TEXT TO SPEECH
SPEECH TO TEXT

LINK:

- Text to Speech:
  - jaocoloma.github.io/texttospeech/
- Speech to Text
  - jaocoloma.github.io/speechtotext/

TEXT TO SPEECH

DESCRIPTION:

- real time synthesizing of text input which results to natural language.

BUILD.GRADLE

```
compile 'com.ibm.watson.developer_cloud:java-
wrapper:0.1.9'
```

IMPORT

```
import com.ibm.watson.developer_cloud.text_to_speech.v1.TextToSpeech;
```

Input	Output
• Brazilian Portuguese Plain Text	• Brazilian Portuguese Speech (1 female voice)
• English Plain Text	• US English Speech(2 female voices; 1 male voice) • UK English Speech (1 female voice)
• French Plain Text	• French Speech (1 female voice)
• German Plain Text	• German Speech (1 female voice, 1 male voice)
• Italian Plain Text	• Italian Speech (1 female voice)
• Japanese Plain Text	• Japanese Speech (1 female voice)
• Spanish Plain Text	• Castillian Spanish Speech (1 female voice; 1 male voice) • North American Spanish Speech (1 female voice)

OUTPUT CAN BE PLAYED THROUGH:

- Browser
- File Download (audio.ogg, audio.wav, audio.flac)

USES:

- Tool for Speech and Visually Impaired
- enhances listening skills
- Foreign Language Learning

SPEECH TO TEXT

DESCRIPTION:

- converts human voice into text form.

BUILD.GRADLE

```
compile 'com.ibm.watson.developer_cloud:java-
wrapper:0.1.9'
```

IMPORT

```
import com.ibm.watson.developer_cloud.speech_to_text.v1.SpeechToText;
import com.ibm.watson.developer_cloud.speech_to_text.v1.model.SpeechResults;
```

INPUT:

- Microphone
- File Upload (flac, l16, wav, ogg)
- Supported languages include :
  - US English
  - UK English
  - Japanese
  - Spanish
  - Brazilian Portuguese
  - Modern Standard Arabic
  - Mandarin

OUTPUT:

- **Text Transcription**
- timestamp of each transcribed word
- confidence score of whole transcribed input and each word
- alternative transcripts

INTENDED USE:

- Vision Impaired Use
- Accurate Speech Transcription
  - call centers
  - Taking notes in meeting and in class
  - Human and Computer Interaction (Voice Control Application)

SOURCES:

- http://www.lc2.ca/item/85-multiple-benefits-of-text-to-speech-applications,
- https://www.ibm.com/smarterplanet/us/en/ibmwatson/developercloud/speech-to-text.html?cm_mc_uid=06821000279314557801002&cm_mc_sid_50200000=1455884823
- http://www.ibm.com/smarterplanet/us/en/ibmwatson/developercloud/speech-to-text/api/v1/?java#recognize
- https://www.ibm.com/smarterplanet/us/en/ibmwatson/developercloud/text-to-speech/api/v1/#introduction
- http://www.ibm.com/smarterplanet/us/en/ibmwatson/developercloud/speech-to-text.html
- http://www.ibm.com/smarterplanet/us/en/ibmwatson/developercloud/text-to-speech.html