

### PROJECT SPECIFICATION

# **Machine Translation**

#### **Submitted Files**

| CRITERIA  | MEETS SPECIFICATIONS  |
|---|---|
| All appropriate files are included in the submission. | The following files have been submitted: helper.py, machine_translation.ipynb, machine_translation.html |

# **Preprocess**

| CRITERIA   | MEETS SPECIFICATIONS   |
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| The tokenize function has been mplemented correctly. | The function tokenize returns tokenized input and the tokenized class. |

| The pad function has been | The function pad returns padded input to the correct MEETS SPECIFICATIONS |
|---------------------------|---|
| implemented correctly.    |   |

### Models

| CRITERIA   | MEETS SPECIFICATIONS  |
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| The simple_model function has been implemented correctly.  | The function simple_model builds a basic RNN model.   |
| The  embed_model  function has been implemented correctly. | The function embed_model builds a RNN model using word embedding.   |
| The Embedding RNN makes a prediction on the dataset.       | The Embedding RNN is trained on the dataset. A prediction using the model on the training dataset is printed in the notebook. |

| The bd_model function has been                             | The function bd_model builds a bidirectional RNN model.  MEETS SPECIFICATIONS   |
|--|---|
| implemented correctly.                                     |   |
| The Bidirectional RNN makes a prediction on the dataset.   | The Bidirectional RNN is trained on the dataset. A prediction using the model on the training dataset is printed in the notebook. |
| The  model_final  function has been implemented correctly. | The function model_final builds and trains a model that incorporates embedding, and bidirectional RNN using the dataset.          |

# Prediction

| CRITERIA   | MEETS SPECIFICATIONS                               |
|--|--|
| The final model correctly predicts both sentences. | The final model correctly predicts both sentences. |