

Documentation

for the auto-generating Spoken Tutorial Website

By - Yuvraj Darshankar FY B.Tech

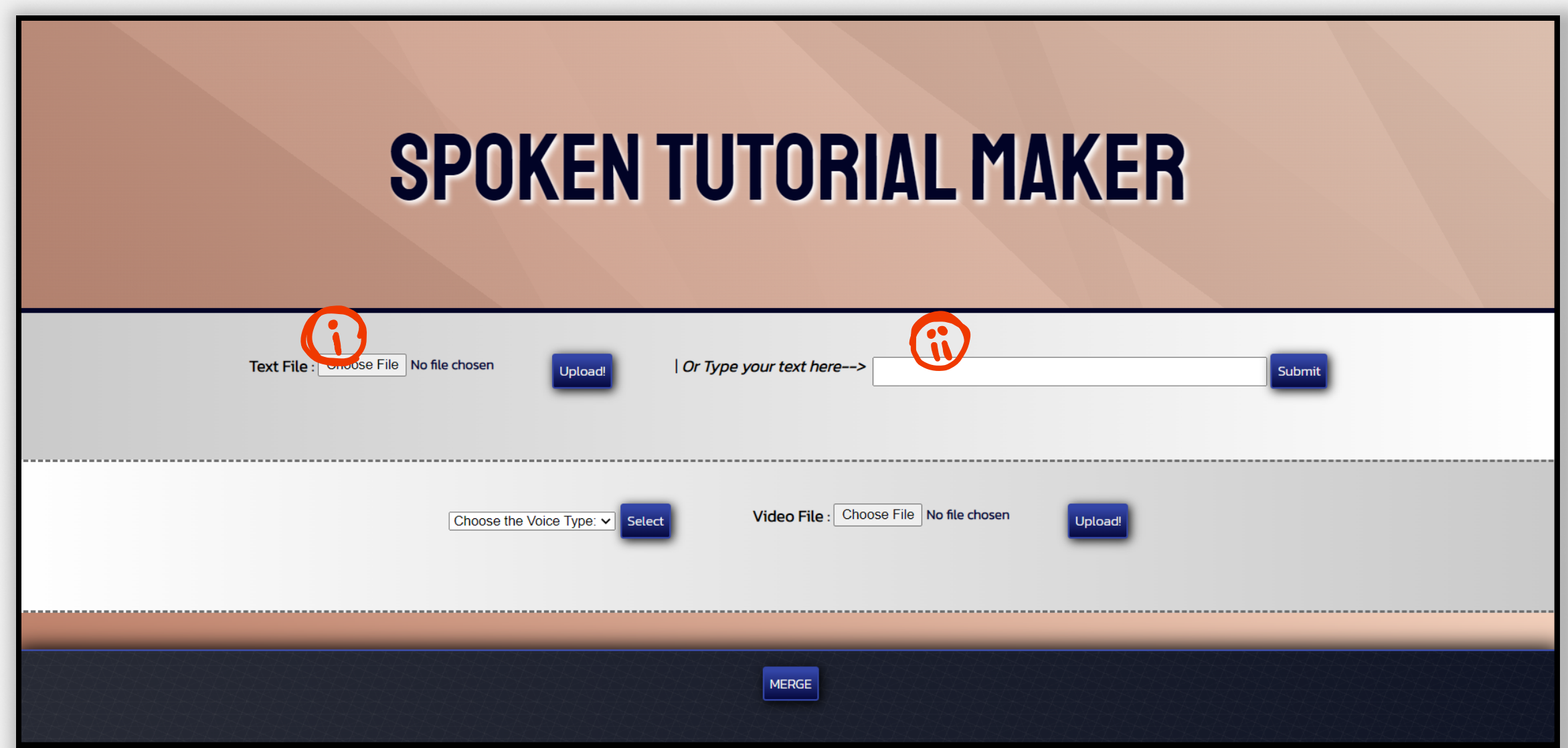
- **Introduction**
- **How to Use**
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This Website is a Online Tool for Auto generation of audio from a given transcript (text) and merging of video & audio to create a Spoken Tutorial. A Spoken Tutorial is a video explaining about something with audio and visual presentation.

