**Name: Purvi Misal**

**MIS: 111403034**

**Software Engineering Project: Synopsis**

**Challenges:**

In today’s world, there is a lot of information available which makes us glide through our lives. Most of this information is visually registered in our minds and then understood by us. This is a setback for people who are visually impaired or blind as they cannot get to access this information without another person’s help. Image reader is a software that is made for the visually impaired or the blind. It is a solution that makes printed text accessible to people who are visually impaired or blind, including books, magazines, business documents and more. And converts this text to speech that is read aloud in natural sounding voices.

**Aim:**

The aim of this project is to create a software which will be able to recognise text written in an image and convert this text to speech.

**Problem Statement:**

To write free and open source software to recognise printed text from images and convert it to speech.

**Scope:**

The scope of this project is limited to images with text in English. It will not be able to decipher illegible text from images. It will not be able to identify text written in languages other than English. It will be able to understand text written clearly in print and will not be able to correctly identify cursive writing. It will also not work well for images having a lot of background noise.

**Functionality:**

The software will have the following functionalities:

1. It will be able to identify letters and numbers in images.
2. Given an image with text (within the scope of the software) it will output the text written on the image.

**Technical Requirements:**

The technical requirements for this software are:

1. Linux distribution
2. Python 2.7 onwards
3. Modules: Pyttsx, Gtts, OCRad, Tkinter