

**SPARK****D**

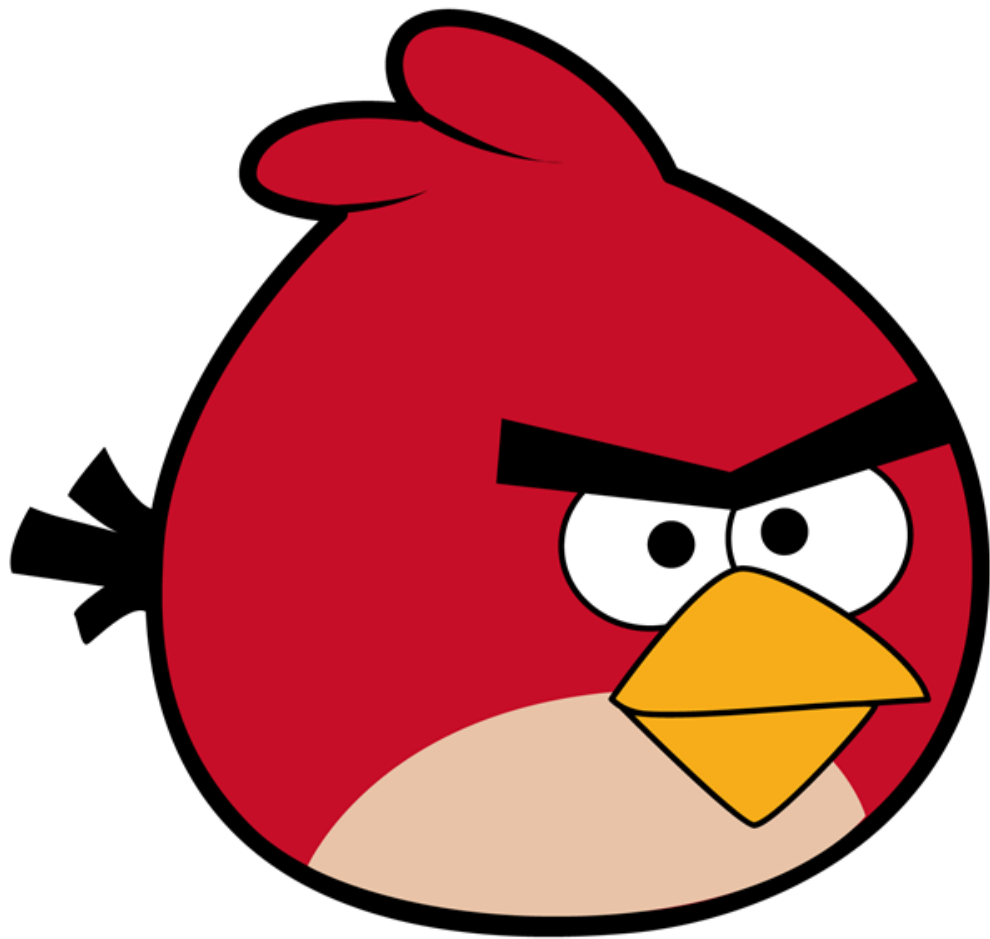
# Ever had a...?

