

BACHELOR OF COMPUTER APPLICATION

R.D COLLEGE SHEIKHPURA

(A CONSTITUENT UNIT OF MUNGER UNIVERSITY)

MUNGER UNIVERSITY, MUNGER



GROUP-B

SUBJECT	: C#
SUBJECT CODE	: 405
PROJECT NAME	: VOICE RECOGNITION APPLICATION
SEMESTER	: 4 TH
SESSION	: 2021-2024



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UNDER THE GUIDENCE OF ANJANI SIR

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SUPERVISION

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EXTERNAL EXAMINER

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A part from the efforts of my team, the success of any project depends largely on the encouragement and guidelines of many others we take this opportunity to express our gratitude to the people who have been instrumental in the successful completion of this Project:

we express deep Sense of gratitude to almighty god for giving us Strength, for the successful completion of the project.

we express our heartfelt gratitude to our parents for constant encouragement while carrying out this project.

We gratefully acknowledge the contribution of the individual who contributes in bringing this project up to this level, who continues to look after us despite our flaws.

who express our deep sense of gratitude to the luminary the principal, Dr Diwakar sir who has been continuously motivating and extending their helping hand to us.

we express our sincere thanks to our class teacher TP sir, Anjani sir, for Constant encouragement and the guidance Provided during this project. The guidance and support received from all the member who contributed and who are contributing to this project, was vital for the success of the project we are grateful for their constant support and help.

PREFACE

In the preparation of this project of CBT, we have precisely demarcated all the important point. We have made our best possible efforts to remove all the errors.

It is a greatest pleasure for us to thanks all these valuable suggestions that have given to us by ANJANI SIR. We must thank and guidance as well as our parents, teachers who directed us to complete this project.

INTRODUCTION OF C#

C# (pronounced "See Sharp") is a modern, object-oriented, and type- safe programming language. C# enables developers to build many types of secure and robust applications that run in .NET. C# has its roots in the C family of languages and will be immediately familiar to C, C++, Java, and JavaScript programmers. This tour provides an overview of the major components of the language in C# 8 and earlier. If you want to explore the language through interactive examples, try the introduction to C# tutorials.

.NET architecture: -

C# programs run on .NET, a virtual execution system called the common language runtime (CLR) and a set of class libraries. The CLR is the implementation by Microsoft of the common language infrastructure (CLI), an international standard. The CLI is the basis for creating execution and development environments in which languages and libraries work together seamlessly.

INTRODUCTION OF VOICE RECOGNITION APPLICATION

A voice recognition application is a software that converts spoken language into text or performs actions based on voice commands. By utilize advanced algorithm and machine learning. These application enable hands-free operation of devices, enhance accessibility, and facilitate natural language interaction. Whether used for dictation, virtual assistants, or smart home control, voice recognition app continue to evolve, offering users a seamless and intuitive way to engage with technology.



ADVANTAGE OF VOICE RECOGNITION

APPLICATION

- ❖ Voice recognition application offers hand-free interaction, improving accessibility for those with mobility challenges, enabling efficient and natural communication and enhancing user experience in various tasks such as dictation. Search, and control of devices.
- ❖ Text to speech technology provides accessibility by converting written text into spoken words, aiding individuals with visual impairments. It also facilitates multitasking as users can consume content audibly while engaged in other activity promotion efficiency and inclusivity.

DISADVANTAGE OF VOICE RECOGNITION APPLICATION

- ❖ One disadvantage of voice recognition application is their susceptibility to errors, especially in noisy environment or when dealing with accents and diverse speech patterns.
- ❖ Text to voice application is the potential for inaccurate pronunciation especially with complex words or specialized terminology.

