Usability and utility of SmallWorlds

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facebook

Search

You

Your items

Friends Who Like Your Items

Your Recommendations

Other Friends and Items

The Secret Life of Bees

Valerie Payne

Serenity

Disney

Harry Potter

Batman: The Dark Knight

Finding Nemo

The Lord of the Rings Trilogy (Official Page)

Lillian DiGiuseppe

Sarah Majdali Ryerson

Amber Joers

Emilyanne Pinkerton Jewell

Chris Davis

Garden State

Tangled

Dead Poets Society

Formal Experiment

- Evaluate Trust
  - trust of system
  - trust of visualization
  - impact of experience and real world data on trust

Formal Experiment: Get Real Trust Data

Friends Name	Trust score for friend in terms of movie recommender

Formal Experiments:
Text Based System

Movie	1 very bad recommendation	2	3	4	5 very good recommendation	N/A
1st						
2nd						
3rd						
4th						
5th						

	1 Fully Mistrust System	2	3	4	5 Fully Trust System	N/A
Text Based System						

Formal Experiment: Visualization System

Movie	1 very bad recommendation	2	3	4	5 very good recommendation	N/A
1st						
2nd						
3rd						
4th						
5th						

	1 Fully Mistrust System	2	3	4	5 Fully Trust System	N/A
Text Based System						

Formal Experiment:
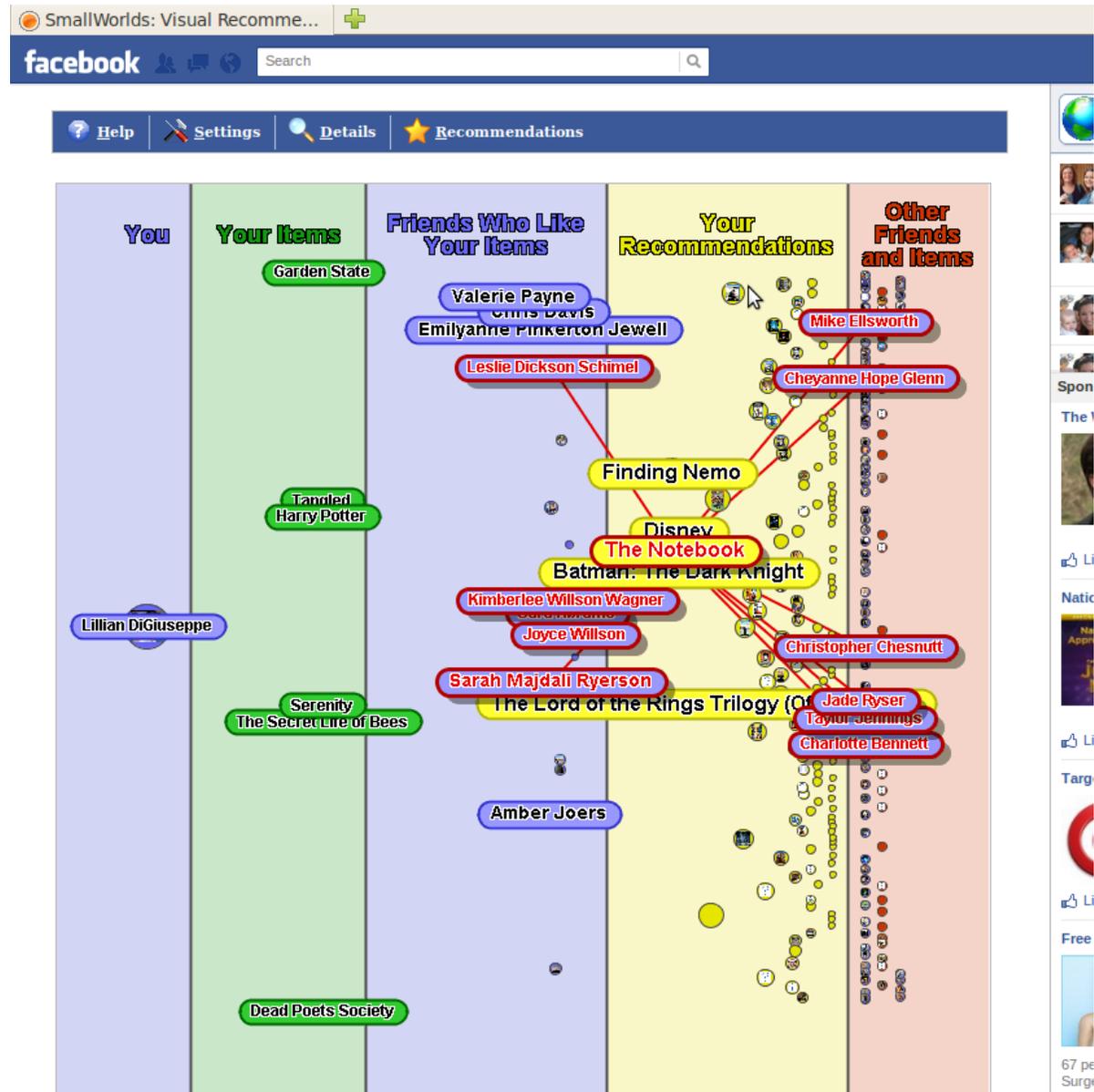# Interaction with Visualization
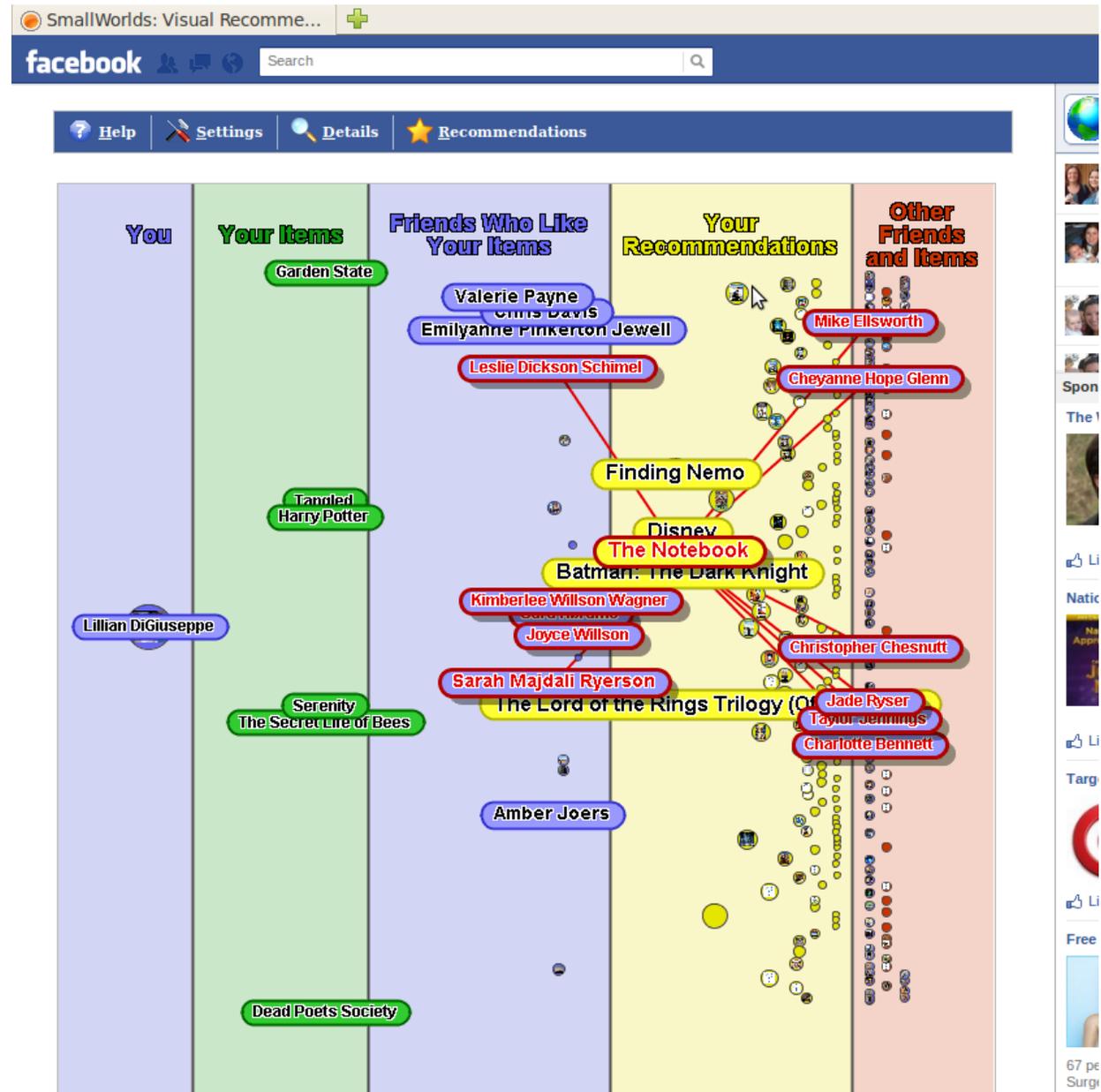
Two Tasks

