

2021 **GOOGLE** SUMMER OF CODE | GFOSS | LABEL BUDDY

Mentors: **Pantelis Vikatos**, **Markos Gogoulos**

UI/UX consulting: **Lina Aggelopoulou**, **Jen
Anastasopoulou**

Student: **Ioannis Sina**

Several parallel teal lines of varying lengths and slopes are positioned on the right side of the slide, extending from the top right towards the bottom right.

ABOUT GOOGLE SUMMER OF CODE (GSOC)

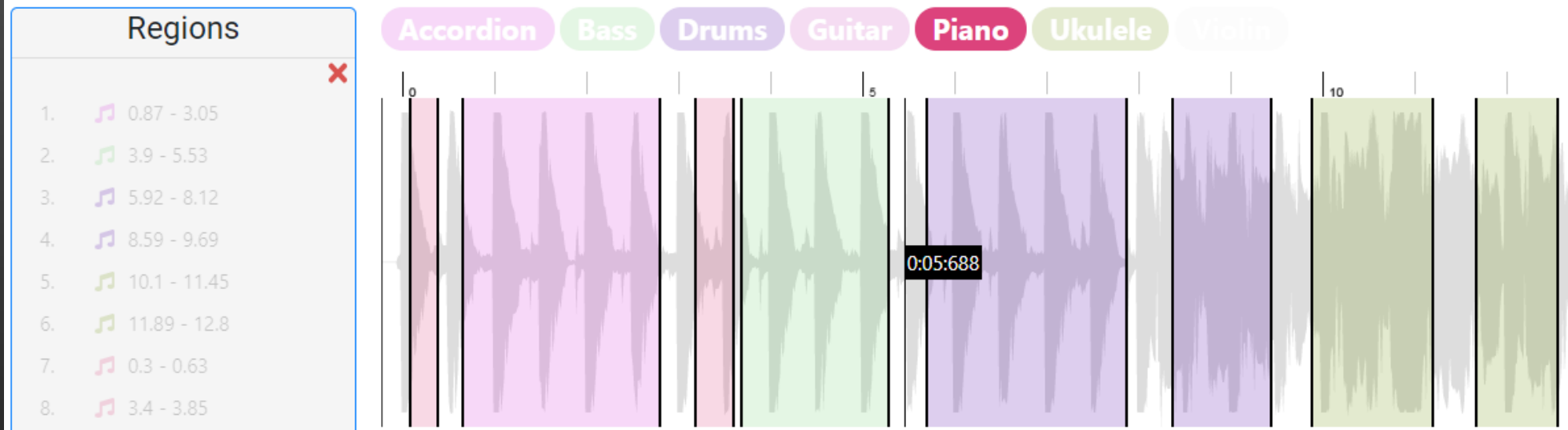
- ▶ Global program for supporting open-source proposals
- ▶ Students who are chosen get paid
- ▶ 2005 – present
- ▶ Mentors are volunteers helping students throughout the whole program
- ▶ Past projects: <https://summerofcode.withgoogle.com/projects/>

PROPOSAL - GSOC - 2021

- ▶ Pantelis Vikatos and Markos Gogoulos (mentors) submitted their idea for creating a web audio first **annotation tool** which provides the multi-user feature
- ▶ It got accepted by the Greek Open Technologies Alliance (GFOSS)
- ▶ I sent my proposal for implementing their idea
- ▶ I got chosen and we created Label Buddy during GSsoC

WHAT IS AN ANNOTATION TOOL

- ▶ It is a tool which helps people add information to audio, text, images etc. This process is called annotation.
- ▶ The output of an annotation process (JSON) can be used as a dataset for training Machine Learning models and other tasks
- ▶ The annotation process is tedious and time consuming
- ▶ Thus, an annotation tool must be user friendly and simple



ANNOTATIONS EXAMPLES



WHY LABEL BUDDY

- ▶ There is a variety of annotation tools available
- ▶ Most of them lack the multi-user feature (multiple users annotating a single project simultaneously) and does not have a role distinction
- ▶ Label Buddy aims to fill these gaps

LABEL BUDDY TECH-STACK

- ▶ Django (Python-based, Backend)
- ▶ HTML, JavaScript, Bootstrap (Frontend)
- ▶ JS Wavesurfer library for waveforms: <https://wavesurfer-js.org/>

LABEL BUDDY

Label buddy is a web audio annotation tool and consists of the following roles:

- ▶ Managers
- ▶ Annotators
- ▶ Reviewers

Each role will be explained below.

