## **Project 4 Words for Music**

## -- Association mining for music and text

## **Project evaluation**

- On 11/16, we will provide you with the music features of 100 songs in the same format as the training data.
- You will also be provided with a voculary ranking sheet for these 100 songs.
  - The vocabulary is the same as the training data.

	song1	song 2	 song 100
word 1	5	321	 112
word 2	2304	986	 3

- You will have 30 minuets to submit rankings of lyrics words with 1 being most likely and 5000 being least likely.
  - Let the dictionary be  $\mathbf{D} = [d_1, \dots, d_K]$ , where K = 5000.
  - For a song with words  $w_1, \ldots, w_m$  and  $w_i \in \mathbf{D}$ , let your predictive ranks be  $r_1,\ldots,r_K$ , and  $\bar{r}=\frac{1}{K}\sum_{k=1}^K r_k$ . • We will compute predictive rank sum as follows:

$$\frac{1}{m}\frac{1}{\bar{r}}\sum_{i=1}^m r_{w_i}.$$