

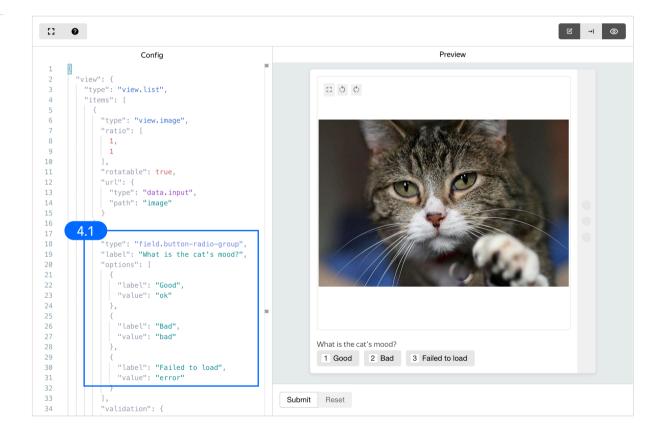
# Binary image classification manual

	Create a project	彩 Toloka Projects Users Skills Profile Messages	2 ▲ \$0.00 \$0.79 Ya.Cereda
1.	Click + Create project	Projects Active ~ Only mine ~	Find project + Create project
2.	Choose the <b>Image classification</b> template	Image & Video Data     Selecting a region in an image   The user outlines certain objects in the picture with polygons.     Select     Preview        Image classification   Cod for image classification and tagging. The template   Includes an image classifications.   Select   Preview	Text recognition from an image (OCR)         For interpreting information from a photo. The template includes an image, matching text, and an input field for the response.         Select          • Preview          Side-by-Side image comparison         For comparing two images. The template contains two images and several radio buttons.         Select          • Preview
3.	Enter a clear project name and description. Click <b>Save</b> <b>Note:</b> The project will be visible to others	<ul> <li>General information</li> <li>Name to show performers *         <ul> <li>Is it a cat or a dog?</li> <li>Description for performers</li> <li>Look at the picture and decide whether there is a cat or a dog.</li> <li>+ Private comment</li> </ul> </li> </ul>	*****         Is it a cat or a dog?         Look at the picture and decide whether there is a cat or a dog.         0\$       ~0\$         per task       per hour

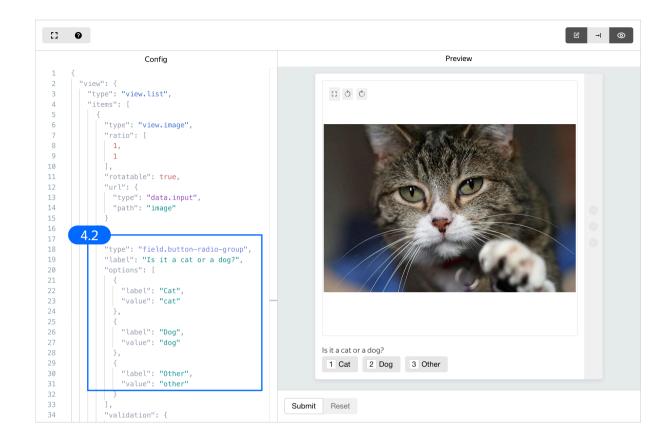
4. Update the task interface in the **Template Builder block** 



4.1. Find the part of the config with the question from the task and the possible answers (starting from line 17)



4.2. Replace the default question and answers with the ones you need. You can find the full config in the Appendix at the end of this manual



4.3. Leave other interface settings as default and click **Save** 

Data specification 💿	Output data <>
image (URL)	result (string)

5. Write short and simple instructions. Click **Save** 

#### 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 Д	U	<b>_</b> 0	1≡ 1≡	ΞΞ	∃∎		[] ⊙	<>
	Decide	Decide what category the image belongs to.								
	Select	"Cat" if	the pi	cture	contains	one or	more ca	its.		
	Select	"Dog"	if the p	icture	contain	s one o	r more d	ogs.		
	Select "Other" if:									
	the picture contains both cats and dogs									
	the picture is a picture of animals other than cats and dogs									
	• it is not clear whether the picture is of a cat or of a dog									
5	Save									

6. Fill in "Name and description" and "Instructions" in the **Translations** block for each language that you want performers to see. If you leave these fields empty, the language is inactive. Click **Save** 

