

Big Data Project : Spring 2014

Assisted Music Promotion Tool

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facebook

Motivation

twitter



- ❖ Alex is a self-produced musician,
- ❖ He wants to **release an album**,
- ❖ How to promote it successfully on social media ?

Single Release

Interview

Album cover release

Countdown

Album release

March 22nd

April 7th

April 25th

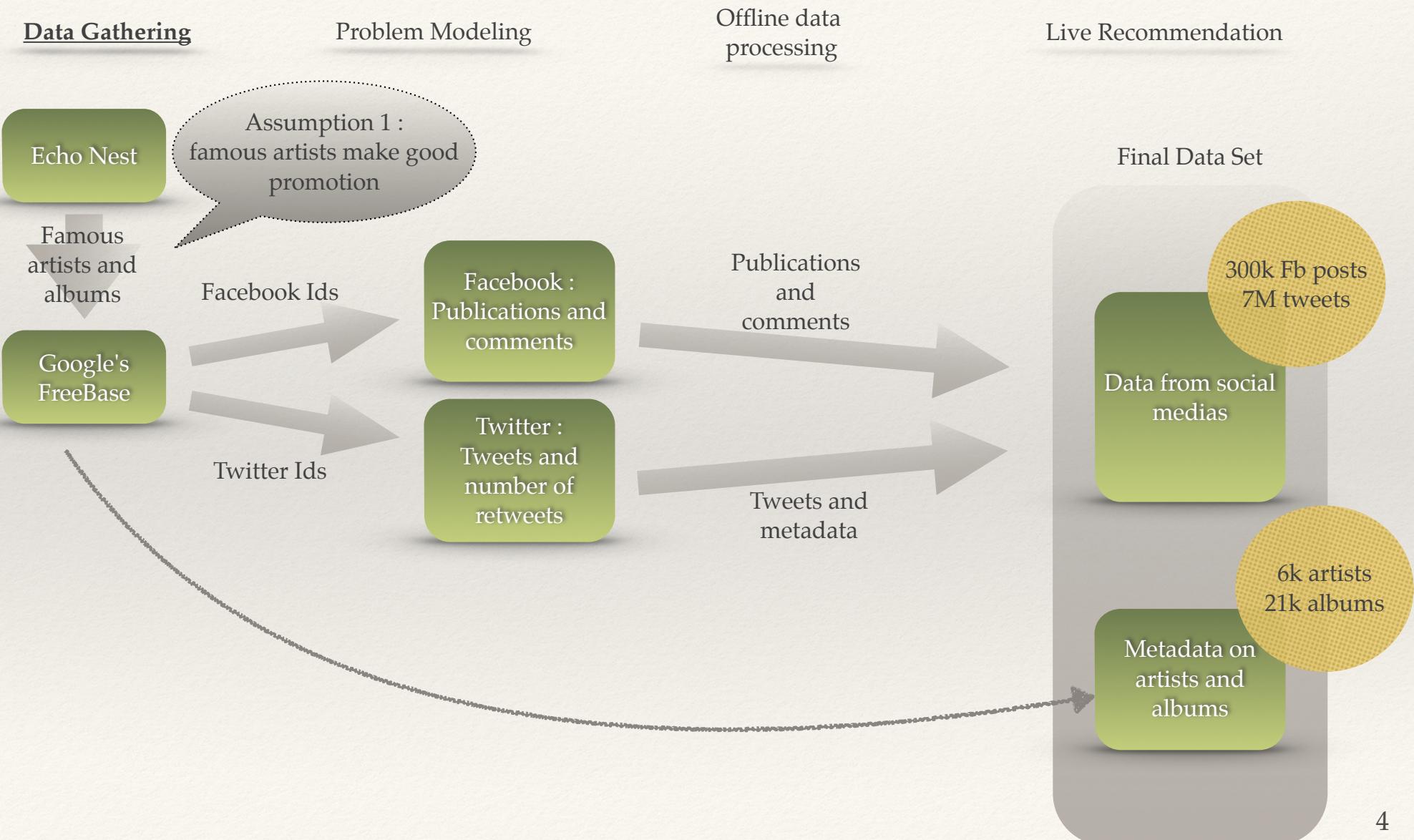
May 2nd

May 16th

Project Milestones



Data Gathering



Problem Modeling

- ❖ Now, the data is ready...
- ❖ How to produce our output ?