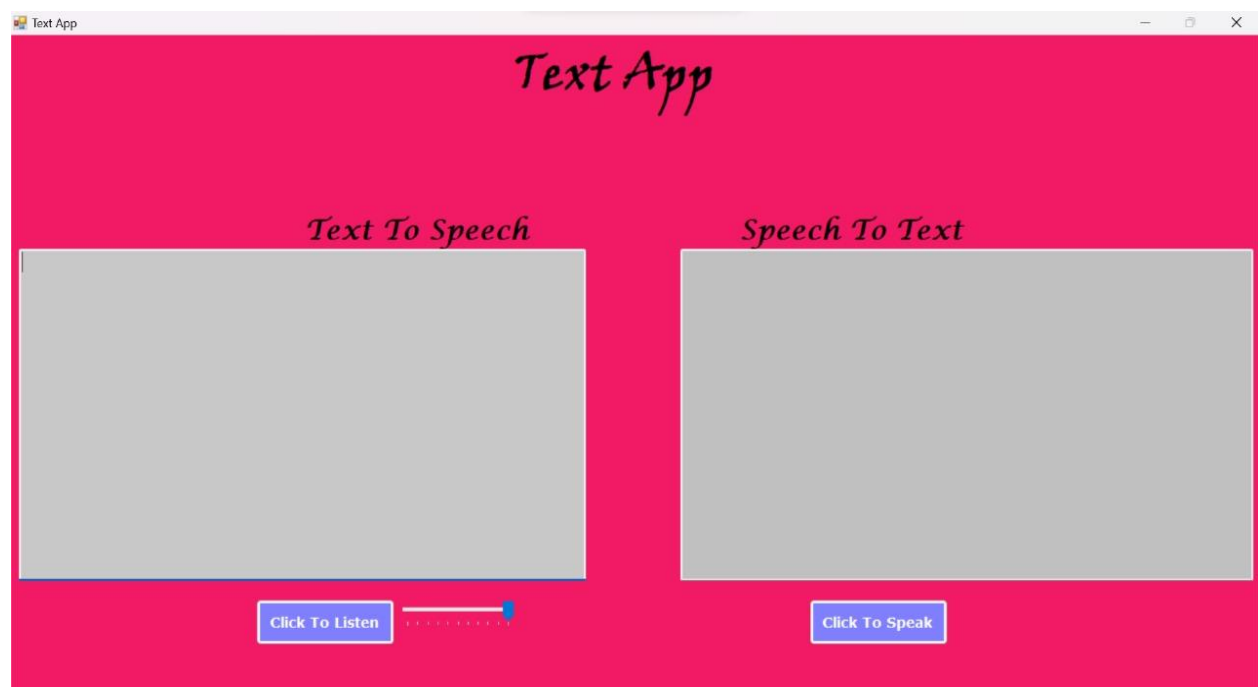
OBJECTIVE OF VOICE RECOGNITION APPLICATION

A voice recognition application serve various purpose, such as enabling hand –free control of devices, enhancing accessibility for individuals with disabilities and providing a more natural interaction with technology through voice commands. They are used in virtual assistants, dictation software and language translation tools, making it easier for user to communicate with devices and application using spoken language. And also a main purpose of making this application is the feature of providing text-to voice technology that converts written text into spoken words.

CONCLUSION OF VOICE RECOGNITION APPLICATION

In conclusion voice recognition application offers the convenience of hands-free interaction, improving accessibility and users experience. Its accuracy and efficiency continue to advance, making it a valuable technology for various industries, from virtual assistants to healthcare. As technology evolves, the future holds promising developments in enhancing the capabilities and widespread adoption of voice recognition application.

DESIGN MAIN SCREEN



SOURCE CODE

```
using System;

using System.Collections.Generic;

using System.ComponentModel;

using System.Data;

using System.Drawing;

using System.Linq;

using System.Text;

using System.Threading.Tasks;

using System.Windows.Forms;

using System.Speech.Synthesis;

using System.Speech.Recognition;

namespace voiceRecognizatonSystems

{

    public partial class Form1 : Form

    {

        public Form1()
```

```

{

InitializeComponent();

trackBar1.Value = 10;

}

private void ClickToListen_Click(object sender, EventArgs e)

{

if (TextToSpeech.Text != "")

{

SpeechSynthesizer synth = new SpeechSynthesizer();

synth.Volume = trackBar1.Value;

synth.Speak(TextToSpeech.Text);

}

else

{

MessageBox.Show("Plz write something");

}

}