Task 1
- Increase two different friends trust scores

Task 2
- Change a movie from recommended, to liked

Formal Experiment:
Use Real Trust Data

Movie	1 very bad recommendation	2	3	4	5 very good recommendation	N/A
1st						
2nd						
3rd						
4th						
5th						

	1 Fully Mistrust System	2	3	4	5 Fully Trust System	N/A
Text Based System						

Preliminary Results

● How much do they trust their friends?

　data：（2,4,1,3,3）（5,2,2,2,4）（5,1,1,3,1),（4,3,3,1,1）

　Mean (Average) = 2.55
　Standard deviation = 1.35627

The average trust for their friends is not very high, while
for   some friends they highly trust, for some they merely trust.

Preliminary Results

- How good are the recommendations?
  - Trust with text view - slightly worse[avg 3.45]
  - Trust with visualization - in between [avg 3.471]
  - Trust with real world data - best [avg 3.813]
    - More and more N/A
- How much do they trust the systems:
  - Trust with text view - best [avg 2.75]
  - Trust with visualization - slightly worse [avg 2.25]
  - Trust with real world data - same [avg 2.25]
    - Some Specifics
      - 25% no trust at all (score 1)
      - 75% have little trust (score of 1-2)
      - 25% have some trust (score 4)

Comments from Subjects

- The text-based system:
  - "...clear ..."
  - "... it guessed movies [that] apeal to me..."
  - "I liked seeing the long list of movies to think about."
- visualization-based system:
  - Positive:
    - "...show the movies liked by my friends..."
    - "Seeing why it...used the friends it did."
  - Negative:
    - "...display so much information..."
    - "...it is really confusing..."
   - "ugly...messy... and it is using friends I don't talk to."

Comments from Subjects

- Real world-data based Recommendation :
  - Negative:
    - "... not really any aspect [helped me to trust the recommendation]..."
    - "...information boxes are hiding each other..."
  - 0% could complete the first task
  - 50% could not complete second task
- Which system is best:
  - "...the text is clean but couldn't adjust from who you are getting recommendation from..."
  - "The text output only."

System Halting Problems

These things made it impossible to perform this study as outlined

Things that went wrong

The visualization appears as a circle instead of columns
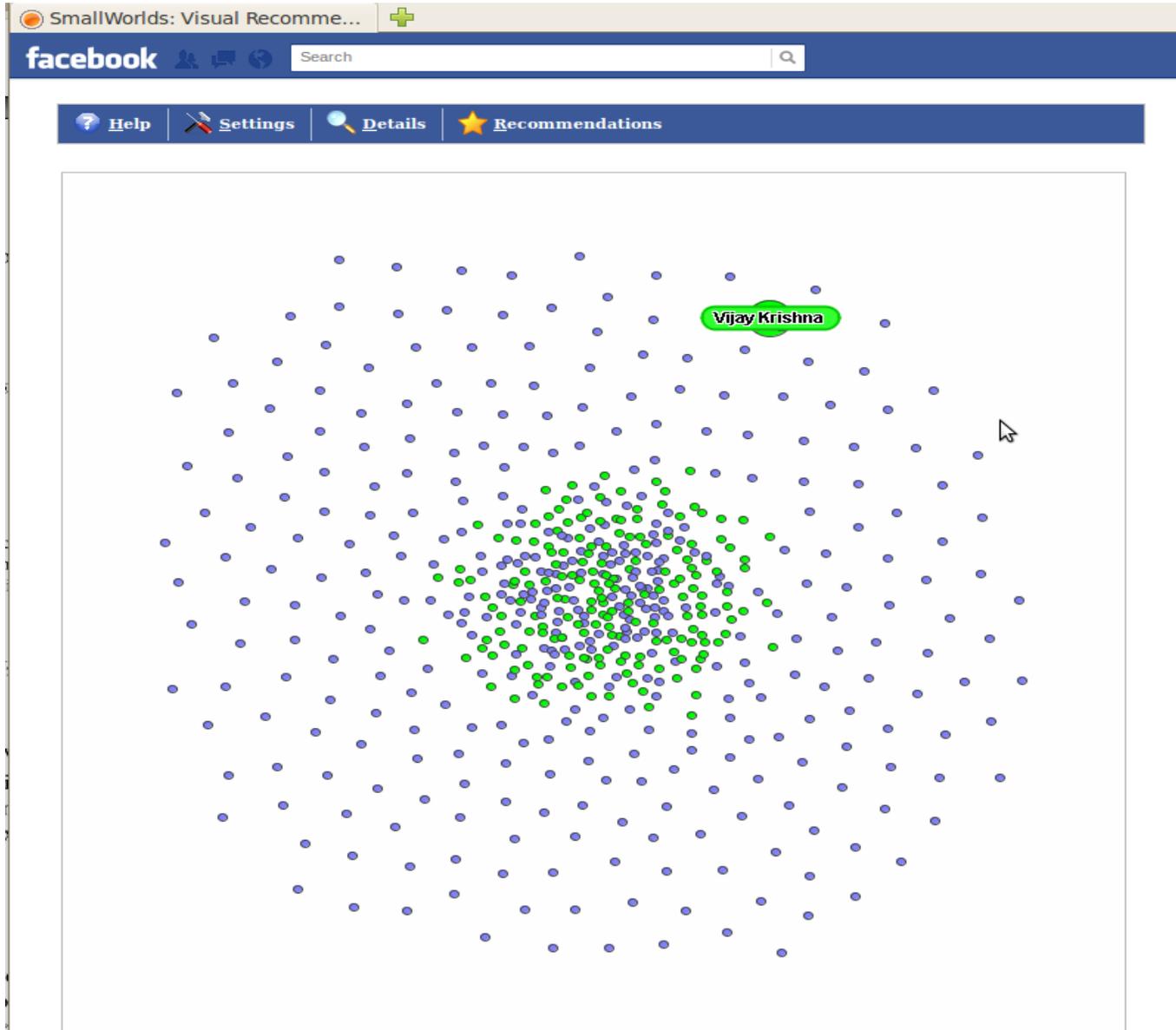
Things that went wrong

