Pragmatic Lineage Linked Social Networking

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Lineage Linked Social Networking Basics

- Identify the user's ancestors (Inputs)
- Compare the users' pedigrees (Processing)
- Show interesting commonalities (Output)

Possible Results

- Common Ancestors (Notable or Notorious)
- Common Geographic Heritage
- Common Societal Connections

Identify the user's ancestors

- Complete Pedigree (GEDCOM file)
  - Lot's of data for comparisons (too much?)
  - Only for genealogists
- 4 generation pedigree (by hand)
  - Works for technophobes and swimmers
  - Might not be enough data to match global DB
- Interactive Pedigree Creation
  - Minimizes needed recall, data entry, and work
  - Most complex (requires YATE development):
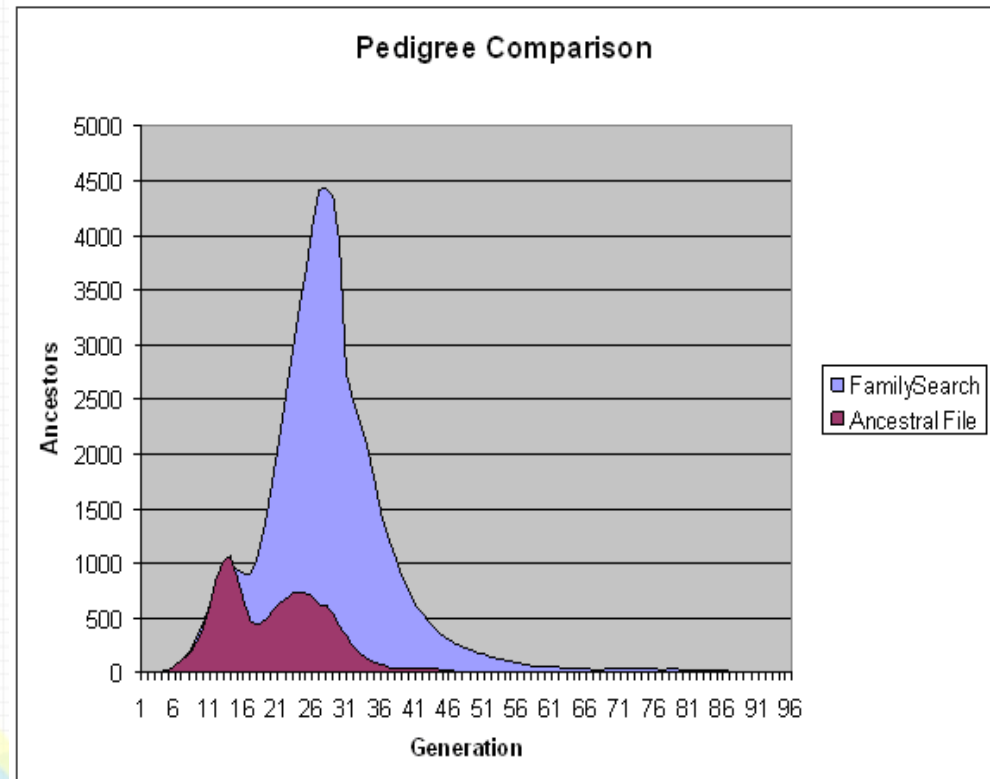- Online Repository (FamilySearch API)

How much can a user recall?

- "Phoning a friend" was allowed and frequently used.

- A high percentage of known ancestors had a known spouse.

	Grandparents	Great Grandparents	Great Great Grandparents
Total non blank couples	6188	3777	1155
>1 character for all 4 fields	82%	64%	73%
>1 character for only 3 fields	7%	6%	5%
>1 character for only 2 fields	6%	11%	9%
>1 character for only 1 field	4%	18%	12%
Missing wife's maiden name	14%	31%	24%
Missing husband's given name	7%	22%	14%
Missing wife's given name	10%	29%	22%
Missing husband's surname	1%	1%	1%

Ancestral File vs FS-API

- More ancestors means more relatives.

- Especially distant ones.

