**FEASIBILITY STUDY REPORT**

**Executive Summary**

The stakeholders for the proposed project are :

* Course instructor and college management
* End users of the application , that is : educators, content and song creators

Business Profile:

Problems in existing systems:

Non-assurance of confidentiality regarding the media files uploaded . Security risks such as duplicating of content . however state of the art software and devices don’t have the previous mentioned issues but users have to pay a high premium to obtain such devices/software.

**Project Scope**

Creating a user friendly GUI application for background noise reduction of audio files and producing the filtered clearer version of the user’s audio file which can be downloaded and used by them while assuring no risks and confidentiality of the files which will be uploaded to the application by the user at an affordable price within the time frame of 4 months allotted for proposed project .

**Methodology Used**

**Observations of the feasibility study**

**Problem Statement**

Most people need to use expensive equipment or software in order to obtain clean cut audio in the present day market . Many of the free to use web-based applications have security risks .

**Market research**

The application proposed will have a big impact on those who are in need of recording voices/sounds without the interference of unwanted ‘noise’ in the background environment .

Our target market is educators , content creators and song creators .

**Technical feasibility**

We would need to create a GUI application using that allows for users to upload media files like .mp3 files which contain the unfiltered audio , after which the application will take care of the background noise reduction process and returns back a new media file to the user with clear audio .

After evaluating the technologies available , we have determined that it is feasible to create the entire application using python and the modules that comes along with it .

**Economic feasibility**

The cost of this project is 2 million dollars . from the ‘cost benefit analysis’ conducted by us ,we have determined that potential users of our application are willing to pay a premium for using the application and hence we will be able to generate revenue from this .

Also by allowing for advertising on our application we can generate ad revenue . combining the revenue streams our analysis suggests that we will not only cover the project costs but also see a reasonable return on investment after a period of 4-5 years.

**Operational feasibility**

The project would need the team members to be proficient in project building and management skills along with the skills needed to create the application , such as good understanding in Natural Language Processing (NLP) and how to build applications using NLP with python.

We have analysed the above requirements and have concluded that the team members possess the required skill set to proceed with the project . The team members have no prior obligations to any other project and are willing to undertake the proposed project .

The successful completion of the proposed project will bring good publicity for the organisation and hence will attract a bigger customer base for future projects thereby aligning with the organisation’s goals.

**Legal feasibility**

**Schedule feasibility**

**Challenges considered**

* Mechanical noises in background example: noises from machinery .
* Sounds originating from non-human beings examples: birds , domestic animals etc

**Assumptions considered**

* Only one human originated sound in the audio file along with any other ‘noises’.

**TEAM NAME:**

**TEAM MEMBERS:**

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* **Avaneesh Sundararajan (21BCS020)**

**REFERENCES:**