MANAGERS CAN:

- ▶ Create/edit projects (choose annotators and reviewers for the project created)
- ▶ Upload audio files for each project (tasks)
- ▶ List all tasks and see which of them are annotated and by who
- ▶ Delete tasks
- ▶ Export annotated data (JSON or CSV format)

ANNOTATORS CAN:

- ▶ Annotate assigned uploaded audio files (tasks)
- ▶ Update already completed annotations
- ▶ See comments written by reviewers for their annotations

REVIEWERS CAN:

- ▶ List all annotation for a specific task and Accept/Reject annotations completed by annotators providing a comment

REPOSITORY SCREENSHOTS

loannisSina Merge pull request #33 from eellak/add-license-1 ... 8d47223 on Sep 5 160 commits

docs	Added demo video link	2 months ago
label_buddy	Fixed small bug in project page	2 months ago
.gitignore	Fixed JSONField error on windows	3 months ago
LICENSE	Add LICENSE for Label Buddy	2 months ago
README.md	Update README.md	3 months ago
pyvenv.cfg	Models created: User, Project, Annotation, Comment, Label, Task	5 months ago
requirements.txt	Fixed JSONField error on windows	3 months ago

README.md

Google Summer of Code with GFOSS 🌞

GSoC - GFOSS - Label Buddy

4 Open 23 Closed Author Label Projects

Import rar/zip and csv for project tasks enhancement Extension of back-end features Extension of front-end features
#26 opened on Jul 27 by loannisSina

Add unit tests enhancement
#23 opened on Jun 30 by loannisSina

Create Swagger documentation documentation enhancement
#22 opened on Jun 30 by loannisSina

Create dockerized setup enhancement Extension of back-end features Extension of front-end features
#21 opened on Jun 30 by loannisSina

SwagatSBhuyan commented 6 hours ago

Hello, I am new to contributing to open source, and am definitely new to this repository. Some guidance would be appreciated but I feel I will be able to tackle this issue.

loannisSina commented 2 hours ago • edited Collaborator Author

Hello, in this issue I need a user to be able to upload a zip or rar file consisting of songs (mp3, mp4, wav). I want to process this file in Django (backend), extract it and save all songs in the database. I was able to achieve this when user uploaded a zip file with the following code:


```
archive = ZipFile(compressed_file, 'r') # read Zip file
files_names = archive.namelist() # take the names of all files
for filename in files_names:
    new_file = archive.open(filename, 'r')
```

So the new_file contains the song and I am able to save it to the Database.

I have tried many ways to achieve the same thing with a rar file but an error occurs every time I try.

You can check [helpers.py](#) file to see the code. It's in the add_tasks_from_compressed_file function.


UI/UX IMPROVEMENTS SCREENSHOTS

LABELBUDDY 

Sign in

Login


Email or Username


Password 

Remember Me ☐

Sign in

[Forgot Password?](#) • don't have an account yet? [Sign Up](#)

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LABELBUDDY 

Sign up

First & Last Name

E.g. "John Anderson"


Email Address*


E.g. JohnAnderson@mars.co

Username*

E.g. johnderson


Password*

Enter new password 

 Min 8 characters, at least one Capital letter, at least one number, at least one symbol (@, #, \$, etc.)

Sign Up

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Projects

Create

Project Title	Date of Creation	Task permissions	Number of tasks	Annotations	Number of labels	Annotator	Reviewer	Managers	Options
Project 1	Fri 22 Oct 2021	Tasks unassigned	10	5	5	Can annotate	Can review	3 Managers	/
Project 2	Mon 20 Sep 2021	Tasks unassigned	1	0	2	Can annotate	Cannot review	johnsina304@yahoo.com	/
Project 3	Mon 20 Sep 2021	Tasks assigned	0	0	0	Cannot annotate	Cannot review	johnsina304@yahoo.com	/
Project 4	Mon 20 Sep 2021	Tasks assigned	0	0	0	Cannot annotate	Cannot review	johnsina304@yahoo.com	/
Project 5	Mon 20 Sep 2021	Tasks assigned	0	0	0	Cannot annotate	Cannot review	johnsina304@yahoo.com	/
Project 6	Mon 20 Sep 2021	Tasks assigned	0	0	0	Cannot annotate	Cannot review	johnsina304@yahoo.com	/
Project 7	Mon 20 Sep 2021	Tasks assigned	0	0	0	Cannot annotate	Cannot review	johnsina304@yahoo.com	/
Project 8	Mon 20 Sep 2021	Tasks assigned	0	0	0	Cannot annotate	Cannot review	johnsina304@yahoo.com	/

Export data

×

Export data in order to use it as a dataset. The file exported contains all annotations completed for the selected project.

JSON

- ☒ List of items in raw JSON format stored in one JSON file. Use to export both the data and the annotations for a dataset.

CSV

- ☐ Results are stored as comma-separated values with the column names specified.

☐ Export **only** approved annotations

Export

Import data

×

Please upload a file.

Accepted formats: **.wav, .mp3 and .mp4.**

Optimally you can upload a **.zip** file containing of accepted format files. Any other formats will be ignored.

