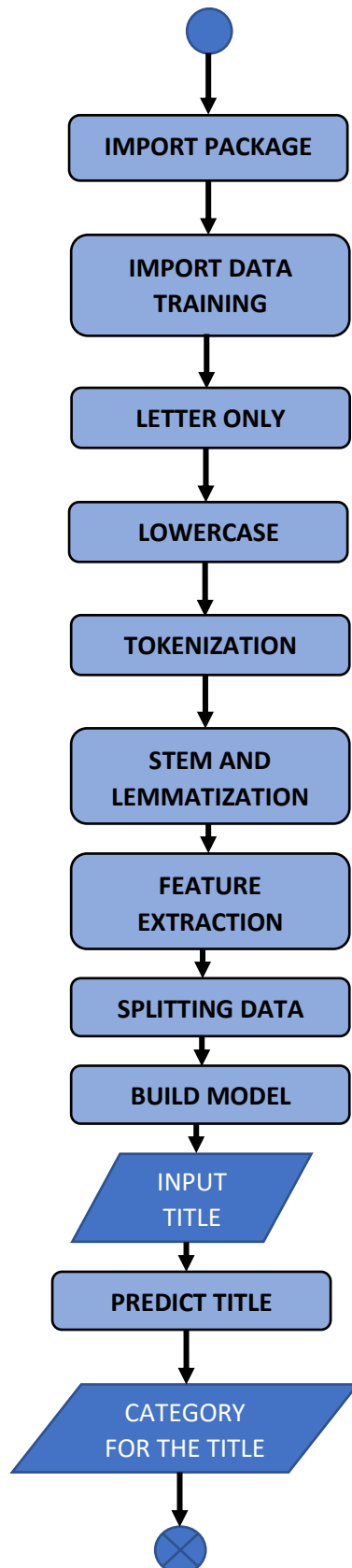## ABOUT:

Make a classifier to classify news title. There are 4 categories namely Business, Entertainment, Medical, and Technology. I use file **"News Title.xls"** as Data Training.

FLOWCHART FOR NEWS TITLE CLASSIFICATION

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            ┌──────────────────┐
            │  IMPORT PACKAGE  │
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            ┌──────────────────┐
            │   IMPORT DATA    │
            │    TRAINING      │
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            │   LETTER ONLY    │
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            ┌──────────────────┐
            │    LOWERCASE     │
            └──────────────────┘
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            │   TOKENIZATION   │
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            │    STEM AND      │
            │  LEMMATIZATION   │
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            ┌──────────────────┐
            │     FEATURE      │
            │   EXTRACTION     │
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            │  SPLITTING DATA  │
            └──────────────────┘
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            ┌──────────────────┐
            │   BUILD MODEL    │
            └──────────────────┘
                    │
            ╱──────────────────╱
           ╱      INPUT        ╱
          ╱       TITLE       ╱
         ╱──────────────────╱
                    │
            ┌──────────────────┐
            │   PREDICT TITLE  │
            └──────────────────┘
                    │
            ╱──────────────────╱
           ╱     CATEGORY      ╱
          ╱   FOR THE TITLE   ╱
         ╱──────────────────╱
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                    ⊗
```

NOTES

- Accuracy for the model is 63%
- This model using Convolutional Neural Network Algorithm
- For feature extraction, I am using global vector (glove) to transform text to vector.