

Audio classification manual

Create a project	Toloka Projects Users Skills Profile Messages 3
1. Click Create project.	Projects Active Only mine Find project Find project
2. Choose the Blank template.	Blank Blank Use this option to create a project from scratch if your task doesn't match any of the templates above. Select

1

3. Enter a clear project name and description. Click **Save**.

Note: The project name and description will be visible to the performers.

Name to show performers *	****	
Is it a male or female speaker?	Is it a male or female speaker?	
Description for performers		udio and determine if it is a male or
Listen to the audio and determine if it is a male or female speaker.	O\$ per task	∼0\$ per hour
+ Private comment		

4. Update the task interface in the **Template Builder** block.

Read more about the <u>Template</u> <u>Builder</u> in the Requester's Guide.



4.1. Delete the existing config and paste the code provided at the end of this manual (in the appendix).

> In the **Preview section** you can see how the template will work. The task will be performed in three steps. First, click **Play** and listen to the audio. Second, choose the correct option ("Female" or "Male"). Finally, submit your answer by clicking **Submit**.

There is a validation rule in the template. It checks whether the performer clicked a button with an answer.

Check the <u>Interfaces section</u> of our Knowledge Base for more tips on interface design.



4.2. Make sure the specifications look like this:

Note: Specifications are a description of input data that will be used in a project and the output data that will be collected from the performers.

Read more about <u>input and output data</u> <u>specifications</u> in the Requester's Guide.

Input data	Output data	<>
path (URL)	• result (string)	•
Add field	Add field	

- 5. Write comprehensive instructions.
 - Click Save.

Get more tips on designing <u>instructions</u> in our Knowledge Base.

3 Instructions for performers

When a performer selects a task, they first see the instructions that you wrote. Describe what needs to be done and give examples. You can prepare your instructions in HTML format, then copy and paste them into the editor. Press < > to switch to HTML mode. To learn more, see the documentation.

	тТ 🌳	в І	<u>U</u>	e ≣	≣≣	ΞΞ		[] ⊙ ↔
	Listen	to the	short a	iudio clip	and d	etermine	whether it is a male or female speaking.	
5		_						
T	Save							

6. Leave the **Translations block** as default and click **Save.**

4	Translations				
	description, and instruction		int performers to see. Otherwise, th	r own language. Translate the task name, he language is inactive. If you want to	
	Source language Translations	~			
	Language	Name and description for performers	Instructions for performers	Task interface	
	Source	✓	✓	\checkmark	
6	Add translation V				

7. Click **Finish** to save the project.

Edit project	Back to the old interface Cancel Finish
General information	
✓ Task interface	
Instructions for performers	
Translations	

Note: To edit project parameters, click the button in the list of projects or go to **Project actions** \rightarrow **Edit** on the project page.

s it a male	e or fema	le speaker? — ac	tive				Project actions \land
tatistics for 7 d	ays						Edit Clone
ubmitted tasks	Spent	Quality: control tasks	Quality: training tasks	Average submit time	Users	Banned users	
	0 Ś	_	-	-	0	0	Archive
							Preview

Create the main pool

1. Click Add a pool.

A pool is a set of paid tasks grouped into task pages. These tasks are sent out for completion at the same time.

Note: All tasks within a pool have the same settings (price, quality control, etc.)

atistics for 7 da bmitted tasks	h = -	:y: control tasks Quality:	training tasks Average submit tim	ne Users Banned users	
	0\$			0 0	
Active and clos	ed Archived Filt	ers			Add a poo
Pools can be ar	chived manually or autom	natically (automatic archiv	ving applies to pools with no activ	vity for 30 days).	
Title ≜	Priority \$	Progress	Status 🛊	Started \$	To be completed
Title 🗄				Started \$	
	To laun	en a project, you mot nee			

2. Give the pool any name you find suitable. You are the only one who will see it.

The description can be either public or private. Choose the option you prefer.

POOL NAME (VISIBLE ONLY		
TO YOU)	Is it a male or female speaker?	
	Vuse project description	
PUBLIC DESCRIPTION 💿	Listen to the audio and determine if it is a male or female speaker.	
	Add a private description	

- 3. Specify pool parameters:
- 3.1. Select pool type. Choose Other.

Read more about <u>pool types</u> in the Requester's Guide.

