p>Data Collection and Analysis: (if Required)</p> <p><i>Initial data collection will require us making surveys and forms regarding what tends to move people and how they react to certain kinds of music.</i></p> |

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| | <p><i>We will try to understand their psyche and how we can detect it using an algorithm. The music dataset will be made by the users themselves as they use the application more and more and give us feedbacks. The model learns from itself and keeps on updating itself after every feedback.</i></p> <p><i>The sentiment detection dataset will be taken from a trusted source, and we will try to get as big a dataset as possible to get most accurate results.</i></p> <p>Drawbacks and the Limitation: <i>The drawback of this project might be that it's a long project that required all kinds of energy and effort making this hard to maintain. Since a person's mental health is also a subjective measure, it may be faulty at first but we will try to make it as accurate as possible over time. Music tastes also tend to differ but we try to incorporate that into our algorithm.</i></p> <p>Conclusion: <i>Rantify is an app that targets people's music tastes and aims at relieving mental stress. We want to simplify the process of choosing songs for people and let them express their feelings without the worry of them thinking that'd affect their reputation.</i></p> |
| 8. Potential Impact | <p><i>Music is present in every part of our lives. Our spiritual rituals are framed with songs, children learn the alphabet through song and the malls and cafes we visit during our leisure time are rarely silent.</i></p> <p><i>But just how much can this ever-present thing impact us -- and the way we act and feel? Research suggests music can influence us a lot. It can impact illness, depression, spending, productivity and our perception of the world. We at Rantify aim to affect to the user through music try to get people in good mood. And if they are already in a good mood, help them maintain it.</i></p> |
| 9. Future Plans | <p><i>For the future of this application, we plan to make a website or a phone application. We also intend to develop the application to suggest other interesting things like movies according to their tastes.</i></p> |
| 10. References | <ol style="list-style-type: none"> 1) https://www.healthline.com/health-news/are-online-rants-good-for-your-health#Stress-leads-to-outrage 2) https://www.palladiumprivate.com/blog/6-benefits-of-music-for-your-mental-health/ 3) https://www.who.int/news-room/fact-sheets/detail/depression 4) https://edition.cnn.com/2019/02/08/health/music-brain-behavior-intl/index.html |