Recording of Audio or speaking could be a problem for some creators if they dont have a good mic. This Website helps those creators to make spoken tutorials with just a transcript on what they want audio explanation to be.

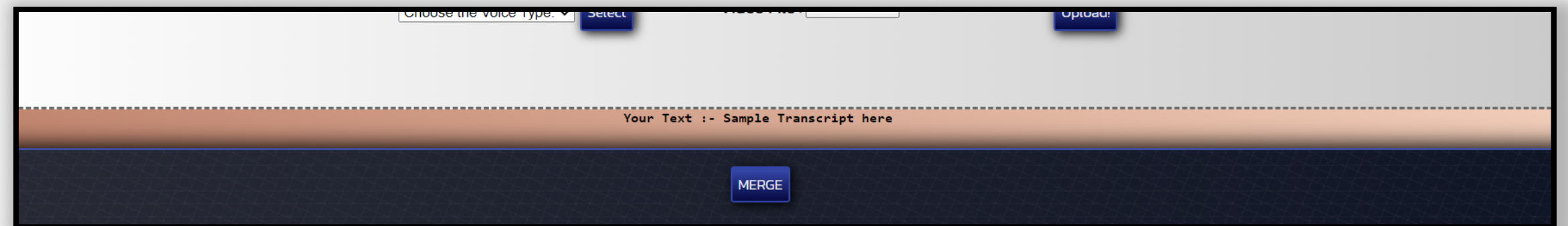
All you need is to create a transcript for the video and upload both of them on the website and the Result Spoken Tutorial will be ready!

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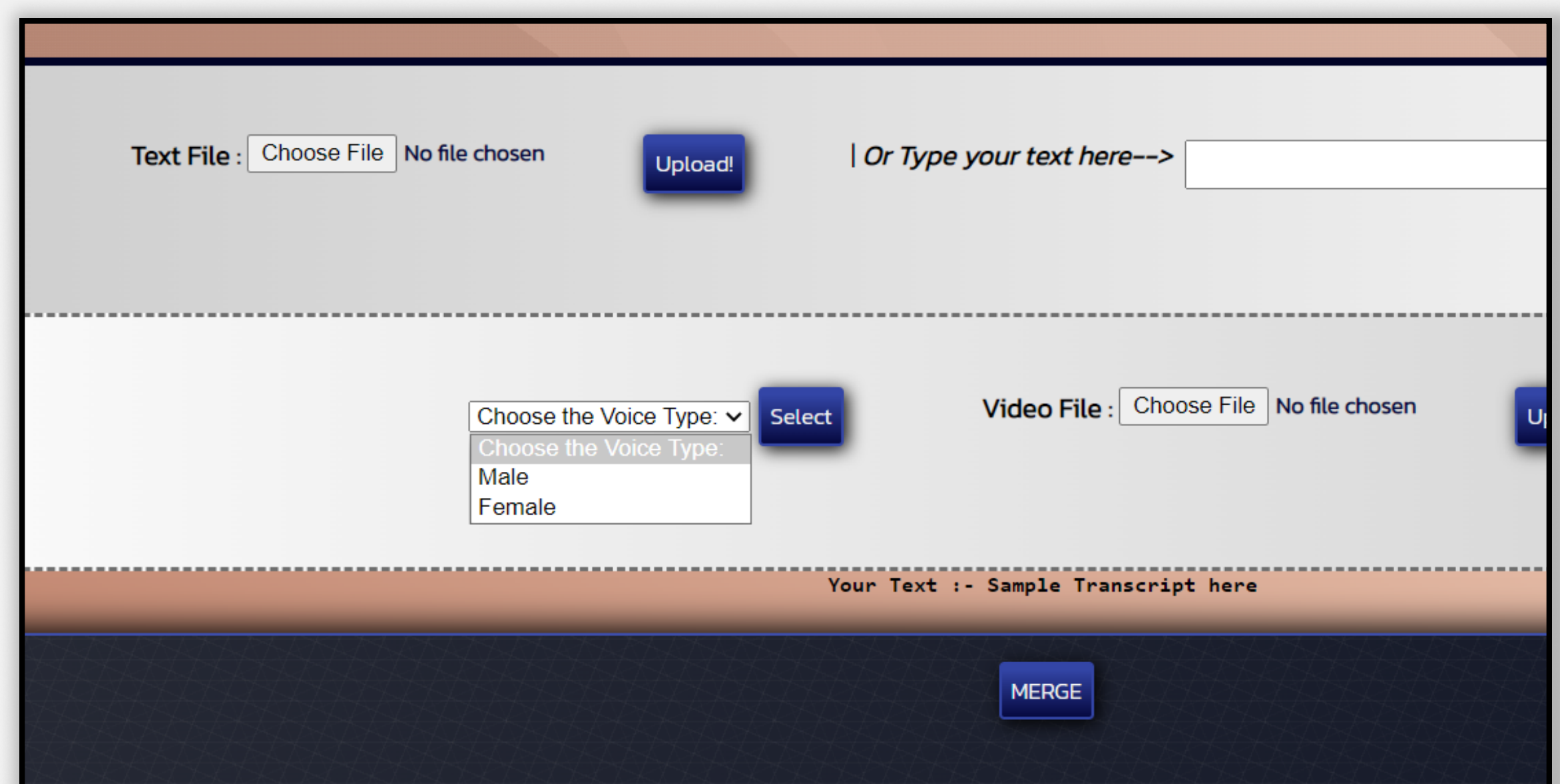