when clicked on the person, nothing would be correlated
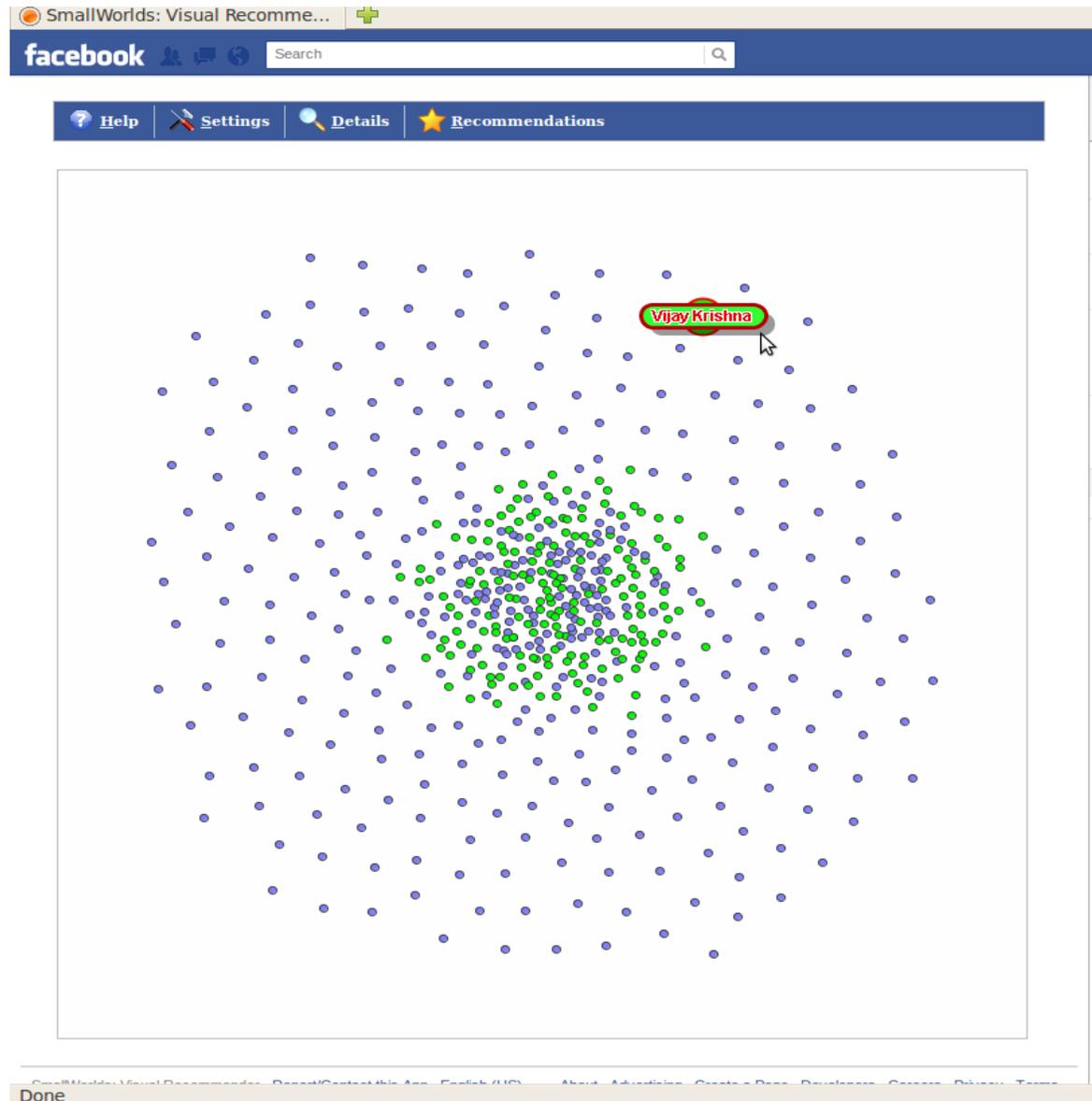
Things that went wrong