4 Translations		
-		etter if the instructions and all descriptions are in their native that you want performers to see. If you leave these empty,
Source language		
English	$\checkmark$	
Translations		
Language Senglish (Source)	Name and description for performers	Instructions for performers
Cinglish (Source)	•	•
Add translation ~		

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

dit project	Back to the old interfa	ce Cancel Finish
General information		
C 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

tatistics for 7	days						Edit
ubmitted tasks	Spent	Quality: control tasks	Quality: training tasks	Average submit time	Users	Banned users	Clone Archive
	0\$				0	0	
							Preview

# Create a pool

1. Click Add a pool

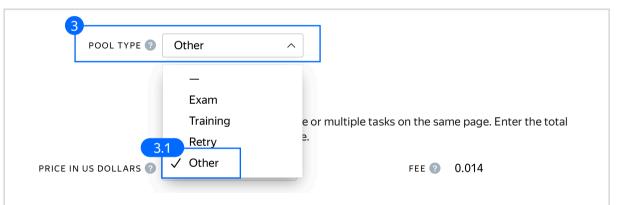
tatistics for 7 da	,						
Jomitted tasks	Spent	Quality: control tasks	Quality: training tasks	Average submit time	Users	Banned users	
	0\$				0	0	
Active and clos		Quality control					1 Add a po
Pools can be ar	chived manually or Priority \$		atic archiving applies to	pools with no activity fo	or 30 days).	Started \$	To be complet

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

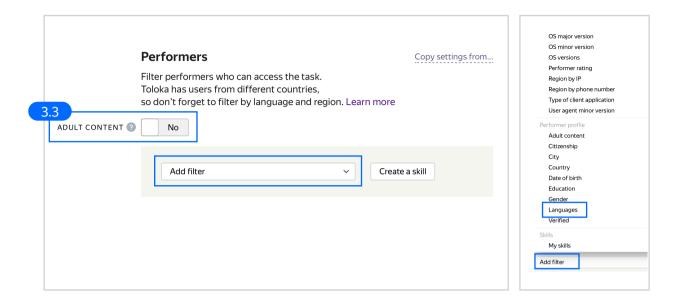
POOL NAME (VISIBLE ONLY TO YOU)	ls it a cat or a dog?	×
PUBLIC DESCRIPTION 📀	✓ Use project description Look at the picture and decide whether there is a cat or a dog.	
	Add a private description	

- 3. Specify <u>pool parameters</u>:
- 3.1. Set a pool type. Choose **Other**



	Price per task suite	
3.2. Set the price per task suite (for example, \$0.07)	Each task suite can have one c price for all tasks in the suite.	or multiple tasks on the same page. Enter the total
	PRICE IN US DOLLARS 2 0.07 ×	fee 🕜 0.014
	+ Dynamic pricing	

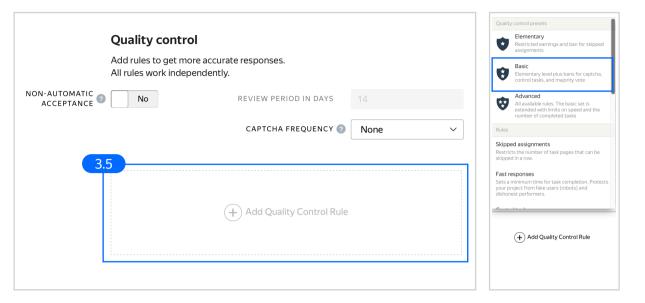
3.3. <u>Filter</u> performers who can access the task. Choose "No" in the **Adult content** block. Click **Add filter** to choose the **Languages** option in the list



3.4. Select English-speaking performers using the Language = English filter

	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	
	Add filter	ı skill
	3.4 PERFORMER PROFILE Languages ~ = English	× = +

3.5. Set up Quality control: Golden Set aka Control tasks. Ban performers who give incorrect responses to control tasks. Click + Add Quality Control Rule and choose Basic preset



3.6. Scroll down to **Control tasks**. Set the number of responses (at least 3) and the percentage of correct responses (less then 60).