Pre-processed Recommendation Matrix

Data Gathering Problem Modeling Offline data processing Live Recommendation

		User features to compute similarity			Items : event		
		Region	Genre	Cluster based on # of albums, FB likes and Twitter followers	Cover release	Interview	...
Album	1	EU	Pop	3 albums 123432 FB likes 214894 Twitter followers <u>Cluster 2</u>	?	?	
	2	NA	Rock	7 albums 532784 FB likes 42398 Twitter followers <u>Cluster 3</u>	?	?	
	n	NA	Classical	2 albums 85934 FB likes 21893 Twitter followers <u>Cluster 5</u>	?	?	

Offline processing

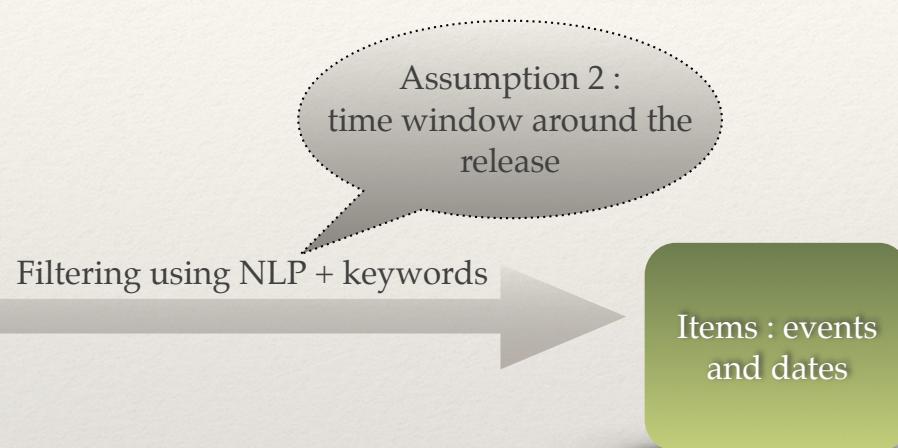
Data Gathering



Problem Modeling

Offline data processing

Live Recommendation



Maroon 5 @M5NewsRoom · 11h

...@Maroon5 to Release New Album 'V' in September, Signs Deal With @LiveNation! More here: goo.gl/Cw6Uqi
pic.twitter.com/vwZRG6OTEu

Reply Retweet Favorite



Shakira a partagé un lien.
7 mai

Did you watch the new video for Dare (La La La) yet? Here's what Shak has to say about it: "When we shot this video I was actually a month and a half pregnant with my son Milan so it was a really happy moment in my life – it sort of matches the mood of the song and it was a very celebratory time" ShakHQ



Shakira - Dare (La La La)

Download Shakira's self-titled album on iTunes....

Pre-processed Recommendation Matrix

	Data Gathering	Problem Modeling	<u>Offline data processing</u>	Live Recommendation
	User features to compute similarity			Items : event
Region	Genre	Cluster based on # of albums, FB likes and Twitter followers		
Album 1	EU	Pop	3 albums 123432 FB likes 214894 Twitter followers <u>Cluster 2</u>	65 54
Album2	NA	Rock	7 albums 532784 FB likes 42398 Twitter followers <u>Cluster 3</u>	30 -
...				
Album n	NA	Classical	2 albums 85934 FB likes 21893 Twitter followers <u>Cluster 5</u>	32 45

