**UIUC Events Recommender System**

Repo: [GitHub](https://github.com/LanLi2017/cs410text_mining)

1. **An overview of the function of the code (i.e., what it does and what it can be used for).**

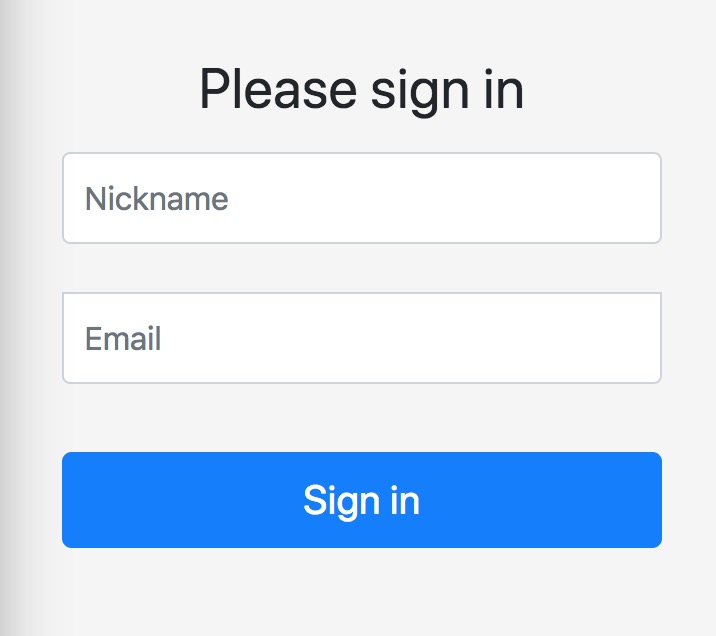
This whole project is based on python 3.6 version. We use the most popular and stable framework: MVC, model-view-controller to achieve the whole data interaction which is from back-end to front-end. And the whole project is including three parts:

The first is Django part, used to construct the website which will output the customers’ information, like the users’ nickname, email and the interested tags. The customized data will be stored in the “data.csv” file.

The second part is text classification part. This part first crawls the events from <http://illinois.edu/resources/calendars.html>. Then it uses a trained KNN text classification model to assign each of the crawled events with a tag.

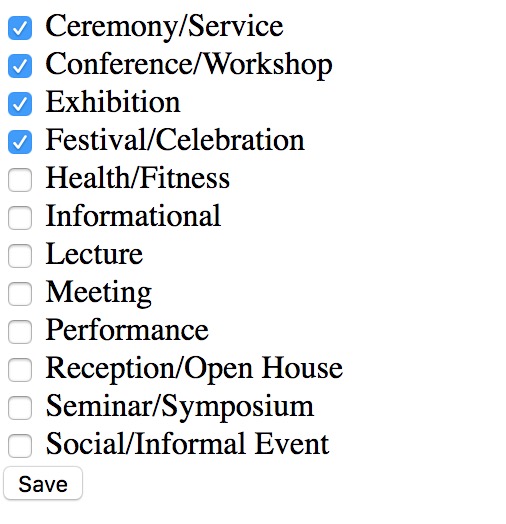
The third part is the feedback part, this step is used to verify the accuracy and robustness in our second step. Here we use Email function to recommend the events which may interest the users, in accordance with tags in the “data.csv” file at the first step.

1. **Documentation of how the software is implemented with sufficient detail so that others can have a basic understanding of your code for future extension or any further improvement.**
   * 1. Sign in interface



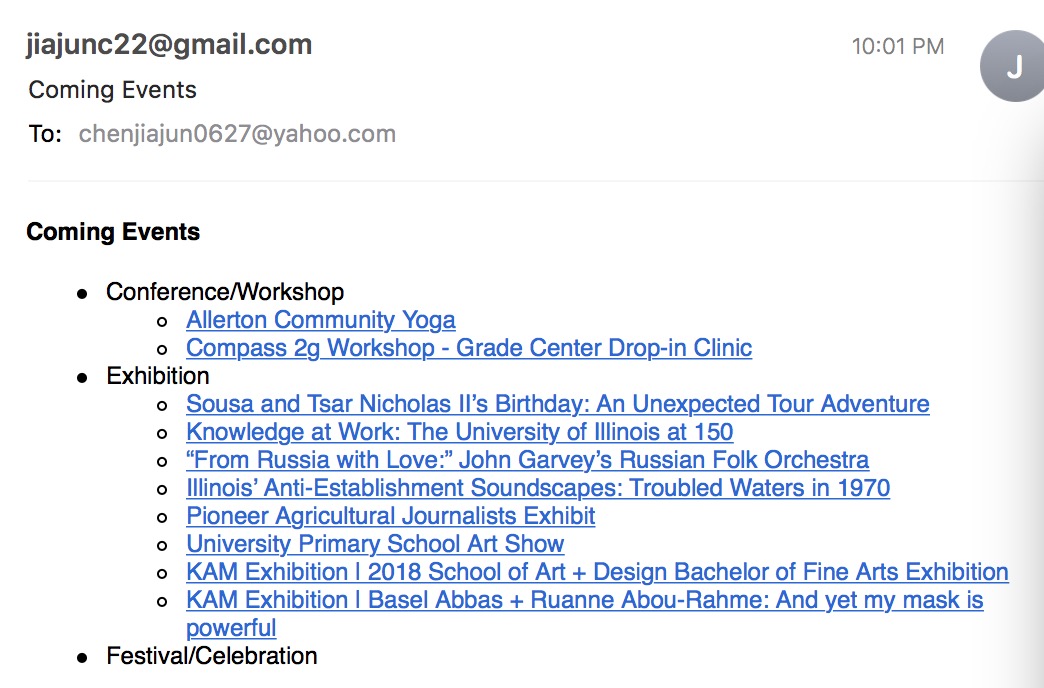
Users can set their own nickname, and input their email for receiving the recommending events later.

* + 1. Click and redirect to choose tags which users are interested in.



Here we set twelve types events for users choosing: Ceremony/Service, Conference/Workshop, Exhibition, Festival/Celebration, Health/Fitness, Informational, Lecture, Meeting, Performance, Reception/Open House, Seminar/Symposium, and Social/Informal Event.

* + 1. Send recommending events to users according to the tags selected.

According to the users tags records in the first step, we will send an email including the tags attached with links and names to users. And these events are firstly using crawler to crawl the school website, and then using KNN to do classification. All these events will be tagged. 

1. **Documentation of the usage of the software including either documentation of usages of APIs or detailed instructions on how to install and run a software, whichever is applicable.**
   * 1. 1Get the latest official version of the Django:

Option 1:

$ pip install Django==2.0.5

Option 2:

$ git clone https://github.com/django/django.git

* + 1. BeautifulSoup library install

$ pip install BeautifulSoup

* + 1. smtp sending email

1. **Brief description of contribution of each team member in case of a multi-person team.**
   1. Xiaokai Cui

Used BeautifulSoup to crawl all the events from UIUC calendar. Trained a text classification model using KNN method to tag the events for future recommendation.

* 1. Jiajun Chen
  2. Lan Li

Using the Django to construct the register interface and subscriber interface, and store users’ information into sqlite database. Then output the data file for later use.

[1] <https://www.djangoproject.com/download/>