**GREAT**  
application idea?

**WEIRD IDEA**  
in a crazy  
mood?

# You know.. one of those ideas

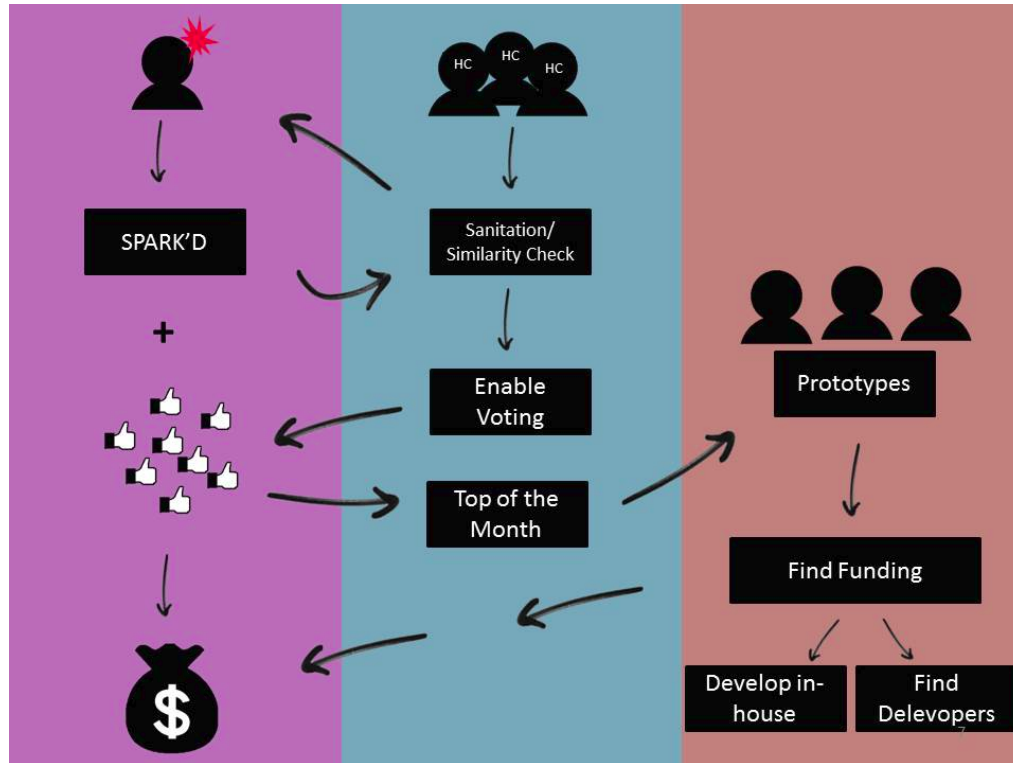
*A crazy game with flying birds, trying to knock out green alien pigs!*