Step 1 - For the transcript (text) to generate into an audio, User has 2 options.

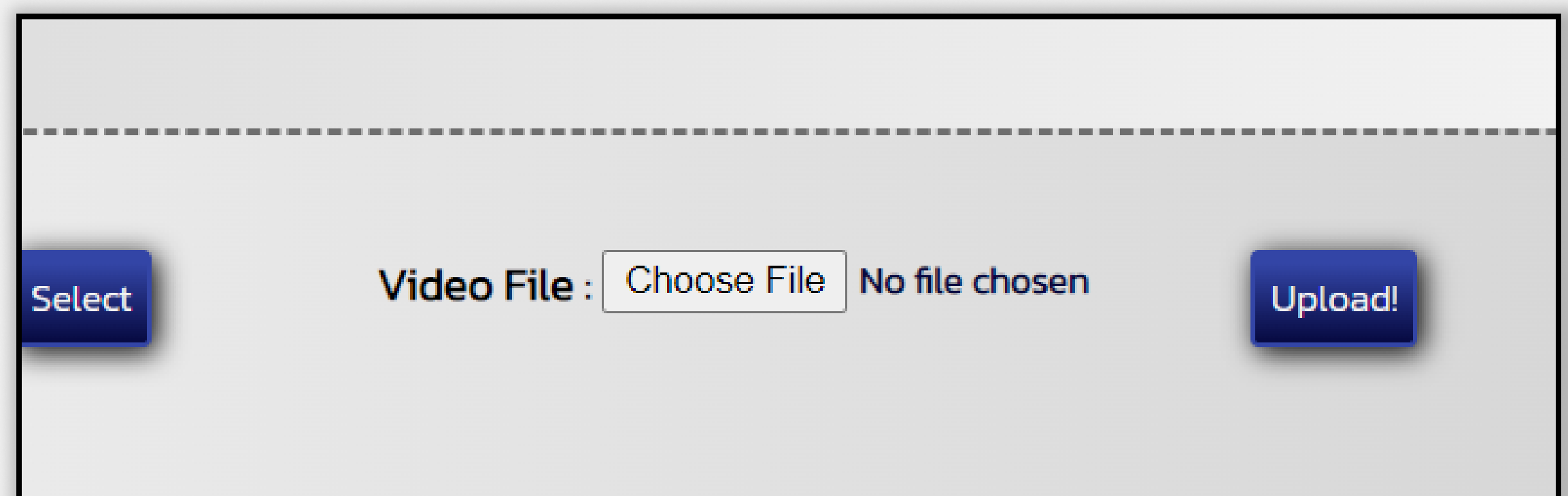
- To Upload the text file(.txt) from storage
- To Type out the text if user dont have a .txt file ready



