

SPLASH BLOG



Movie lovers' community

Presented by Group 2 Splash

Chen Chen
Xinyi Wei
Yingtong Xu
Yuting Jiang

INTRO (Problem/Aim)

What we try to build is a Django website which has three features:

- 1.It should have a blog feature with an admin interface based on Django framework
- 2.The website should implement translation function
- 3.We also try to build an interface to show our learning results of data science, data visualization, and machine learning.

Requirement

```
python >= 2.5
```

```
pip >= 0.8
```

```
Django >= 3.2 (tested with Django 1.6 and Django 1.7)
```

```
pip install squarify
```

```
pip install googletrans==4.0.0-rc1
```

p.s. The packages that needs to be imported to implement data science, data visualization, and machine learning has been presented in the source code (Data Analyse Source Code-Splash.ipynb)

Based on the requirements above, open the whole folder in VScode or PyCharm, our project can be run by inputting "python manage.py runserver" in terminal.

This folder also includes two ipynb files which can be run by evoking jupyter notebook.

Example for background test super user:

Username: jyt

Password: jyt199969

Function Display

Django administration

Site administration

AUTHENTICATION AND AUTHORIZATION

Groups

[+ Add](#) [Change](#)

Users

[+ Add](#) [Change](#)

BLOG

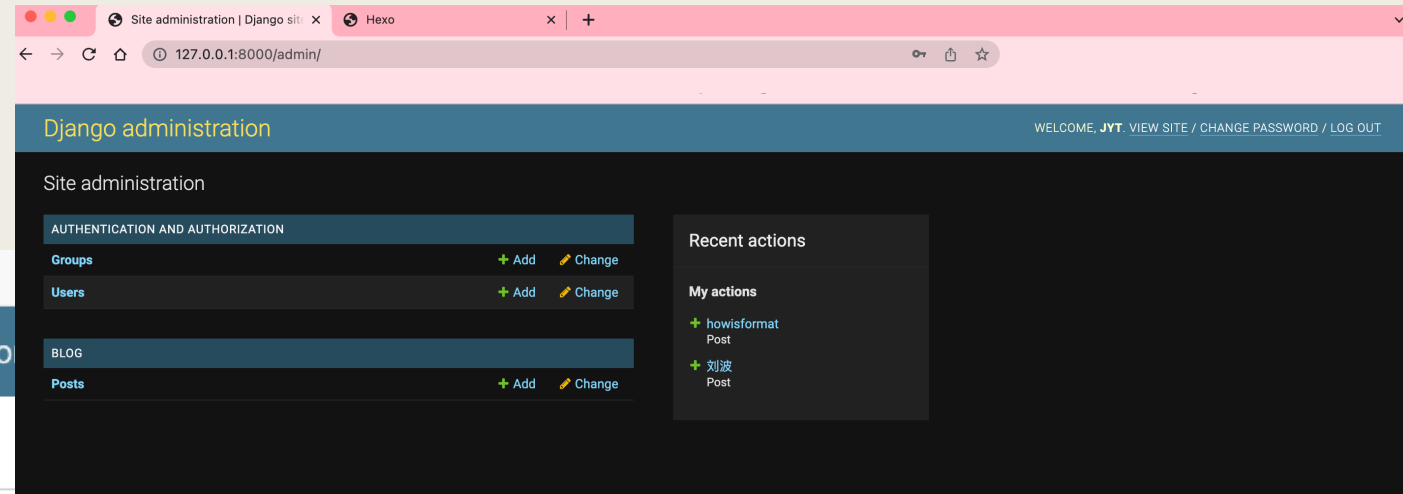
Posts

Django administration

Username:

Password:

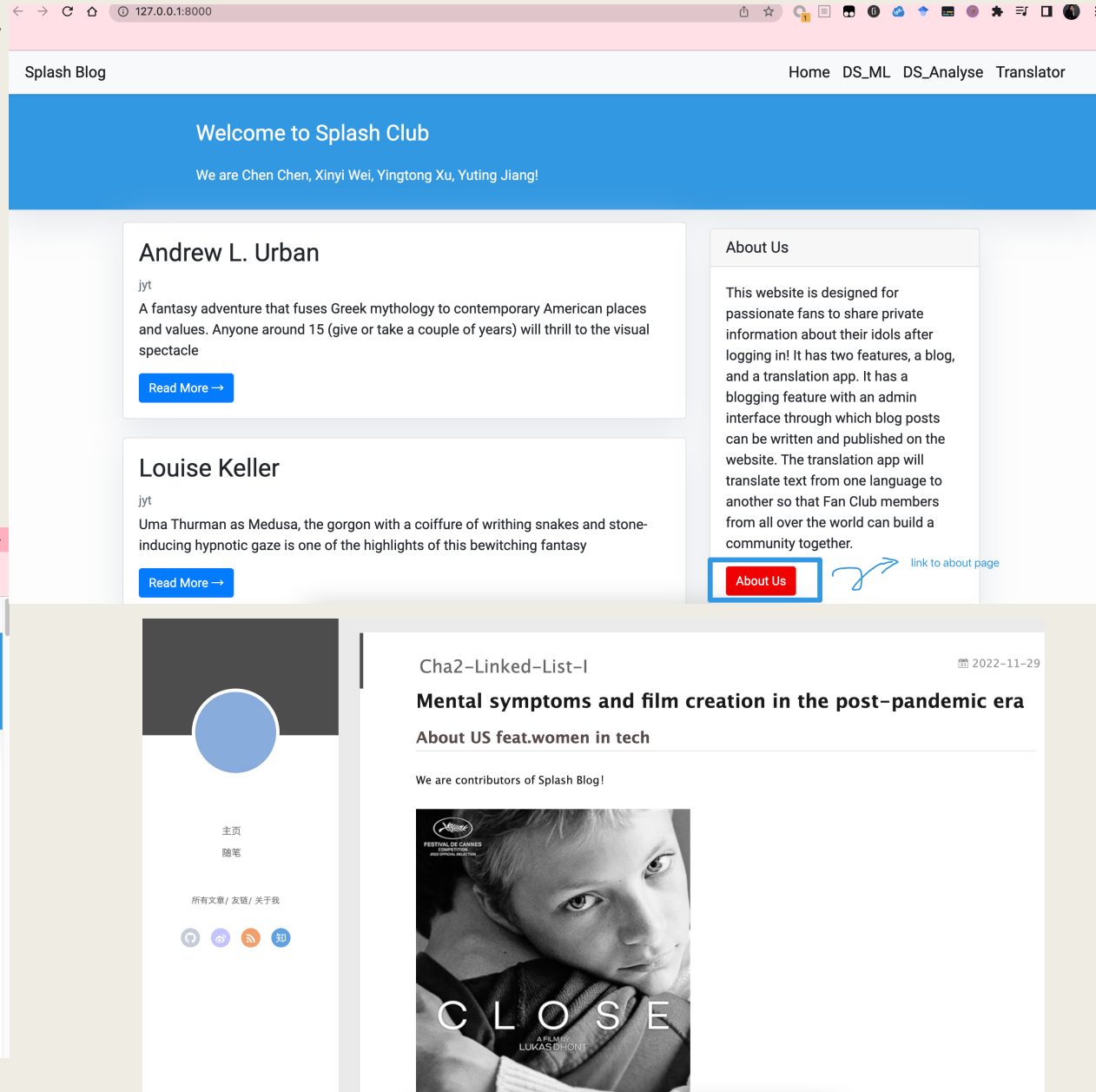
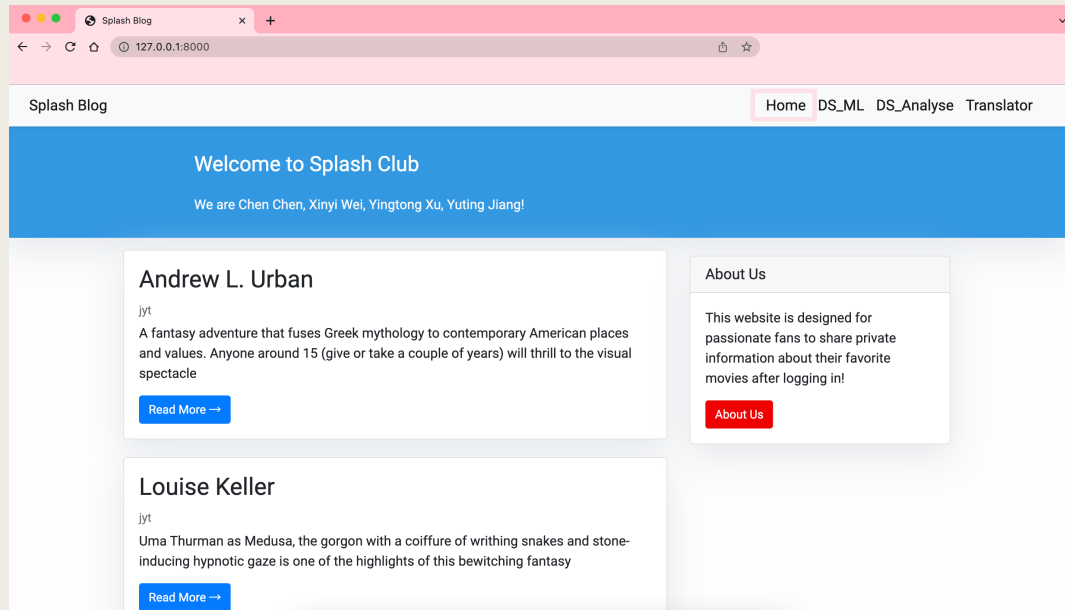
Log in