POOL TYPE ?	Other	^		
	_			
	Exam			
	Training	or multiple tasks on	the sam	e page. Enter the
3.1	Retry			
PRICE IN US DOLLARS ?	Other		FEE ?	0.005

3.2. Set the price per task suite (for example, \$0.01).

Audio classification tasks are normally paid as basic tasks (e.g. binary classification) because these tasks do not take much time.

Read more about <u>pricing principles</u> in our Knowledge Base.



3.3. <u>Filter</u> performers who can access the task. Choose "**No**" in the **Adult content** block. Click **Add filter** to choose the **Languages** and **Client** options in the list.

	Performers	Copy settings from
	Filter performers who can access the task. Toloka has users from different countries, so don't forget to filter by language and region. Learn more	
ADULT CONTENT ?	No	
	3.3 Add filter	skill

3.4. Choose Languages = English as your first filter. This way, performers who speak English will be invited to complete this task. Then choose Toloka web version and Toloka for mobile clients.

> These filters will make it possible for performers to complete your task on their computers or mobile devices.

Add filter	✓ Create a skill	Bugfix version of the operating s
		Client application bugfix version
		Client application major version
FORMER PROFILE		Client application versions Device type
Languages	✓ = English × = +	Operating system
Lunguuges		OS major version
	AND	OS minor version
	AND	OS versions
CALCULATED DATA		Performer rating
Client	✓ = Toloka web version ✓ = +	Region by IP Region by phone number
	OR = Toloka for mobile 🗸 📋	Type of client application

3.5. Set up <u>Quality</u> control: leave the Non-automatic acceptance, Review period in days, and Captcha frequency blocks as default.

> Note: Since there is one true answer to an audio classification task which can be used as ground truth, control tasks are the preferable way to check if the answers provided are acceptable.

Read more about <u>quality control</u> <u>principles</u> in our Knowledge Base or check out<u>post-acceptance settings</u> in the Requester's Guide.

3.6. Set up the **Control tasks rule**. Use this rule to ban Tolokers who make too many mistakes.

This rule will be triggered when a performer completes 1 control task in the pool. If the performer gives at least 1 response to control tasks and the percentage of correct responses is less than 80%, they lose access to the pool for 3 days. The rule uses up to 10 recent responses to control tasks.

Read more about <u>Control tasks</u> in the Requester's Guide.

	ontrol get more accurate c independently.	e responses.		
NON-AUTOMATIC ACCEPTANCE		REVIEW PERIOD IN DAYS	14	
		CAPTCHA FREQUENCY 📀	None	~
	(+) Add Quality Control Rule		

CONTROL TASKS 💿	
Recent control task responses to use 10 ×	
If number of responses ∨ ≥ 1 × +	
and correct responses (%) \checkmark \leq 80 \times \ddagger +	
then suspend v in pool v	
3 × days ~	
bad quality X] +

3.7. Overlap. This is the number of users who will complete the same task.

Note: In the case of audio classification tasks, you will need 3 answers to decide which one is correct.

To understand <u>how this rule works</u>, go to the Requester's Guide.

	Overlap
3.7	Specify how many performers you want to complete each task in the pool.
OVERLAP 📀	3 ×
DYNAMIC OVERLAP 📀	Off

3.8. Optionally, specify the percentage of top-rated performers in the <u>Speed / quality balance</u>.

Note: This can slow down pool completion.

Speed/quality balance

Set additional filters to restrict performer access based on their rating in Toloka. This boosts quality but may slow down project completion because there will be fewer performers available to complete tasks. Learn more...



Specify the percentage of top-rated active users who can access tasks in the pool.



3.9. Specify the time given to complete a task suite (for example, 1200 seconds).

To understand how much time it should take to complete a task suite, try doing it yourself.

3.9	Parameters				
5.9	TIME PER TASK SUITE IN SECONDS 2 1200	\times	POOL CLOSING DATE 🧿	2022-07-23	
	KEEP TASK ORDER 💿 No		WAITING TIME FOR THE POOL TO CLOSE IN ② SECONDS	0	
		P	DOL PRIORITY WITHIN THE PROJECT	0	

4. Click **Save** to save Pool parameters.

Parameters		
TIME PER TASK SUITE IN 2 1200	POOL CLOSING DATE 2	2022-07-23
KEEP TASK ORDER 😨 No	WAITING TIME FOR THE POOL TO CLOSE IN ⑦ SECONDS	0
	POOL PRIORITY WITHIN THE PROJECT	0
Cancel Save		