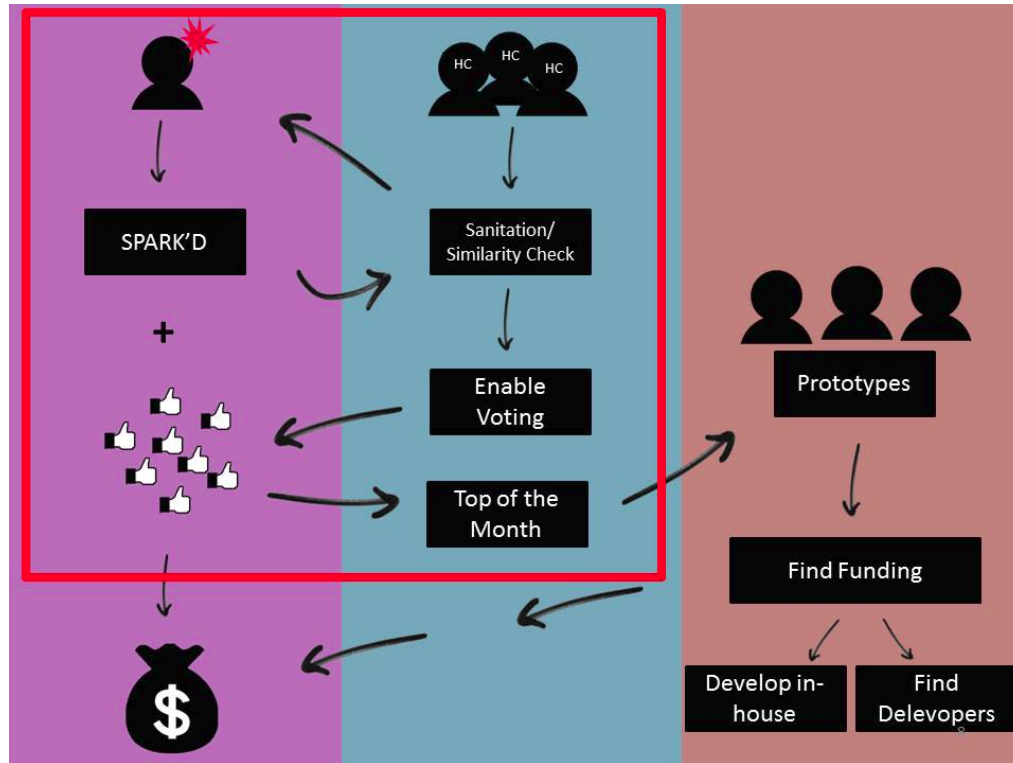
# Sparked

**Group 2 - Alex, Gizem, Hao, Miriam, Peter**

# What is Sparked?



# What is Sparked?



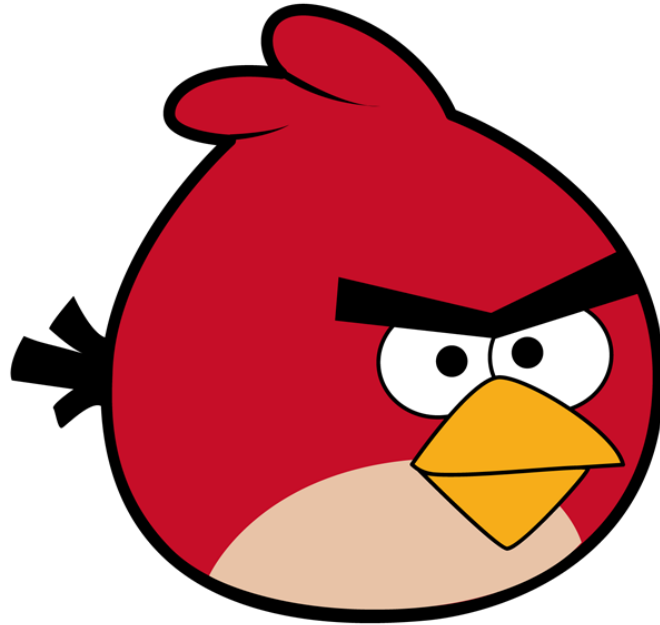
# Ideas from the crowd

*“Crowdsourcing process generated ideas score significantly higher in terms of **novelty**, **customer benefit** but, **slightly lower in feasibility**”*

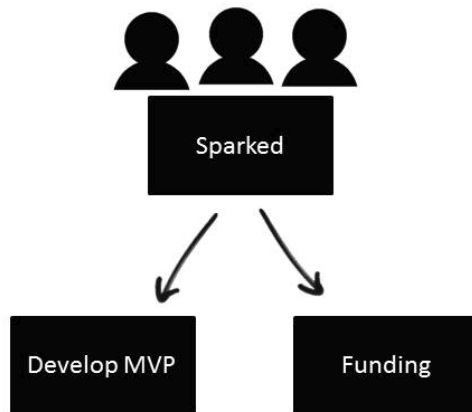
(Poetz and Schreier, 2012)



