**SYNOPSIS**

“Eyeless data exchange with face detection” is an Python based project. Its main concern is to help the visually challenged to access their mails and reply to them. This project `enables smooth and reliable management of mails for a visually challenged person.

“Eyeless data exchange with face detection” can reduce the difficulties that a blind person has in accessing his/her mails. The security of the system is maintained by making use of the face detection mechanism of the blind to login. The main significance of our project is to avoid the problems faced by a visually challenged person in accessing his/her mails.

The project is concerned with converting the texts to speech (audible form) with the help of speech synthesizer. This enables the blind person to access mails and hear the contents of the mail. The project is also concerned with converting the speech to text with the help of the speech recognizer. This enables the blind to reply to his/her mails by speaking into a microphone.

1. **INTRODUCTION**

**Project Overview**

The goal of this project is to help the visually challenged person to access their mails.Nowadays an email account is necessary. Persons with inabilities are also living in this world so, an email account is also necessary for them. The purpose of” **Eyeless data exchange with face detection**” is to help the person with such inabilities.

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* 1. **Organization Profile**

**Syntax Soft** is an aggressive catalysts helping customers to leverage technology to accelerate adaptation.Our focus is singular and clear: offer business benefits to the customer to deliver an unbeatable edge over competition. That's the bottom line we like to put on top of everything else. All our passion, all our values, our strengths, skills and efforts orbit around this positioning. The idea of offering endless value to the customer is the very differentiating principle Syntax was founded on.Building up from the direction our foundation gave us, our guaranteed, unwavering quality of delivery was built up by sheer determination, expertise and commitment.

Having started in 1998 with a one-man team and a single client, Syntax today has a manpower base of over 150 that is expected to double within the year and a list of clients that reads like a Who's Who list of companies spread across geographies. Syntax has now attained the position of an emergent powerhouse in Technology consulting, product development and Outsourcing services.This amazing growth has resulted from the tremendous confidence Syntax has evoked in everyone alike - Management, Employees, Investors, Partners, Alliances and, of-course, our Clients. On the ground, Syntax is a people company. The company's backbone is its strong management team that keeps focused on the magic of the initial vision. In addition, the expertise and energy of the founders has filtered down to the entire team making it one complete dynamic entity with strong commitment and focus.Syntax fundamentally aims to build strong relationships. Our deliverables are strong technology solutions that make a difference to the profitability of our clients' businesses.Our fundamental values can be defined by our Vision, Mission and Philosophy.

**Vision**

To be one of the top IT Consulting Companies in India and abroad.

**Mission**

To leverage Technology & Human Capital for Optimum Productivity.

**Philosophy**

To create an opportunity & to provide a platform where everybody can grow & contribute towards making India a 'Super Power' & the World a better place to live in.

**Syntax Soft-Tech India Pvt. Ltd**

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1. **SYSTEM ANALYSIS**

The first stage of any project, sometimes called the initial study is the brief investigation of system under consideration. Initial study is the problem solving activity that requires intensive communication between the system users and the system developers. It does various feasibility studies .in these studies, a rough figure of the system activities can be obtained from which the decisions about strategies to be followed for the effective system study and analysis can be taken. To launch a system investigation, we need a master plan detailing the steps to be taken, the people to be questioned in the outcome expected. Initial study also identifies the methods of the data collection to be followed. The most critical phase of managing system projects is planning.

The initial investigation has the objective of determining whether the user request has potential merit. The major steps in defining the user requirements are:

* Studying the present system.
* Verify the problem
* Defining the performance expected by the candidate system

**2.1 The Existing System**

The current mailing system is difficult in various circumstances for the blind to gain access to his mails. In the existing system, the user logins by entering his mail id and password. The blind cannot enter his mail id and password by his own. So he needs to depend on others which makes it unsecure. In the current system the mails are read and replied to in the form of text.

**LIMITATION OF EXISTING SYSTEM**

* Difficult to login
* Unsecure
* Needs a greater level of dependency on others
* Unreliable
* Difficult to read and write

**2.2 PROPOSED SYSTEM**

The proposed system is to computerize all the manual activities in the existing system. Proposed system provides the facilities for reading and writing mails. The security is maintained by making use of the user’s finger print. In the current system the mails are read and replied to in the form of text. This is not applicable for a visually challenged. So here we propose a system in which the inbox mails in the form of text are converted into speech (audible form) which can be heard by the user through a headset. In order to write mail, he can just speak into microphone and his voice will be converted into text. The text is then sent to the recipient.

**Advantages of Proposed System**

* Provides a very important application to a disabled person.
* Provides security
* Reduce human effort
* Reduce the dependency on others

**3. FEASIBILITY STUDY**

The objective of feasibility study is to determine whether the proposed system is feasible. In this stage, the aim is to provide solutions of the stated problems usually in the form of specification to meet the user requirements and to make recommendations for a new computer based system. Feasibility study is a major step in the software life cycle. It focuses on:

* Finding out whether a new system is required or not.
* Determine the potentials and drawbacks of the existing system
* Identification of user requirements and the benefits expected by the user from the resulting system.
* Finding out the various alternatives available.
* Knowing what should be incorporated in the new system.
* Define the ingredients and objectives involved in the project.

Feasibility study is conducted to test whether the system is beneficial to the organization. The feasibility study analyses potential solutions against a set of requirements, evaluate their ability to meet these objectives, describe a recommended solution, and offer a justification for the selection.

**3.1 Technical Feasibility**

Feasibility study has been done to gather required information. Training, experience and commonsense are required for collection of the information. Data was gathered and checked for completeness and accuracy. This system requires a multiple user environment. It needs powerful RDBMS database SQL Server to the purpose. So, this system is technically feasible.

Analyzing the data involved identification of the components of the system and their inter relationship and identifying the strength and weakness of the system.

The main points that are considered to prove that the project is technically feasible are:

* The present technology is sufficient to develop the project.
* The proposed system provides adequate response to the user.
* The system can be expanded and developed.

**3.2 Operational Feasibility**

There is no difficulty in implementing the system. The proposed system is effective, user friendly and functionally reliable that the user in the company will find the new system reducing their hardship. The user of the system must be completely unaware of the internal working of the system so that the users will not face any problem running the system. The system thus reduces the responsive time of computer thereby, the system is found to be operationally feasible.

Design is the only way that can accurately translate customer registration into finished software or system. Without software design, the risk of building an unstable system exists. System design provides the procedural details necessary for implementing the system recommended in the feasibility study.

**3.3 Economical Feasibility**

Economic and Financial analysis is used for evaluating the effectiveness of the candidate system. My project is technically and operationally feasible. But when posting the system in the internet it may cost a little, but it could be made from the registering companies. So we can say the system is financially feasible as well.

The developing system must be justified by cost and benefit. Economic feasibility is concerned with savings, increased profit and reduction. This is an ongoing effort that improves accuracy at each phase of the system life cycle. Economic feasibility is the most frequently used method for evaluating the effectiveness of the candidate system, more commonly known as cost/benefit analysis. The procedure determines the benefits that are expected from the candidate system and compare them with cost involved. If the benefit outweigh the cost then the system is economically feasible.