EARNINGS 🔞

3.6

Example: If the number of responses is  $\geq$  3 and correct responses (%) account for < 60, then ban on project for 10 days. Optionally, add other quality control rules

IINGS D	CONTROL TASKS 📀	
If     earned in last 24 hours     >     ≥     20     ×     +       then     ban     >     on requester     >       1     X     day     >       Reason (visible to you only)     >	Recent control task responses to use 10	1
+ PED ASSIGNMENTS	If number of responses ~ 2 3 × +	
If         task suites skipped in a row <ul></ul>	and   correct responses (%)   <   60   X   =     then   ban    on project	
Reason (visible to you only)	then ban    on project	
Recent control task responses to use 10 ×	Reason (visible to you only)	+
If number of responses v 2 4 × + and correct responses (%) v < 75 × = + then ban v on project v 10 × days v Reason (visible to you only) +		

3.7. Overlap. This is the number of users who will complete the same task. For example, 3

	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 ratio</u>

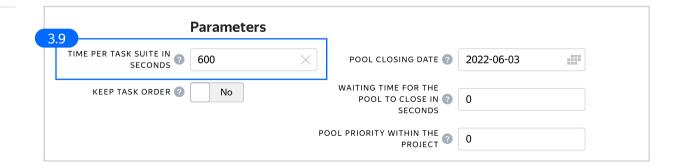
**Note:** This can slow down pool completion

#### Speed/quality ratio

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...

'974 🖍 peed	All 9	1 I I I 90% 80%	70% 60%	50%	40%	30%	20%	I 10%	4784 🖍 Quality
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3.9. Time given to complete a task suite (for example, 600 seconds)

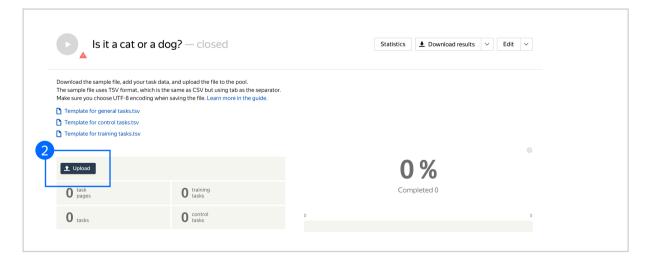


4. Click Save to save Pool **Parameters** parameters TIME PER TASK SUITE IN SECONDS 600  $\times$ POOL CLOSING DATE ? 2022-06-07 WAITING TIME FOR THE KEEP TASK ORDER 🕐 No POOL TO CLOSE IN 🕜 🛛 🛛 SECONDS POOL PRIORITY WITHIN THE PROJECT 0 Cancel Save

# Prepare and upload a file with tasks

 Prepare a TSV file with tasks as shown in our <u>example</u>. License: CC BY 4.0

2. <u>Upload pool tasks</u> from this file



2.1. Select <u>Smart mixing</u> in **File upload settings** and specify the number of tasks per page. For example: 9 main tasks and 1 control task. Click **Upload** once again

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

2.2.	In the pop-up window, click
	Add to add tasks to the pool

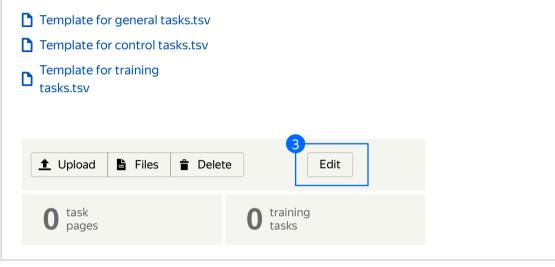
	File upload settings 📀		
	Tasks per page		
	By empty row Set manual	) Ily	Smart mixing
2.1			
	Main tasks	9	×
		9	X
	Main tasks		×
	Main tasks Training tasks	0	

Adding tasks to po	ol (cats.tsv)		
	TASKS FO	DR POOL	
<b>120</b> tasks		<b>0</b> training tasks	
<b>O</b> control tasks			
			Cancel Add

#### 3. <u>Create control tasks</u>.

 $\mathsf{Click} \: \textbf{Edit} \to \textbf{Create control tasks}$ 

**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 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.



#### 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 ÷ Overlap \$ Responses from performers \$ Last updated \$ ...38757659 3 0 06/07/2021 13:48:32 ...38757642 3 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, select the response, and click **Save and go to next**. Repeat until you have enough control tasks

Create control task 1. Enter correct responses relect the freeds to use result result	E I O O	al ≣ Distribution of correct: for control tasks ● 53.3% cat 46.7% dog 0% other
	Is it a cat cat doe2 1 Cat 2 Dog 3 Other	