# Ideas need implementation



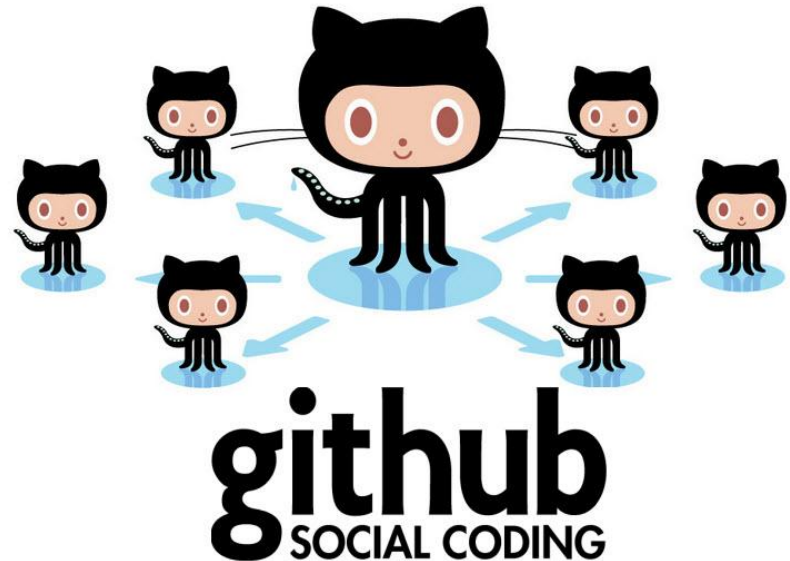
# More than ideas



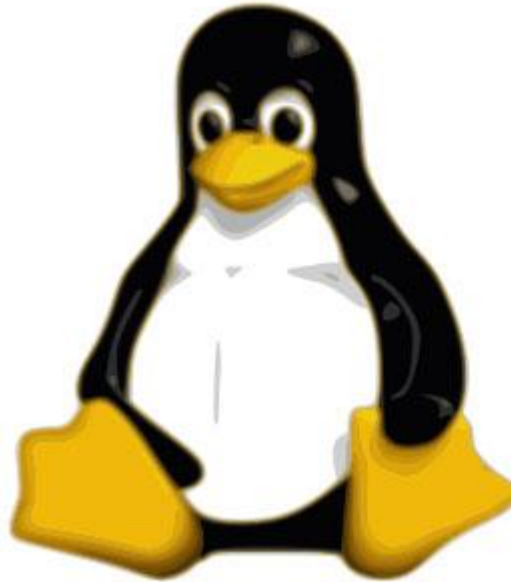
# Development Environment

# Github

- Easy collaboration
- Issues + Pull Requests allow easy tracking of discussions
- Quickly move code to different environments