Prepare and upload a file with tasks

1. Prepare a TSV file with tasks as shown in our <u>example</u> (Origin).

Bibtex:

@article{adigwe2018emotional, title={The emotional voices database: Towards controlling the emotion dimension in voice generation systems}, author={Adigwe, Adaeze and Tits, No{\'e} and Haddad, Kevin El and Ostadabbas, Sarah and Dutoit, Thierry}, journal={arXiv preprint arXiv:1806.09514}, year={2018}

- 2. Upload pool tasks from this file.
- 2.1. Select <u>Smart mixing</u> in **File upload settings** and specify the number of tasks of each type per page.

We recommend putting as many tasks on one page as a performer can complete in 1 to 5 minutes. That way, performers are less likely to get tired, and they won't lose a significant amount of data if a technical issue occurs.

To learn more about <u>grouping tasks</u> into suites, read the Requester's Guide.

Click Upload again.

Note: If you changed the name of the input field, change it in the file as well.



File upload setting	s 🧿		
Tasks per page			
By empty row	Set manually		Smart mixing
Main tasks		4	×
Training tasks		0	
Control tasks		1	×
Show advanced settings	1		
Sample file for uploading	a tacks		2.1 Close Upload

3. Create control tasks.

Click Edit \rightarrow Create control tasks.

Is it a male or fe	male speaker? — closed		Statistics		~	Edit	~
Download the sample file, add your task data The sample file uses TSV format, which is the Make sure you choose UTF-8 encoding when Template for general tasks.tsv	same as CSV but using tab as the separator.						
Template for control tasks.tsv							
Template for training tasks.tsv							
1 Upload B Files 1 Delete	3 Edit		0	%			
O task pages	0 training tasks		Con	npleted 0			
120 tasks	0 control tasks	0					C

Note: Control tasks are tasks that already contain the correct response. They are used for checking the quality of responses from performers. The performer's response is compared to the response you provided. If they match, it means the performer answered correctly.

Edit tasks

Use main tasks as a starting point to create control tasks or training tasks.

Control tasks are for checking the quality of responses from performers. They contain correct responses to compare with actual responses. Training tasks are for teaching performers how to complete tasks. They contain correct responses and hints. Learn more

Main 120 Control tasks 0 Training tasks 0 Create control tasks Create training tasks Download ID \$ Responses from performers \$ Last updated 👙 Overlap 🛊 3 0 ...38757659 06/07/2021 13:48:32 3 ...38757642 0 06/07/2021 13:48:32

3.1. Enter correct responses for your control tasks. Check the result output field, which compares the user's response to the control task, listen to the audio, select the correct response, click **Save and go to next**. Repeat until you have 20 control tasks.

To learn more about creating <u>control</u> <u>tasks</u>, go to the Requester's Guide.

	$Projects \rightarrow \mbox{ Is it a male or female spea}_{\rm m} \rightarrow \mbox{ Is it a male or female spea}_{\rm m}$	nale or female spea >	Uploaded tasks \rightarrow Edit tasks		Create 1 more ② 〈 〉
	Create control task		1/1 ⊙ ×		≡i la
3.1	Select the fields to use	7	► 0:09 / 0:09	● :	Distribution of correct responses for control tasks 📀
	result		Is it a male or female speaker? 1 Female 2 Male		Create control tasks to see charts of response distribution.
	Save and go to next				

In small pools, control tasks should account for 10–20% of all tasks.

Tip. Make sure to include different variations of correct responses in equal amounts.

Go to Uploaded tasks \rightarrow Control tasks \rightarrow Distribution of correct responses for control tasks tab.