Choose File

No file chosen

Upload

LABELBUDDY

/ Project 1

Project 1

Filters

Import...Export

# ID	Task Title	Annotations completed	Annotated by	Audio file	Status	Review status	Annotated by you	Options	
1	Track8.mp3	3	3 Annotators	0:00 / 0:48	Annotated	Unreviewed	Annotated by you		
2	Track9.mp3	1	user2@yahoo.com	0:00 / 0:48	Annotated	Unreviewed	Not annotated by you		
3	Track1.mp3	0	-	0:00 / 0:48	Not annotated	Unreviewed	Not annotated by you		
4	Track10.mp3	0	-	0:00 / 0:22	Not annotated	Unreviewed	Not annotated by you		
5	Track3.mp3	1	johnsina304@yahoo.com	0:00 / 0:48	Annotated	Unreviewed	Annotated by you		
6	Track5.mp3	0	-	0:00 / 0:48	Not annotated	Unreviewed	Not annotated by you		
7	Track6.mp3	0	-	0:00 / 0:22	Not annotated	Unreviewed	Not annotated by you		
8	Track2.mp3	0	-	0:00 / 0:22	Not annotated	Unreviewed	Not annotated by you		

<< < page 1 of 2 > >>

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Unreviewed

Annotated

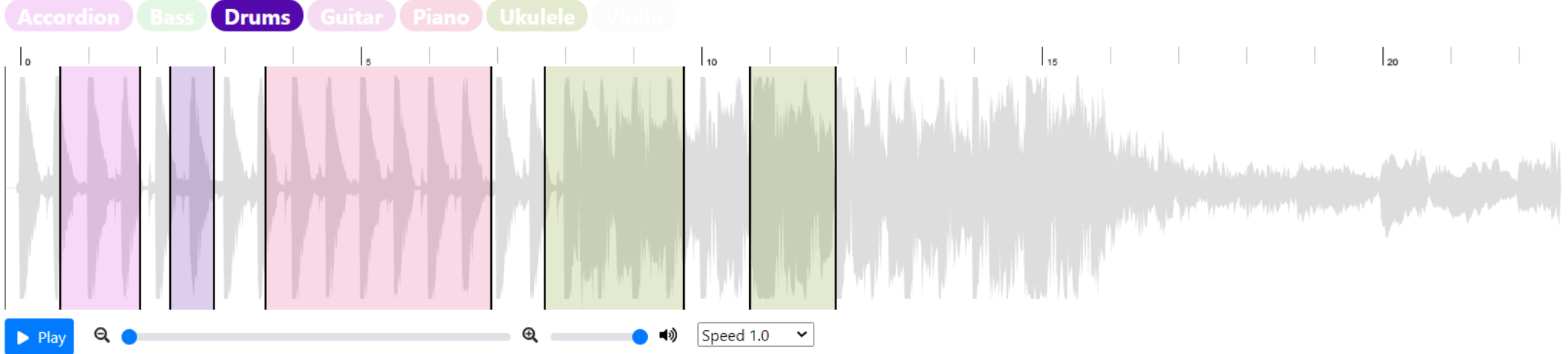
Task: Track10.mp3 [?](#)

Annotation created at: Sun 14 Nov 2021

Regions

1. 🎵 3.82 - 7.16
2. 🎵 7.92 - 9.99
3. 🎵 10.93 - 12.22
4. 🎵 0.8 - 2
5. 🎵 2.42 - 3.09

All tasks: **10**
 Annotated: **1**
 Not annotated: **9**
 Task permissions [?](#):



Save



Next

LABEL BUDDY DEMO

- ▶ Video: <https://www.youtube.com/watch?v=ikPrWbs9MWw>

LABEL BUDDY LINKS

- ▶ GitHub repository: <https://github.com/eellak/gsoc2021-audio-annotation-tool>
- ▶ GSoC final report: https://github.com/eellak/gsoc2021-audio-annotation-tool/blob/main/docs/GSOC_FINAL_REPORT.md
- ▶ UI/UX improvements branch: https://github.com/eellak/gsoc2021-audio-annotation-tool/tree/UX_improvements
- ▶ <https://labelbuddy.io/>
 - ▶ Now serving a simple demo
 - ▶ Username: demo
 - ▶ Password: labelbuddy123

ACKNOWLEDGMENTS AND CONTRIBUTIONS

- ▶ Pantelis Vikatos, Markos Gogoulos (mentors)
- ▶ Lina Aggelopoulou, Jen Anastasopoulou (consulting team)
- ▶ GFOSS and ORFIUM (support during the GSoC period)

THANK YOU FOR YOUR ATTENTION

ANY QUESTIONS?

sinaioannis@gmail.com

GSoC - GFOSS - Label Buddy