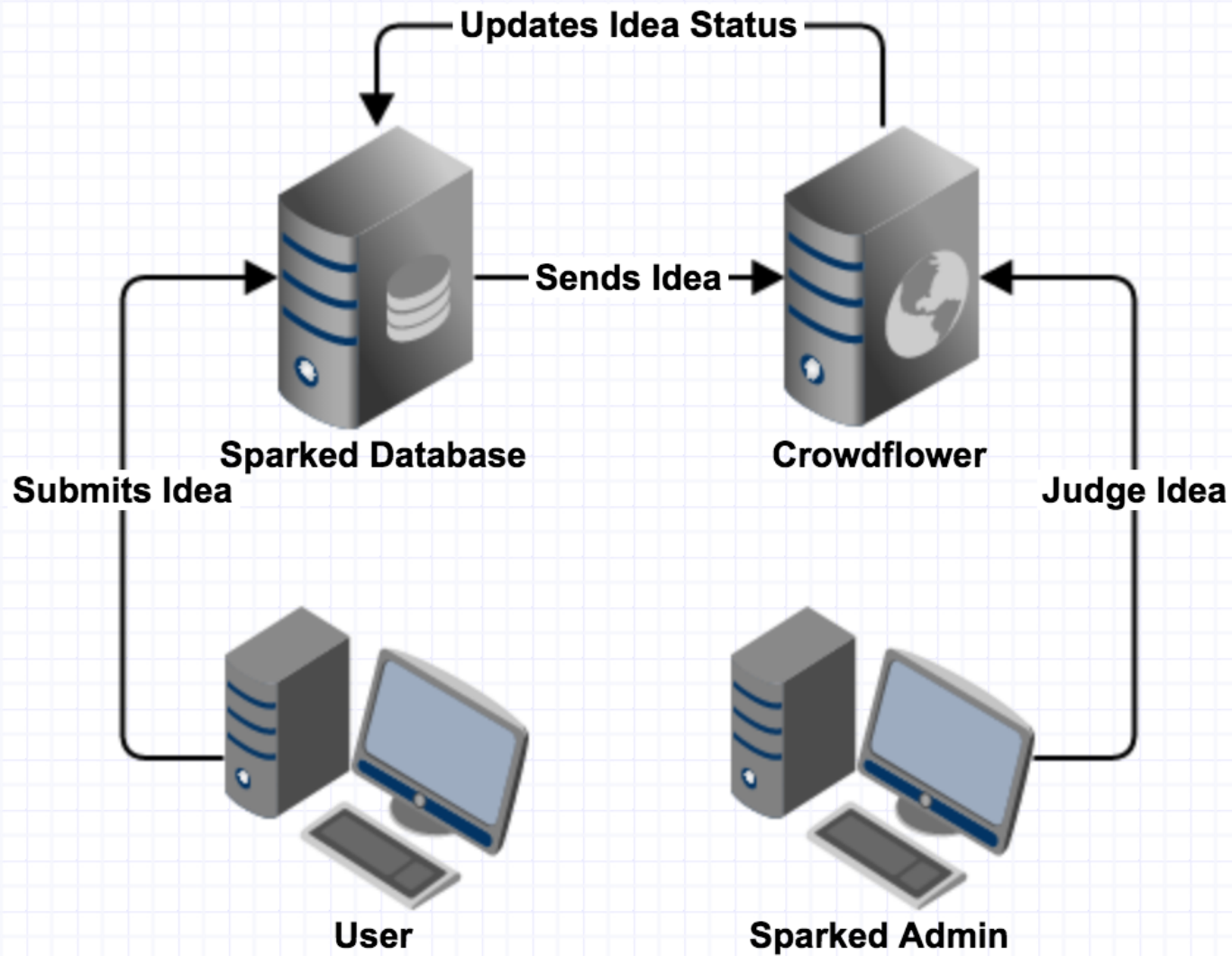
# Amazon AWS+LAMP Stack



# Crowdfower



- Human Computation used to check user generated input, specifically images



# Dandelion

- dataTXT semantic api
- dataTXT similarity

Language: **English**

[Copy permalink](#)

[Show API url](#)

[Show me the response](#)

Escape from zombies in this fun game

0 persons

1 work

2 organisations

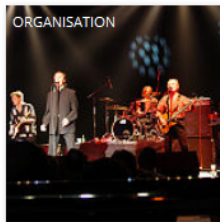
0 places

0 events

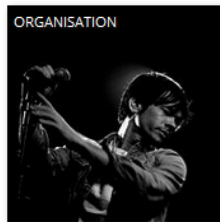
1 concept



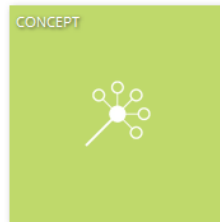
Escape (Enrique Igle...



The Zombies



Fun (band)

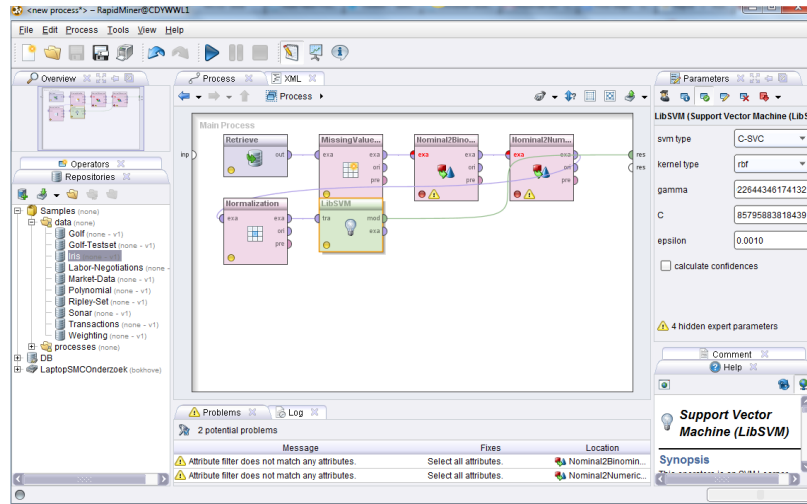


The Game (rapper)



# RapidMiner

- unit based building of tasks
- uses cosine similarity



# Lucene

- Open Source Library
- Solr Framework
- MoreLikeThis-function



# Evaluation

- Test data with 10 unique ideas described in 5 different ways; total of 50 ideas
- Used Dandelion, RapidMiner and Lucene for similarity check
- Ranked results
- Results evaluated with MAP (Mean Average Precision)

$$\text{AveP} = \frac{\sum_{k=1}^n (P(k) \times \text{rel}(k))}{\text{number of relevant documents}}$$

$$\text{MAP} = \frac{\sum_{q=1}^Q \text{AveP}(q)}{Q}$$

# Results

MAP Dandelion: 0.6038

MAP RapidMiner: 0.7024

MAP Lucene: 0.7851

Lucene is the winner!

