**FEASIBILITY ANALYSIS DOCUMENT**

**PROJECT TITLE**: Implementation of Thyroid Disease

Prediction System using LDA and

PCA Algorithm

**TEAM MEMBERS:**

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1. **Economical Feasibility :**

The EFS is composed of two required forms:

* **Business Case**

The Business Case provides an analysis of the business environment including-

Expected customers : People with similar symptoms as Thyroid

The nature of the business : Social

The Business Case also presents the benefits of the proposed project.

* **Cost Benefit Analysis**

The Cost Benefit Analysis summarizes the revenues and costs involved with the proposed project. As the proposed system will be used for the benefits of the people(users), no additional cost will be paid by them. No hardware system is included in our project, so the hardware cost gets minimized. Only minimal amount will be required by certain softwares. Hence, our system is Cost Efficient.

1. **Technical Feasibility :**

Technology used at front end: Python, HTML, CSS, Bootstrap

Technology used at Back end: Python

Resources Required: Manpower, Programmers, testers, debuggers

Software required: Testing Tools (to perform black box and white box testing), Github

Hardware required: PC for development, server for deployment

1. **Managerial Feasibility :**

Management support, user involvement, and commitment are key elements required to gauge managerial feasibility in the proposed project. The success and the profitability of the project partly depend on managerial competence of the major ingredients of the proposed project which are the users i.e. doctors and people with symptoms similar to Thyroid. The capability of the infrastructure of a process is to achieve and sustain the properties of isolation, atomicity, durability, consistency etc in the matter of the data stored of the users and benefiters. Also, constant attention is required in the case of amount of log in files being created.

1. **Operational Feasibility :**

The proposed system is concerned with the people who are interested in prediction of disease by specifying the symptoms. The main task will be to provide disease diagnosis at early stages with higher accuracy. This system will be useful for disease diagnosis as it is indispensable for busy clinics. This system will be free for all the users. They can directly use the system. Providing prediction of thyroid disease is the main part of the system key which will be automated by using algorithms machine learning algorithms.