UNIVERSITY
OF TWENTE.

AUDIO
PLAYGROUND

USER DOCUMENTATION

THE
BMS
LAB
Tech4People

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Welcome to the Audio Playground user documentation!

This documentation has been created to support the University of Twente's Researchers, Teachers, and Students when using the Virtual Nature Application. The aim of this documentation is to provide you with all the information you need to use and get the most out of Virtual Nature. Based on this, the documentation is segmented into 2 main parts: (1) introduction and (2) directions and advice. The second part consists of 4 sections which are numbered in a logical order. So, please make sure to follow the modules in their numbered order.

At the end of this documentation, you should be able to:

- Transcribe an audio
- Code an audio
- Analyze the transcribed and coded audios

If you have any questions, you can reach us via **bmslab@utwente.nl**.

1. Introduction

In this chapter, we will introduce you to the general overview and objective of the Audio Playground tool.

1.1 Tool overview

Audio Playground is a software that enables you to edit and analyze an audio using two methods: (1) Transcription and (2) Coder.

1. **Automatic Audio to Text – Transcribe** the Audio to Text.
2. **Text Analysis – Analyze** the total word per turn and speaker, turn allocation per speaker, and the percentage of turns per speaker and **analyze** the sentiment and emotion of the text.
3. **Audio Analysis – Analyze** the total word per turn and speaker, turn allocation per speaker, and the percentage of turns per speaker and **code** audio fragments according to the participant.

1.2 Tool objective

The Audio Playground's objective is to:

1. Help you analyze the audio using the (1) Transcription, Text Analysis, or (2) Audio Analysis.
2. Enable you to know the difference between these three methods.

2. Directions and advice

In this chapter, we will look into the directions and advice of opening the Audio Playground tool and analyzing the audio through the transcription, text analysis and audio analysis.

2.1 Opening the Audio Playground

1. Go to **https://dev.bmslab.utwente.nl/audioplayground#/login**
2. Login with your UT account.
    i. 🔴 *The website's use is exclusively for UT staff and students. Please check with the BMS Lab for access.*

You have now successfully logged in.

Once you have logged in, you will see the Audio Playground's dashboard. Here, you can choose which method you would like to analyze your audio. Either through the Automatic Audio to Text, text analysis or audio analysis.

2.2 Automatic Audio to Text

2.2.1 Creating an Audio to Text Task

1. On the Audio Playground's dashboard OR on the top right corner, click on "Automatic Audio to Text".
2. On the left side, enter the task name.
3. Click on "create".
4. Click on the task you have just created.
5. On the right side, click on "upload".
6. Select the audio file you would like to attach to the task.
7. If you want to delete the task, on the top left side select the task.
8. and click the "delete" button.
    i. 🔵 This will delete all the task information, except for your uploaded audio.

You have now created an Automatic Audio to Text Task.

2.2.2 Transcribing the audio

Once you have created your Automatic Audio to Text task, you can start transcribing the audio.

1. Under the "Transcription Editor", you will see the audio.
2. Here you can play or pause your audio.
3. And edit the playback speed of the audio.
4. To transcribe the audio, you can either upload a JSON file.
   i. 🔴 *Make sure that the speaker's name is specified followed by a colon symbol and space. For example, "Speaker 1: if you want to know more about the item".*
5. Remember to always click on the "save" button next to the coder task or enable the autosave toggle.
   ℹ️ *Autosaving toggle might sometimes take longer than expected. So, if you want to be sure press the "save" button.*

You have now transcribed your audio.

2.3 Text Analysis

2.3.1 Creating a Text Analysis Task

1. On the Audio Playground's dashboard **OR** on the top right corner, click on "Text Analysis".
2. On the left side, enter the task name.
3. Click on "create".
4. Click on the task you have just created.
5. On the right side, click on "upload".
6. Select the audio file you would like to attach to the task.
7. If you want to delete the task, on the top left side select the task.
8. and click the "delete" button.
   ℹ️ *This will delete all the task information, except for your uploaded audio.*

You have now created a Text Analysis Task.

2.3.2 Editing the Text

Once you have created your Text Analysis task, you can edit the text.

1. You can either upload a JSON file or copy paste the text manually (e.g., from Automatic Audio to Text).

    🔴 *Make sure that the speaker's name is specified followed by a colon symbol and space. For example, "Speaker 1: if you want to know more about the item".*

2. 🔴 Remember to always click on the "save" button next to the coder task or enable the autosave toggle.

    ℹ️ *Autosaving toggle might sometimes take longer than expected. So, if you want to be sure press the "save" button.*

You have now edited your text.

2.3.3 Analyzing the text

Once you have created a Text Analysis task and edited your text, you can analyze it.

1. In the Text Analysis Editor, specify the number of speakers.
2. Click on "analyze".
3. Under "statistics", you will then see the analyzed text data. For example, the total word per turn and speaker, turn allocation per speaker, and the percentage of turns per speaker.

You have now analyzed your text through the Text Analysis method.

2.4 Audio Analysis

2.4.1 Creating an Audio Analysis Task

1. On the Audio Playground's dashboard **OR** on the top right corner, click on "Audio Analysis".
2. On the left side, enter the task name.
3. Click on "create".
4. Click on the task you have just created.
5. If you have not uploaded an audio yet, click on "upload" on the right side.

6. Select the audio file you would like to attach to the task.

7. If you want to delete the task, on the top left side select the task.

8. and click the "delete" button.

> ⓘ *This will delete all the task information, except for your uploaded audio.*

You have now created an Audio Analysis Task.

2.4.2 Coding the audio

Once you have created your coder task, you can start coding the audio.

1. To code the audio, you need to add a participant.

2. Under the "Coder Editor", click on "add participant".

3. Enter the participant's name.

4. Select the audio file.

5. Click on the "add participant" button.

6. Then, under the "coder editor", you can play or pause your audio.

7. And edit the playback speed of the audio.

8. Remember to always click on the "save" button next to the coder task.

You have now coded your audio.

2.4.3 Analyzing the transcribed audio

Once you have created an Audio Analysis task and coded your audio, you can analyze it.

1. Click on "analyze".

2. Under "statistics", you will then see the analyzed the coded data. For example, the total word per turn and speaker, turn allocation per speaker, and the percentage of turns per speaker.

You have now analyzed your audio through the coder method.