Text To Speech Converter

Project Link
https://sandeep-balli.github.io/Text-To-Speech-Converter/

Project Description
Text to Speech Converter is a web application that helps us to convert our text into speech in different voices depending on the system.
This project is purely based on SpeechSynthesis Web API.
If the length of the text is above 80 letters, the pause and resume functionality will be enabled.

Languages Used
HTML, CSS, JavaScript

Code Workflow

```
function voices() {
    for (let voice of synth.getVoices()) {
        let selected = voice.name === "Google US English" ? "selected" : "";
        let option = `<option value="${voice.name}" ${selected}>${voice.name} (${voice.lang})
</option>`
        voiceList.insertAdjacentHTML("beforeend", option); //Inserting option tag beforened
    }
}
```

In the above code, synth.getVoices() returns a list of voices that are available on the current device.
We are selecting the “Google US English” as the default language.
We are creating an option tag with passing voice name and voice language.

```
function textToSpeech(text) {
    let utternance = new SpeechSynthesisUtterance(text);
    for (let voice of synth.getVoices()) {
        if (voice.name === voiceList.value) {
            utternance.voice = voice;
        }
    }
    synth.speak(utternance);
}
```

The above code does the conversion part of the project.
Here, SpeechSynthesisUtterance() represents a speech request. It contains the content the speech service should read and information about how to read it (language, pitch and volume).

```
speechBtn.addEventListener("click", e => {
    e.preventDefault();
    if (textArea.value !== "") {
        if (!synth.speaking) {
            textToSpeech(textArea.value);
        }
        if (textArea.value.length > 80) {
            if (isSpeaking) {
                synth.resume();
                isSpeaking = false;
                speechBtn.innerText = "Pause Speech";
            } else {
                synth.pause();
                isSpeaking = true;
                speechBtn.innerText = "Resume Speech";
            }

            setInterval(() =>  {
                if(!synth.speaking && !isSpeaking) {
                    isSpeaking = true;
                    speechBtn.innerText = "Convert To Speech";
                }
            });
        } else {
            speechBtn.innerText = "Convert To Speech";
        }
    }
})
```

The above code does the functionality of Pause and Resume.