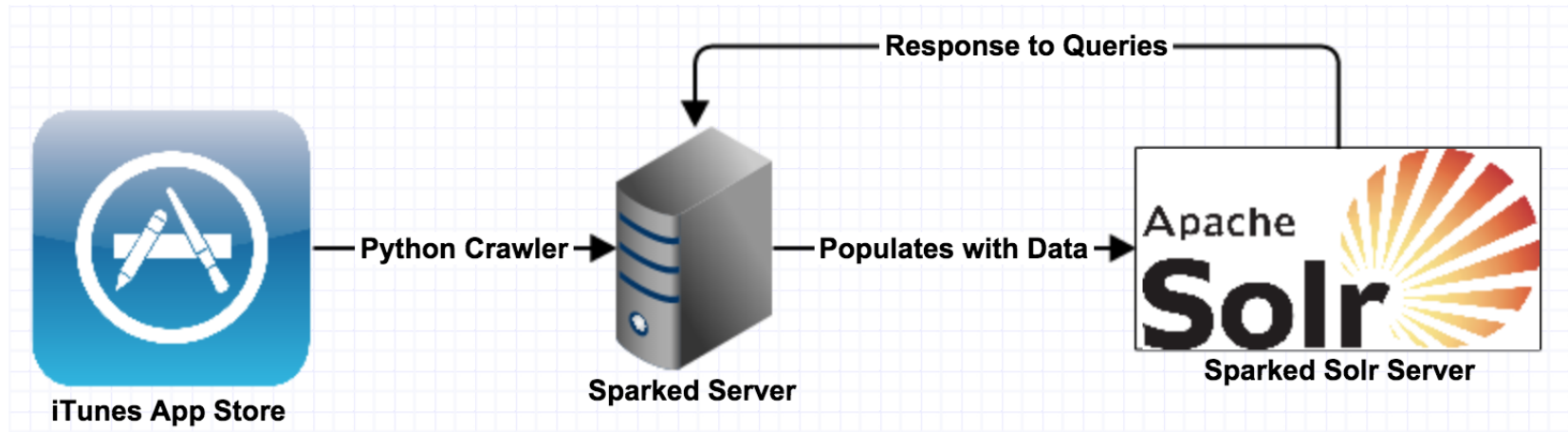
Idea_id :36	
ID	Similarity
16	0.4632888
26	0.22929816
46	0.12640676
6	0.09674742
19	0.044678163
13	0.041342873
47	0.035393994
38	0.03412616
1	0.031224884
29	0.024979908
AveP	1

Idea_id :37	
ID	Similarity
27	0.38507053
47	0.16748056
32	0.15733582
40	0.14886288
17	0.14143643
1	0.119381666
46	0.115795344
39	0.09550533
7	0.081342004
42	0.07902314
AveP	0.7611

Idea_id :38	
ID	Similarity
18	0.5862379
28	0.47141254
40	0.2705041
32	0.26725975
48	0.2590901
16	0.17419784
8	0.16626859
12	0.13340549
33	0.09053245
46	0.08315497
AveP	0.7929

# Web Crawler

- Gathers apps from iTunes App Store
- Added subsection of apps to Lucene DB
- Used to compare ideas to existing apps



DEMO  
SPARK'D

The image features the text 'DEMO' in a yellow, sans-serif font on the top line, and 'SPARK'D' in a dark blue, bold, sans-serif font on the bottom line. A yellow, multi-pointed starburst graphic is placed between the two words, overlapping the 'O' in 'DEMO' and the 'K' in 'SPARK'D'.

# Future Work

We think it is a success, but no MVP yet.

- Facebook/Twitter integration
- Completely integrate the iTunes data
- Similarity check improved

**SPARK****D**