Projects \rightarrow Is it a male or female speaker \rightarrow Is it a male or female speaker \rightarrow Uploaded tasks

Edit tasks

Use main tasks as a starting point to create control tasks or training tasks. Control tasks are for checking the quality of responses from performers. They contain correct responses to compare with actual responses. Training tasks are for teaching performers how to complete tasks. They contain correct responses and hints. Learn more

Main 100 Co	ontrol tasks 20	Training tasks 0			
Create from main	n tasks			Download	
ID \$	Overlap \$	Responses from performers 💲	Correct responses, % 🛊	Last upc	Distribution of correct responses for control tasks 🥥
0bc2632e	00	0		07/22/2021 12:51	result 50% female
0bc26337	00	0		07/22/2021 12:51	50% male
0bc2632f	00	0		07/22/2021 12:51	

3.2. To check the number of control tasks, go to the **Pool page.**

Is it a male or female speaker?—closed	Statistics 🕹 Download results 🗸 Edit 🚿	~
Download the sample file, add your task data, and upload the file to the pool. The sample file uses TSV format, which is the same as CSV but using tab as the separator. Make sure you choose UTF-8 encoding when saving the file. Learn more in the guide. Template for general tasks.tsv Template for control tasks.tsv Template for training tasks.tsv		
L Upload Files The Delete Edit O Preview	0 %	
~75 task ages 3.2 training tasks	Completed 0	
100 tasks 20 control	~	~75

4. Preview the pool.

Note: Remember that the tasks will be completed by actual Tolokers. Double check that everything is correct with your project configuration.



5. Start the pool.

Is it a male or fe	male speaker?— closed	Statistics L Download results ~	Edit
Download the sample file, add your task dat. The sample file uses TSV format, which is th Make sure you choose UTF-8 encoding wher Template for general tasks.tsv Template for control tasks.tsv	e same as CSV but using tab as the separator.		
1 Upload 1 Files 1 Delete	Edit • Preview	0 %	
~75 task pages	0 training tasks	Completed 0	

Receiving responses

1. Wait until the pool is completed. Refresh the pool page to check progress.

Note: Aggregation takes from 5 to 20 minutes. During this time, you can start configuring your next project. Refresh the Operations page to check progress.

2. Click the **Download results** button and run aggregation using the Dawid-Skene model.

> We use this aggregation model because our questions are of comparable difficulty, and we don't have many control tasks.

Read more about the <u>Dawid-Skene</u> <u>model</u> in the Requester's Guide or get at an overview of different <u>aggregation models</u> our Knowledge Base.

3. Go to the list of operations and wait until aggregation is complete.

Refresh the **Operations** page to check progress.

ls it a male or	emale speaker	?— closed	Statistics Download results View operations	Edit 🗸
Download the sample file, add your task The sample file uses TSV format, which i Make sure you choose UTF-8 encoding v	s the same as CSV but using	tab as the separator.	Dawid-Skene aggregation model Aggregation by skill	
Template for control tasks.tsv				
Template for training tasks.tsv				
1 Upload E Files	Edit	• Preview	100 %	
75 task pages	0 training		Completed 75, accepted 75	
	• tusks		View assignments	
100 tasks	20 control tasks			
			0	75

Operations											
PROJECT Is it a male or female speaker		POOL sit a male or female speaker v									
ld ≑	Type \$		Started 🔶	Completion time 💲	Progress	Status 👙	Files				
148d9	Dawid-Skene aggre	egation model	07/22/2021 15:38:35	-	0%	Running	-				
							10 ~				

4. When aggregation is complete, download the TSV file with the results.

Operations											
PROJECT	POOL										
Is it a male or f	female speaker v Is it a male or f	emale speaker 🗸 🗸									
Id \$	Type \$	Started \$	Completion time \$	Progress	Status ¢ Files						
148d9	Dawid-Skene aggregation model	07/22/2021 3:38:35 PM	07/22/2021 3:41:43 PM	100%	Success Download						
					10 ~						

Appendix

```
Interface code
Step 4.1.
```

```
{
"view": {
"type": "view.list",
"items": [
"type": "view.audio",
"url": {
    "type": "data.input",
    "path": "path"
},
"validation": {
"type": "condition.played",
"hint": "you need to listen to the audio"
 "type": "field.button-radio-group",
"label": "Is it a male or female speaker?",
"options": [
 "label": "Female",
"value": "female"
 "label": "Male",
"value": "male"
],
"data": {
"type": "data.output",
"path": "result"
 "validation": {
"type": "condition.required"
 "plugins": [
{
"type": "plugin.toloka",
"layout": {
    "kind": "scroll",
    "taskWidth": 300
"1": {
  "1": {
  "type": "action.set",
  "data": {
  "type": "data.output",
  "path": "result"

 },
"payload": "female"
"payload": "Temmale"
},
"2": {
"type": "action.set",
"data": {
"type": "data.output",
"path": "result"
 },
"payload": "male"
  "type": "plugin.hotkeys"
```