```

```
}
```

```
private void ClickToSpeack_Click(object sender, EventArgs e)
```

```
{
```

```
SpeechRecognitionEngine speech = new SpeechRecognitionEngine();
```

```
Grammar word = new DictationGrammar();
```

```
speech.LoadGrammar(word);
```

```
try
```

```
{
```

```
SpeechToText.Text = "Listening Now.....";
```

```
speech.SetInputToDefaultAudioDevice();
```

```
RecognitionResult result = speech.Recognize();
```

```
SpeechToText.Clear();
```

```
SpeechToText.Text = result.Text;
```

```
}catch(Exception ex)
```

```
{
```

```
SpeechToText.Clear();

MessageBox.Show(ex.Message);

}finally {

speech.UnloadAllGrammars();

}

}

private void Form1_Load(object sender, EventArgs e)

{

this.WindowState = FormWindowState.Maximized;

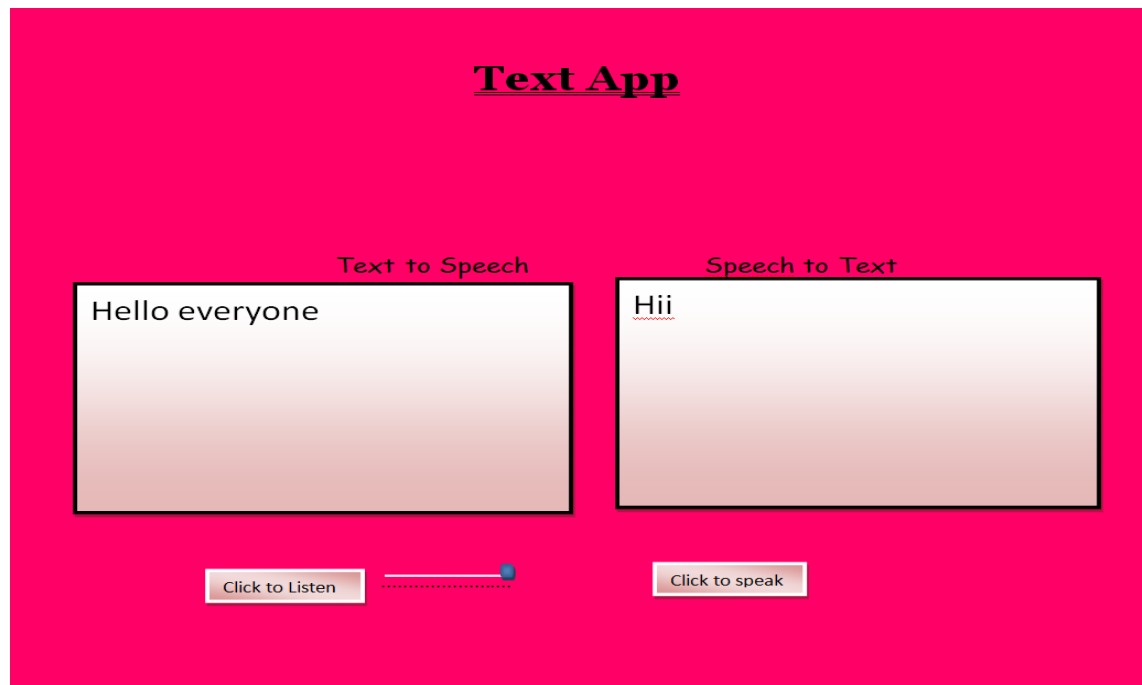
MaximizeBox = false;

}

}

}
```

OUTPUT SCREEN



FUTURE SCOPE OF VOICE RECOGNITION APPLICATION

The future scope of voice recognition application is promising, with potential advancement in natural language processing increased accuracy, and broader integration across various devices and industries. As AI and machine learning technologies progress voice recognition application may play a pivotal role in human-machine interaction. Smart homes, healthcare, and more. Improvement in multilingual support context understanding, and personalized user experiences likely to contribute to the widespread adoption and further evolution. Of voice recognition application in the future.

BIBLIOGRAPHY OF VOICE RECOGNITION APPLICATION

For successfully completing our project on voice recognition application. We have take help from the following website like:-

<https://www.Slideshare.net>

<https://www.researchgate.net>

<http://ieeexplore.ieee.org>>

youtube