The system would recommend nothing
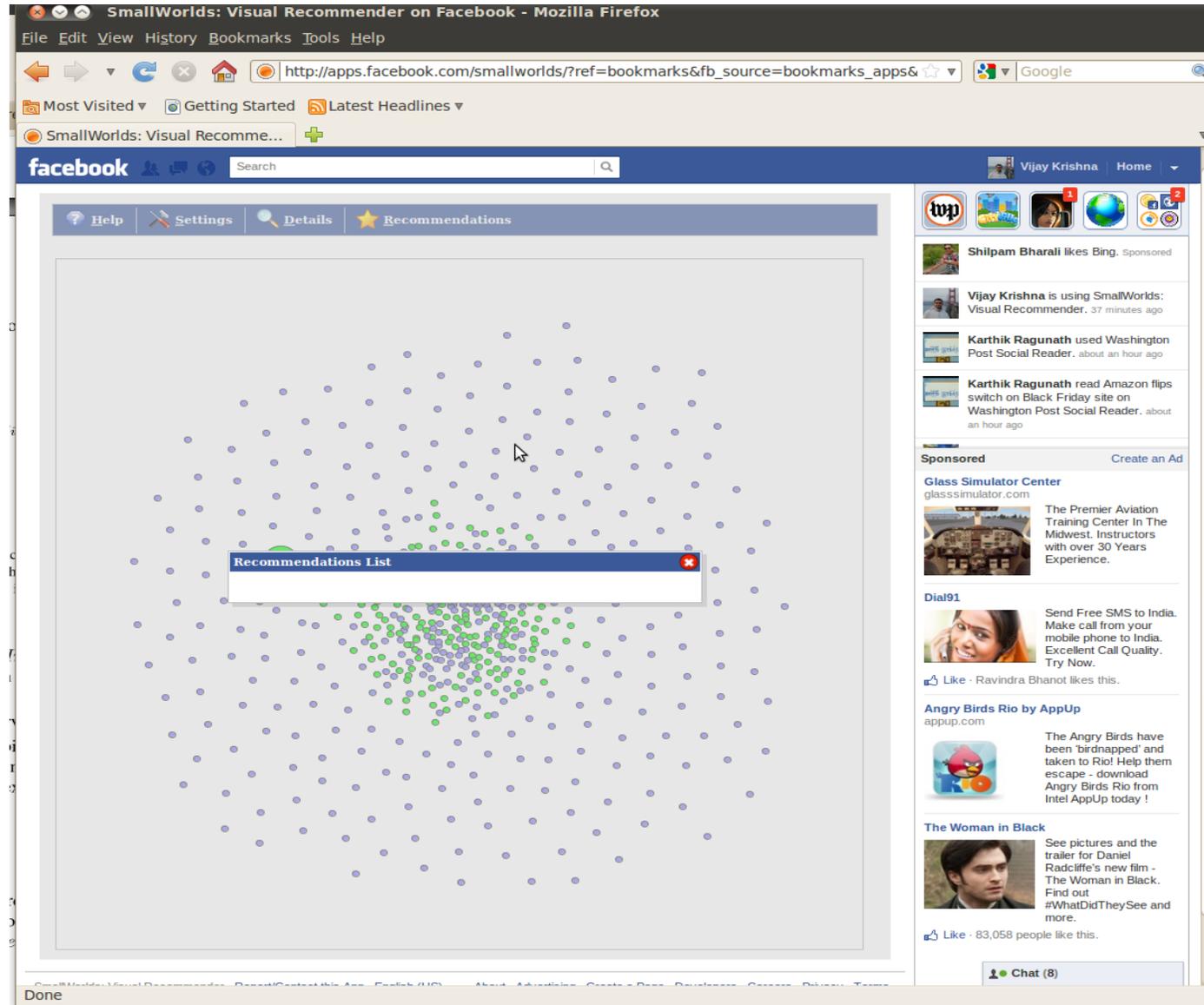
Usability Problems

