About the challenge

You are provided with a training file (.csv) with first names and the respective genders. Your aim is to write code to train and serve a machine learning model to assign a gender (male, female) to first names. The machine learning model must be able to determine the gender of names which have not been used to train the model. Please attempt this task to the best of your ability within 24 hours and send back to us.

Estimated time to complete:24 Hours.

Submission Guidelines

Please submit your code by sending a zip of all the files (not including the trained model) or Github link back to the email address from which you received this document.

Requirements

* The codebase must be in python (.py) and not Jupyter Notebook.
* Using TensorFlow or Keras would be preferred.
* Aim to achieve the highest accuracy model possible without overfitting.
* Please include a requirements.txt file.

Project evaluation

We are evaluating project according to the features which are specified below.

Base requirements

1. Trainable and servable Machine Learning model.
2. README included with codebase on how to run the Machine Learning model.
3. Commented code.
4. Python requirements file included.

Extra Extension Requirements

1. Hyperparameter Tuning.
2. A model which can be trained and served using a flask/Django service.
3. DockerFile included with the codebase to serve machine learning model.

Project evaluation

We are evaluating the task according to the features which are specified below:

1. Accuracy of the Machine Learning model.
2. Ease of Docker build.
3. Ease of model to train and serve.
4. Quality of comments.
5. Quality of code.