Users Input text will be shown above the Merge Button on the bottom of WebSite



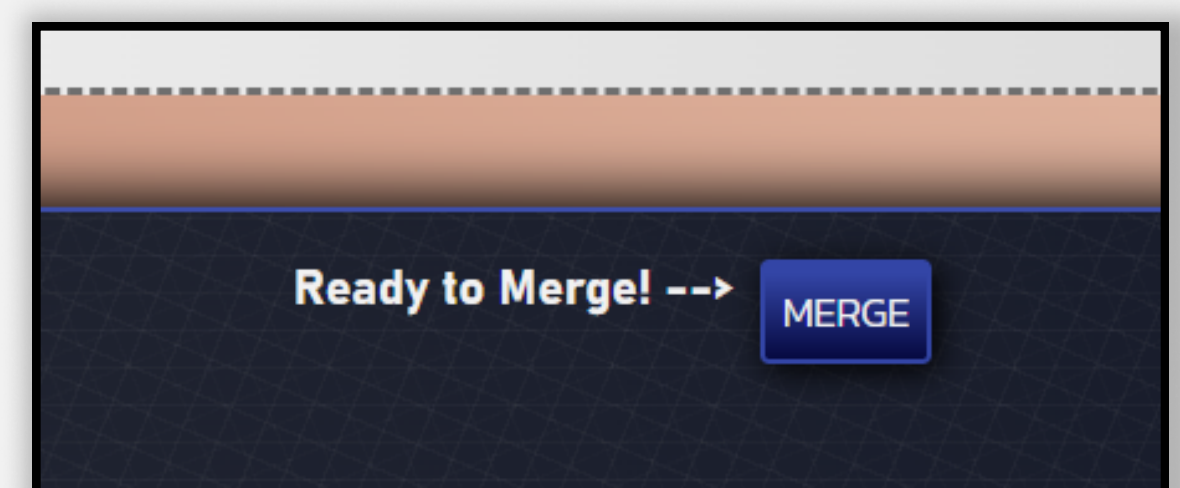
Step 2 - Choose the Voice Type (Male or Female) and Click "Select"; Voice Type is the voice user will hear in the audio. User may choose the preference voice or the default Male voice would be used.



