



## Project Description

As a part of this project, you will create a simple OCR model using the TF2 or Keras Functional API. In this project, you can use CNN, RNN, and any other layer you may create as part of your project.

## Dataset

The dataset contains 1040 captcha files as **png** images. The label for each sample is a string, the name of the file (minus the file extension).

- **Context**

The dataset contains images of CAPTCHAs (Completely Automated Public Turing Tests to Tell Computers and Humans Apart). It was designed in 1997 as a way for users to identify and block bots (to prevent spam, DDOS, etc.). However, it has since been replaced by reCAPTCHA, which uses Artificial Intelligence to break them.

- **Content**

Each image contains a 5-letter word that can contain a number. The images have been blurred and have a line applied to them to create noise. The images are PNGs of 200 x 50 pixels.

## Final Version Requirements

1. docstring, object-oriented, type hinting, comments as much as required, data preprocessing with tf. data, tf.image, should have utils, and data utils module, etc.
2. clean report in colab or notebook should be provided. (markdown, comments. etc)

لطفاً پروژه ها در فایللی به نام و نام خانوادگی خودتان و با فرمت **zip** تبدیل شده و به آدرس ایمیل [internshipsummer1401@gmail.com](mailto:internshipsummer1401@gmail.com) ارسال گردد.

با تشکر