1. creat new user
2. user log in & out
3. user profile page
4. write & save & publish & edit blog-posts

Function Display

- 1.visit blog homepage
- 2.visit about page:
embed a personal blog
which was implemented
through HEXO framework



Function Display

```
Splash Blog x +
127.0.0.1:8000/ds//Analyse
Home DS_ML DS_Analyse Translator

In [21]: #Import all necessary packages

import pandas as pd
from pandas.api.types import is_string_dtype, is_numeric_dtype
from sklearn import preprocessing
from sklearn.neighbors import KNeighborsClassifier
from sklearn.metrics import confusion_matrix, accuracy_score, matthews_corrcoef, f1_score
# from sklearn.externals import pickle, json
import pickle, json
from matplotlib import pyplot as plt
import seaborn as sns
import joblib
import numpy as np
import pandas as pd
from matplotlib import pyplot as plt
import matplotlib.animation as animation
import imageio
import os
# import cv2
from PIL import Image
import squarify
%matplotlib inline

In [22]: #Check the path to the directory where you are currently in
%pwd

Out[22]: '/Users/melody/Desktop/repos/5002/project'

In [23]: my_path = '/Users/melody/Desktop/repos/5002/project'

In [24]: !ls

5002project1104          knn_model
5002project1104的副本    rotten_tomatoes_movies.csv
Data Analyse Source Code-Splash.ipynb ~$Splash.pptx
Splash.pptx

In [25]: my_df = pd.read_csv(f'{my_path}/rotten_tomatoes_movies.csv',
                             low_memory = False)
print(my_df.shape)
my_df.head(3)
```

```
Splash Blog x Hexo x +
127.0.0.1:8000/ds//ML

Out[1083]: {1, 2}

In [108... set(Y_pred)

Out[1084]: {1, 2}

In [108... # Plot confusion matrix
from sklearn.metrics import confusion_matrix

my_knn_cmatrix = confusion_matrix(Y_valid, Y_pred)

my_knn_df = pd.DataFrame(my_knn_cmatrix)
plt.figure(figsize = (8,8))
sns.heatmap(my_knn_df, xticklabels = ["Spilled", "Upright"],
            yticklabels = ["Spilled", "Upright"], annot = True)
```