These problems made it difficult for the people to use the system, or made the system behave incorrectly
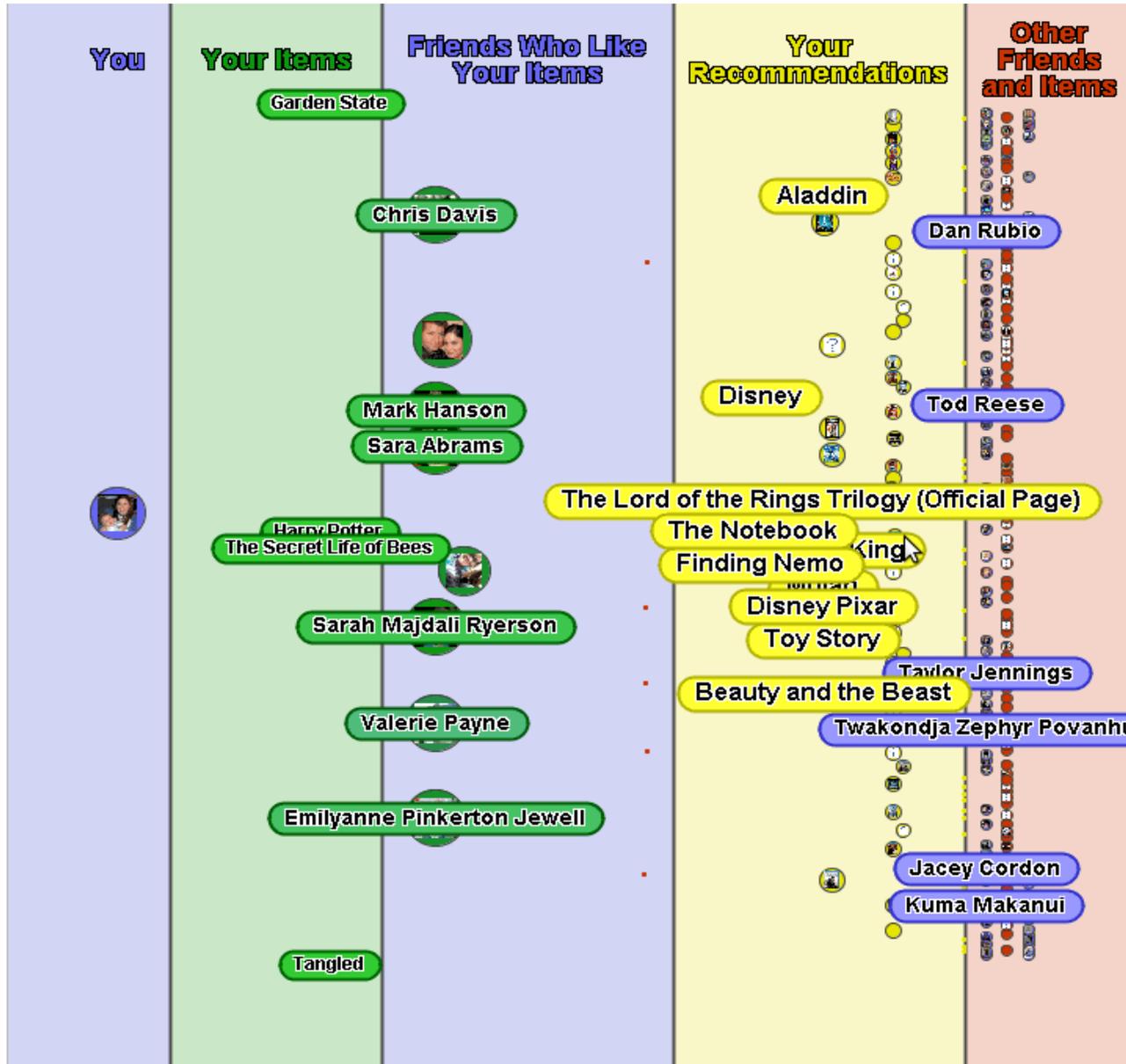
Things that went wrong
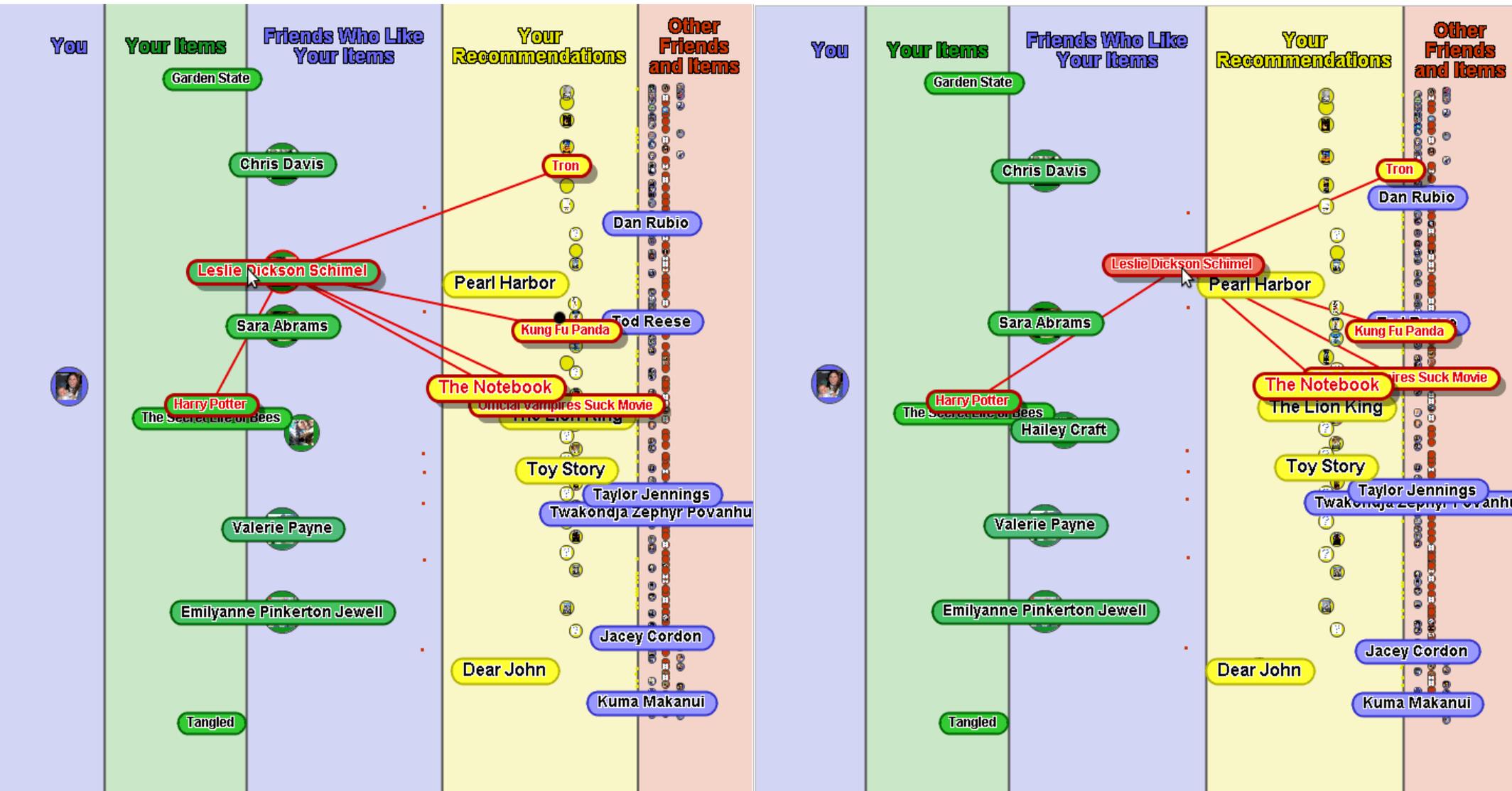
The reset function doesn't work

