**A Project Report on**

**(Voice Based Email System For Blinds)**

Submitted for the partial fulfillment of the award of

**Master of Computer Applications**

By

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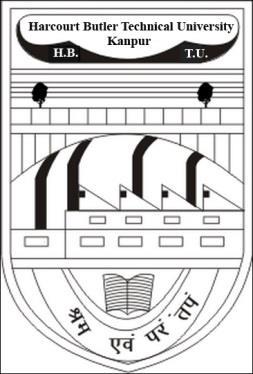
**Under the supervision of**

**Mr. Sukhbir Singh Saini**

To

**Department of Computer Science and Engineering**

**Harcourt Butler Technical University Kanpur-208002 (India)**



**2016-2019**

**CERTIFICATE**

Certified that Name of **(Radhe Shyam)(1604514040)** has carried out the research work presented in this report entitled **“Voice Based Email System For Blinds”** for the award of **Master of Computer Applications**  from **HBTU Kanpur** under my supervision. The Report embodies results of original work, and studies are carried out by the students themselves and the contents of the report do not form the basis for the award of any other degree to the candidate or to anybody else from this or any other University/Institution.

**(Dr. Prabhat Verma) (Prof. Raghuraj Singh)**

**Training Incharge Head of Department**

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**DECLARATION**

This is to certify that the project report entitled “**Voice Based Email System For Blinds**” submitted by me in fulfilment of the requirement for the award of **Master of Computer Application,** degree to Department of Computer Science & Engineering, **Harcourt Butler Technical University, Kanpur** comprises of my original work and due acknowledgement has been made in the text to all other materials used.

Date: Radhe Shyam

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**ABSTRACT**

Internet has made life of people so easy that people today have access to any information they want sitting at their home. One of the main fields that Internet has revolutionized is communication. And talking about communication over Internet, the first thing that comes in our mind is E-mail. E-mails are considered to be the most reliable way of communication over Internet, for sending or receiving some important information. But there is a special criteria for humans to access the Internet and the criteria is you must be able to see. You must be thinking that what sort of criteria is this, every one with eyes can see. But there are also specially abled people in our society who are not gifted with what you have. Yes there are some visually challenged people or blind people who can not see things and thus can not see the computer screen or keyboard.

The only way by which a visually impaired person can send an E-mail is, they have to dictate the entire content of the mail to a third person( not visually challenged ) and then the third person will compose the mail and send on the behalf of the visually impaired person.  
But this is not a correct way to deal with this problem. It is very less likely that every time a visually challenged person can find someone for help. Although for these reasons the specially abled people are criticized by our society.

So, for the betterment of society and giving an equal status to such specially abled people we have come up with this project idea which provides the user with ability to send mails using voice commands without the need of keyboard or any other visual things.

**ACKNOWLEDGEMENT**

“Perseverance, inspiration and motivation have always played a key role in any venture. It is not just the brain that matters most, but that which guides them, the character, the heart, generous qualities and progressive forces. What was conceived just as an idea materialized slowly into concrete facts. The metamorphosis took endless hours of toil, had its moments of frustration, but in the end everything seemed to have sense”.

At this level of understanding it is often difficult to understand the wide spectrum of knowledge without proper guidance and advice. Hence, we take this opportunity to express our heartfelt gratitude to our project guide **Mr. Sukhbir Singh Saini** who had faith in us and allowed us to work on this project.

We would like to thanks **Prof. Raghuraj singh (H.O.D, CSE)** and **Dr. Prabhat Verma (Training Incharge, CSE, HBTU Kanpur )** for his immense interest,

valuable guidance, constant inspiration and kind co-operation throughout the period of word undertaken, which has been instrumented in the success of our project.

-Radhe Shyam

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**LIST OF ABBREVIATION**

TTS – Text to Speech

VRU – Voice Response Unit

IVR – Interactive Voice Response

STT – Speech to Text

ASR – Automatic Speech Recognition

SMTP – Simple Mail Transfer Protocol

TCP – Transfer Control Protocol

GUI – Graphical User Interface