NLP + keywords processing

Similarity Computation

Data Gathering

Problem Modeling

Offline data processing

Live Recommendation

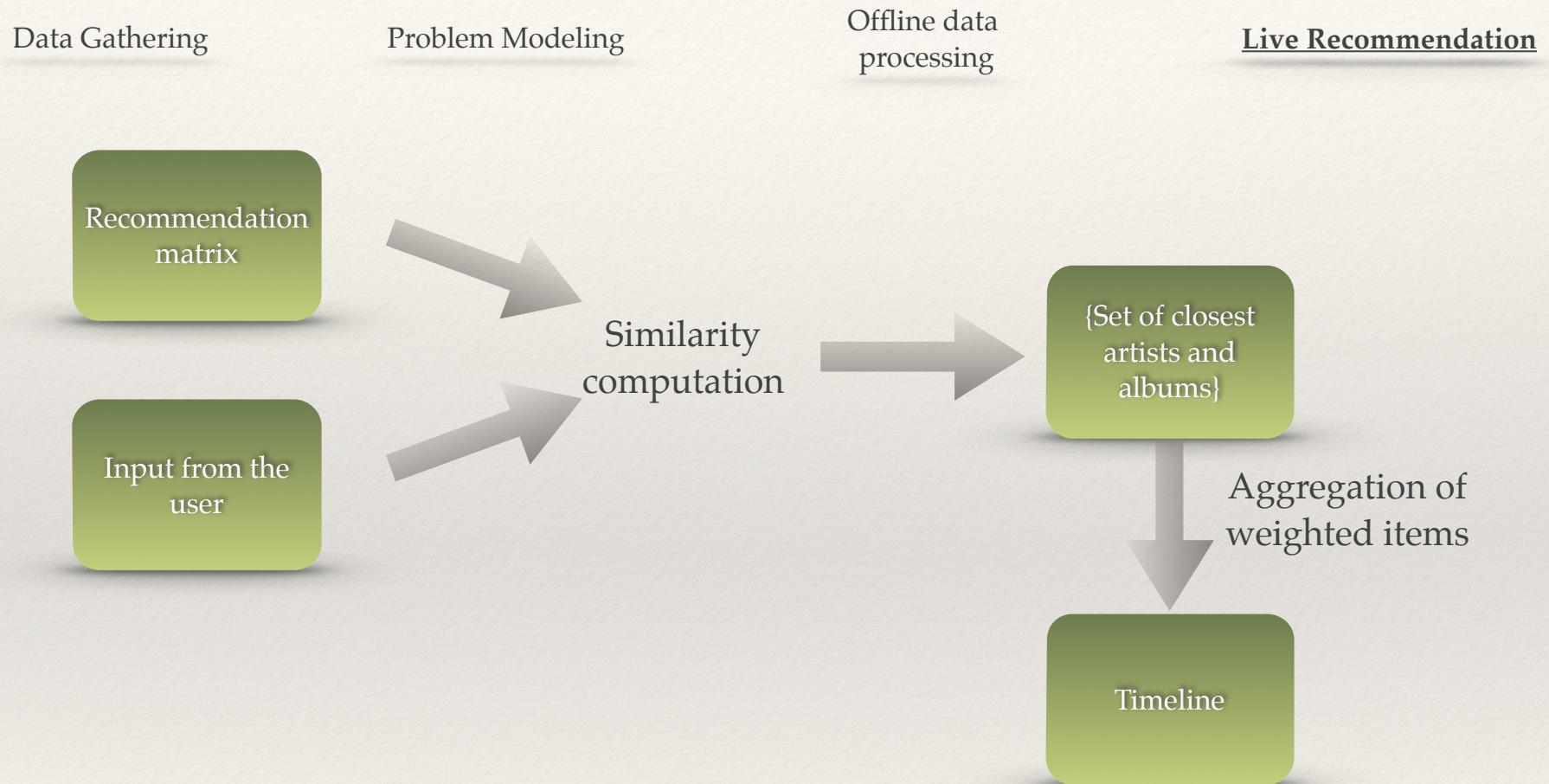
❖ 5 User attributes :

- Region (EU, NA, SA, ...) → sim : {0,1}
 - Genres → sim : {0,1}
 - K-means clustering based on 3 attributes → sim : {0,1}
 - Number of albums already released
 - FB likes score
 - Twitter followers score
- ❖ **Sim (A, B) = SUM(weight * Simregion(A,B) + ...) with SUM(weights)= 1**

Refinement



Live Recommendation



Next Steps

- ❖ Extend the artists set by enlarging the search criteria
(update continuously)
- ❖ Try to use social media as the basis to construct the artists set
- ❖ Have a dynamic list of events using online analysis