Out[1085]: <AxesSubplot:~>



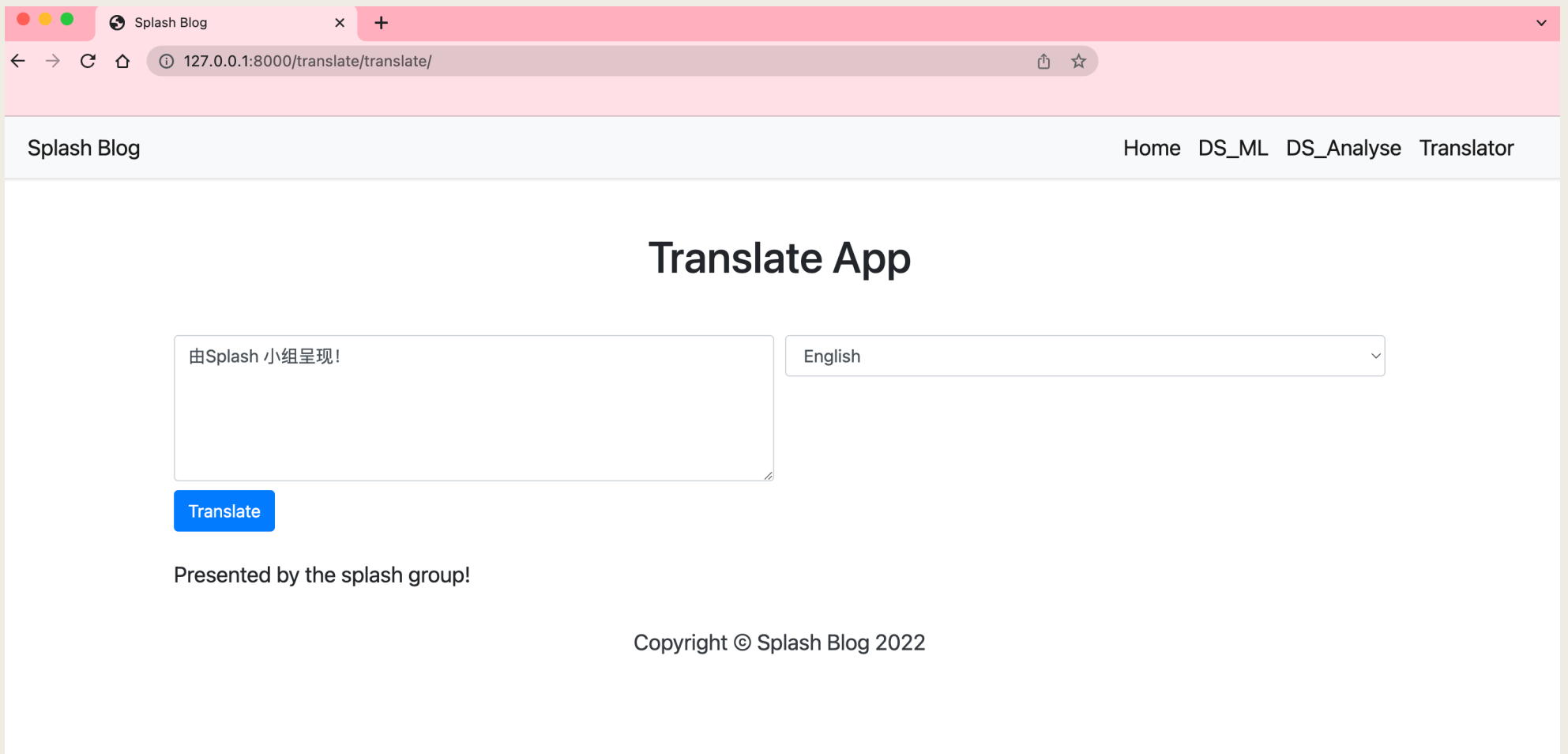
visit data_scienc(DS & ML) page:

1. Analyze the number of films released each year, calculate each movie type's proportion. Visualize the conclusion.
2. Analyze the movie comments' emotional tendency based on NLTK and VADER.
3. Using audience count and movie runtime to predict the audience status (spilled or upright).

Function Display

Translator:

1. Translate text from one language to another
2. Choose the target language you want



The screenshot shows a web browser window with the title "Splash Blog" and a tab labeled "Splash Blog". The address bar displays "127.0.0.1:8000/translate/translate/". The page content includes a header with "Splash Blog" on the left and navigation links "Home", "DS_ML", "DS_Analyse", and "Translator" on the right. The main heading is "Translate App". Below this is a text input field containing the Chinese text "由Splash 小组呈现!". To the right of the input field is a dropdown menu currently set to "English". Below the input field is a blue "Translate" button. At the bottom of the page, it says "Presented by the splash group!" and "Copyright © Splash Blog 2022".

Splash Blog

Home DS_ML DS_Analyse Translator

Translate App

由Splash 小组呈现!

English

Translate

Presented by the splash group!

Copyright © Splash Blog 2022

THANK YOU!



All team members implement our own edition.

Help each other debug, code review, discuss, improve, share, prepare for the final presentation.

Presented by Group 2 Splash

Chen Chen
Xinyi Wei
Yingtong Xu
Yuting Jiang