Test Tasks

You can use Jupyter Notebook or any other IDE to solve tasks. As you finish, just upload your .py or .ipynb files to your drive and share the folder with us by link. If you have any questions about the tasks, please, write to us.

1. **Use DeepLabV3 model for Semantic Segmentation of humans in the image**.
   Create a class with at least one method - **predict_mask(path_input)**. “path_input” is a parameter to set a path to the input image. This method should return a segmentation mask.
   Note:
   - Only humans should be masked.
   - It would be a plus if you also write a method to visualize the result of segmentation (map your mask on image).

2. **Write a simple Flask application with one endpoint to make NER over text.**
   To make NER you can use **spacy** or **transformers** pretrained models. We are interested only in PERSON and LOCATION entities. All specifications of the endpoint you can find in the table below.

endpoint	method	request parameters	body parameters	response	description

/get-entities	GET	**name**: text
		type : string
		example: "Elon Musk and Lady Gaga at first met in Mexico in 2010. None of them was in Kyiv. Lady Gaga is going to become a new brand manager of Tesla Inc."
				{
				"persons": [
				"Elon Musk",
				"Lady Gaga"
				],
				"locations":[
				"Mexico", "Kyiv"
				]
				}
					Endpoint to get entities from short texts
					
					Input data (string):
					"text" - any text with length < 300 symbols (str)
					
					Output data (JSON):
					key (value) pairs:
					"persons" (list of strings), "locations" (list of strings)