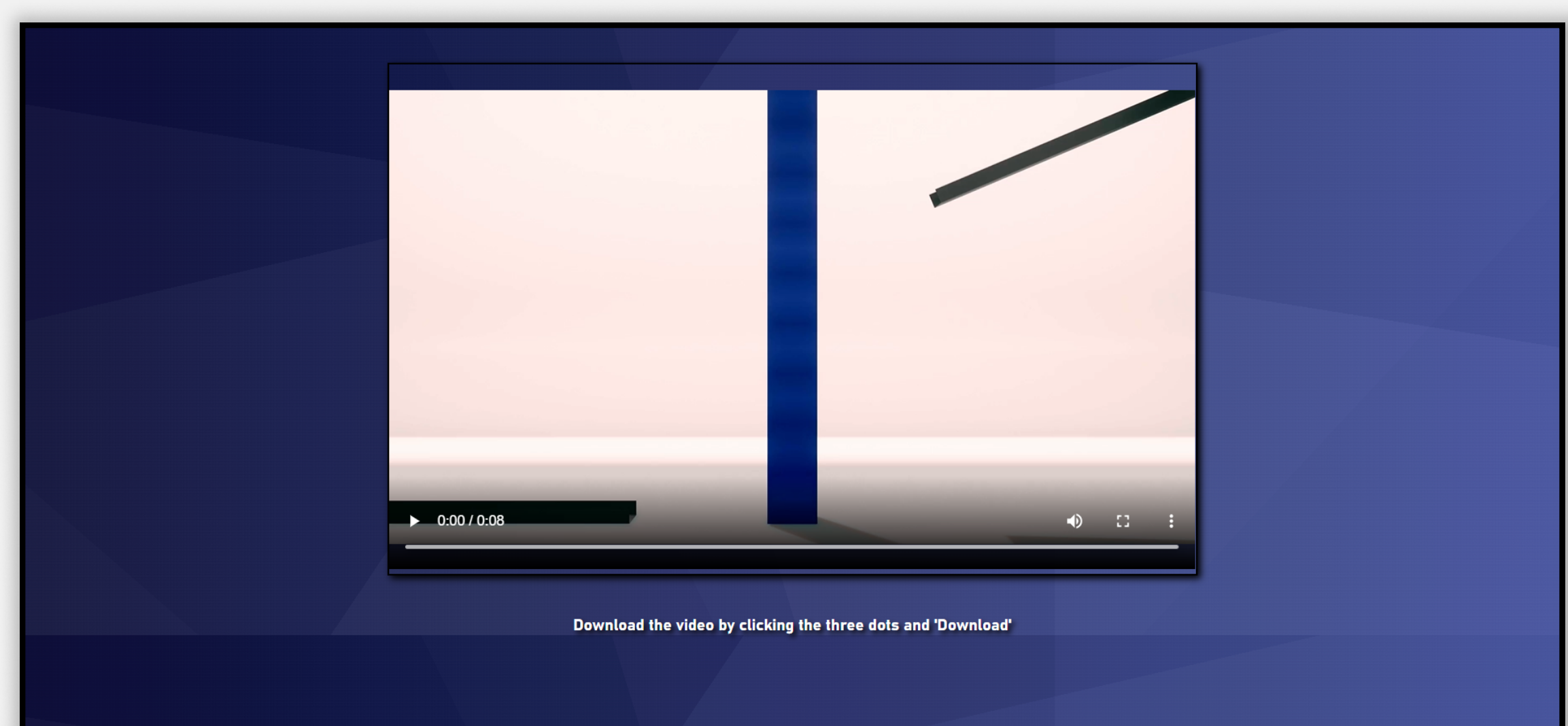
Step 3 - Choose the Input Video File and Click on Upload.

User will hear the generated voice and the Files would become Ready to merge.

So Step 4 - Click on the Merge Button



And It would take user to the Preview Page, having Preview of the final Spoken Tutorial Video. The Audio from provided transcript will match the length of the whole input video



So, If the user wants only certain parts of the video to have a voiceover, User should trim the the part of video to have voiceover, Generate the video with voice using this Tool and join it back with other video parts.

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The Website is made using **django** web framework. It takes care of the routing for Website and many other essential things. This website needs backend operations, which are carried out with **python** language with **django** framework.

The Design for the Website is done completely with **CSS** and The Input operations are carried out by **HTML**.

The BackEnd Operations are carried out with python libraries such as- **pyttsx3** is used for one of the important operation of this Website to create spoken tutorial. That is generating the audio from provided text. **pyttsx3** is a text-to-voice python library with flexible configuration of the audio. The text to be converted, Type of voice, Rate of the generated voice can be specified while using this library in generating the Tutorial.

The second important operation is to strip the audio out of Input video and merging it with the generated audio and compressing the output video file. All of these operations are carried out by the use of **ffmpeg** library tool. **ffmpeg** is one of the biggest video editing tool. It can handle many video and audio related operations. encoding, compressing , merging, seperating, changing file type, adding subtitles and much more.

For the Calculation of rate of audio to match the duration of audio with video, The duration of temporary audio and input video are required. These are accessed using the **moviepy** library.