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

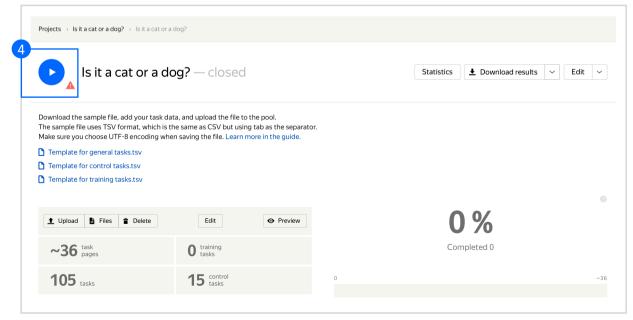
		g point to create control tasks o	-		
		ing the quality of responses fro ning performers how to complet		•	mpare with actual responses.
_earn more	sare for teach	ing performers now to complet	te tasks. They contain cor	rect responses and finits.	
Main 105	Control tasks	15 Training tasks 0			
Create from n	nain tasks			Download	
4	Overlap \$	Responses from performers 👙	Correct responses, % 💠	Last updated 💠	Distribution of correct responses for control tasks 😨
Ŷ			correct responses, // v		result
	00	0		06/07/2021 14:01:42	46.7% cat
6e47fe1		0		06/07/2021 14:01:35	53.3% dog
6e47fe1 6e47ff0	00	0			
6e47ff0				06/07/2021 14:01:29	0%
	∞	0		06/07/2021 14:01:28	0% other

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

<b>3.2</b> Projects → Is it a cat or a dog? Is it a cat or a	dog?			
Is it a cat or a do	og? — closed		Statistics   Download results	Edit 🗸
Download the sample file, add your task da The sample file uses TSV format, which is t Make sure you choose UTF-8 encoding whe Template for general tasks.tsv	ne same as CSV but using tab as th			
<ul> <li>Template for control tasks.tsv</li> <li>Template for training tasks.tsv</li> </ul>				0
▲ Upload 🖺 Files 着 Delete	Edit	Preview	0 %	
~36 task pages	0 training tasks		Completed 0	
<b>105</b> tasks	15 control tasks	0		~36

4. Start the pool

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



### 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 <u>Dawid-Skene model</u>

	r a dog? — closed	View operations
The sample file uses TSV format, v	ur task data, and upload the file to the pool. which is the same as CSV but using tab as the separator. ding when saving the file. Learn more in the guide.	Dawid-Skene aggregation model Aggregation by skill
Template for general tasks.tsv		
Template for control tasks.tsv		
Template for training tasks.tsv		
Template for training tasks.tsv		
Template for training tasks.tsv     ①      ①     ①      ①	Edit • Preview	100 %
1 Upload B Files	Edit • Preview	<b>100 %</b> Completed 36, accepted 36
	Edit • Preview	Completed 36, accepted 36
1 Upload E Files	Edit • Preview	

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

Operatio	ns						
PROJECT	log? ~	POOL Is it a cat or a dog?	~				
ld ≑	Type \$		Started 🗧	Completion time \$	Progress	Status \$	Files
888b2	Dawid-Skene aggre	gation model	06/07/2021 14:08:14	-	3 10%	Running	-

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

JECT		POOL					
it a cat or a d	dog? ~	Is it a cat or a dog?	~				
d ¢	Type \$		Started \$	Completion time \$	Progress	Status 🗧	Files
3256	Dawid-Skene aggreg	ation model	06/03/2021 18:45:46	06/03/2021 18:48:08	100%	Success	4 Download

# Appendix

## Interface config Step 4.2. { "view": { "type": "view.list", "items": [ { "type": "view.image", "ratio": [ 1. ], "rotatable": true, "url": { "type": "data.input", "path": "image" { "type": "field.button-radio-group", "label": "Is it a cat or a dog?", "options": [ "label": "Cat", "value": "cat" { "label": "Dog", "value": "dog" "label": "Other", "value": "other" "validation": { "type": "condition.required", "hint": "choose one of the options" }, "data": { "type": "data.output", "path": "result" "plugins": [ { "type": "plugin.toloka", "layout": { "kind": "scroll", "taskWidth": 500 { "1": { "type": "action.set", "data": { "type": "data.output", "path": "result" "payload": "cat" }, "2": { "type": "action.set", "data": { "type": "data.output", "path": "result" }, "payload": "dog" paytoau : "dog" }, "3": { "type": "action.set", "data.output", "path": "result" "payload": "other" } "type": "plugin.hotkeys"