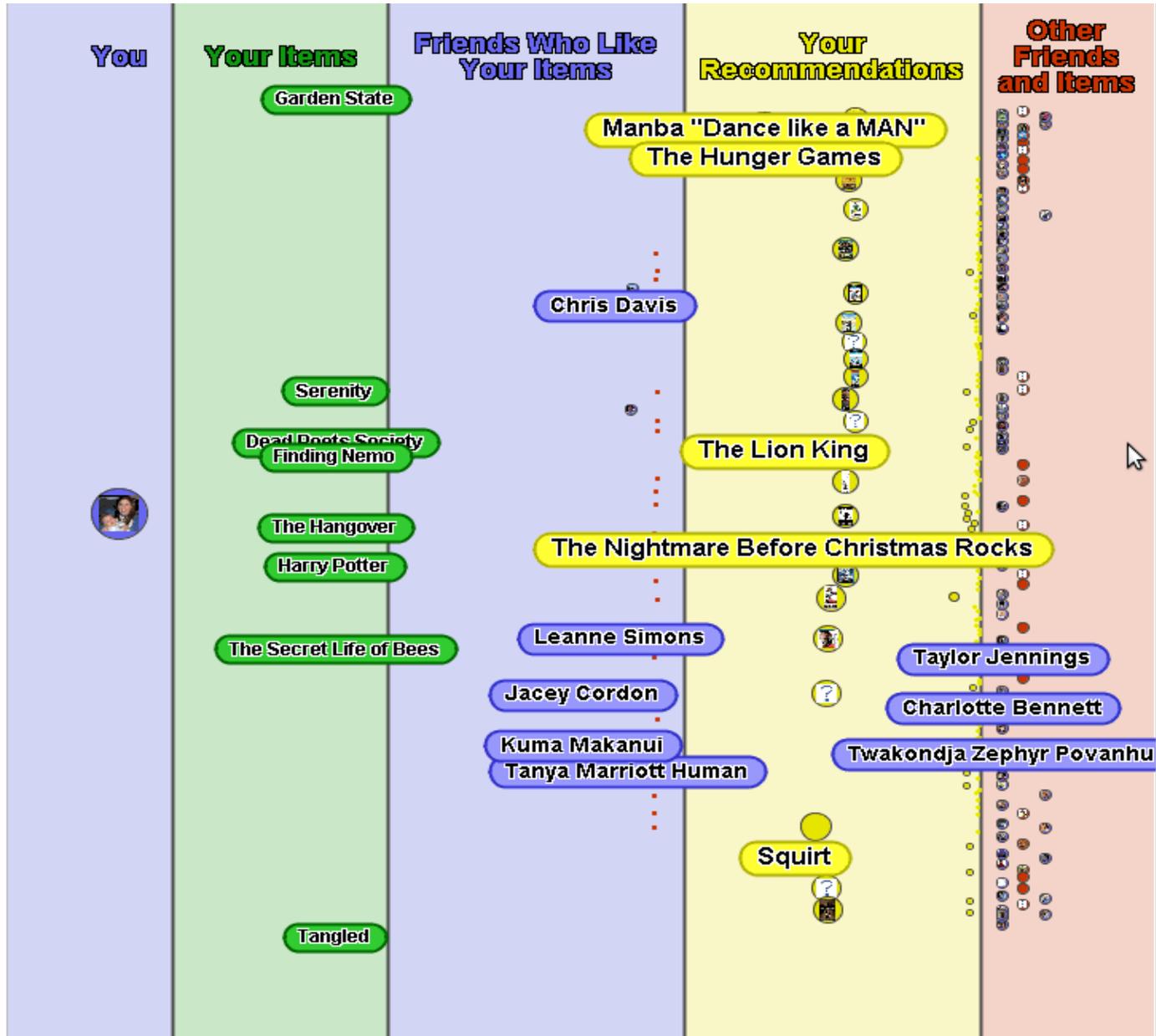# Things that went wrong

The items are overlapped

Things that went wrong

Users don't know the meaning of the layout or the moves

Things that went wrong

People are highlighted in the wrong column

Timeline

Week 8: Presentation, All
Week 9: Analysis of data, Fang/Naiyu
          Writing Report, all
Week 10: Writing Report, all

Report:
- Problem: Fang
- Initial Steps/Methods: Fang, Naiyu
- Results: Naiyu
- Interpretation of results: Nicholas, Naiyu
- Recommendations for improvement: Fang, Nicholas
- Conclusion: Nicholas