- Fill the gap between the user and DB
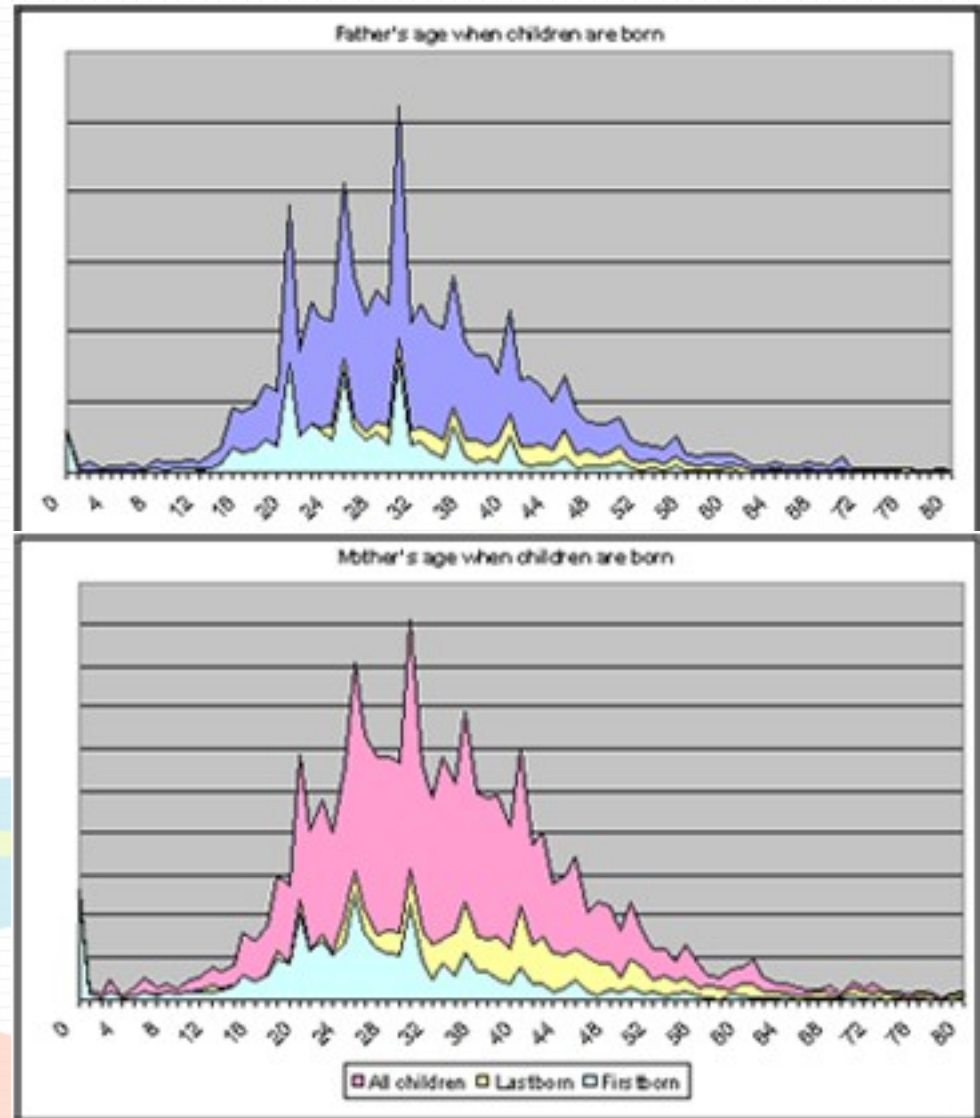

Pedigree Comparison

Compare the users' pedigrees

- Clean the data
  - Validate by birth date
- Match-Merge Individuals
  - Avoid having to do it
- Processing pedigrees, not people
  - Flatten the pedigree for speed and simplicity
- Making it practical
  - People won't wait forever... Or will they?

Clean the data

- ## Fathers' ages
  - – "World Records"
    - 12-90
  - – My Pedigree
    - 13-70

- ## Mothers' ages
  - – "World Records"
    - 5-66
  - – My Pedigree
    - 10-64

Father's age when children are born

Mother's age when children are born

All children   Lastborn   First born

Match-merge individuals

- Work from a single merged database
  - If you are using multiple sources, do the merging ahead of time.
  - 40-60,000 people in well populated pedigree
  - Billions of match comparisons (with a similar sized pedigree) to find all relations.
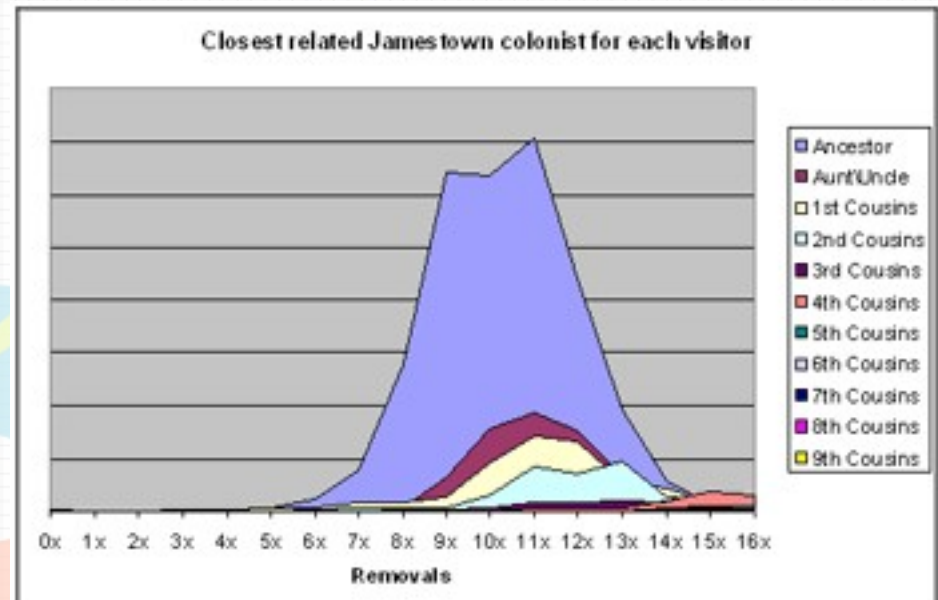 - Only one join from merged database

Process pedigrees not people

- Take a more global view of genealogy
  - Find people no man has found before
- Pedigree perspective (plus cousins)
  - Only walk the tree once
  - One join query finds all relatives
  - Elements of an entry in pedigree
    - Required OwnerID, RelativeId
    - Generation up (Plus down for cousins)
    - Previous entry or entries in the pedigree
      - If you want to re-create the path(s)

Make it practical

- Jamestown colonist pedigrees
  - 139MB in DB (789 colonists)
- Pedigrees with 4th cousins
  - 1,234MB in DB (~9 times)
- 1 terabyte ($100?)
  - 500,000 people
- 500 Million people
  - 1 exabyte

Percentages of Jamestown related users with a relative in the category shown or closer	
61.9%	Ancestor
75.2%	Aunt\Uncle
86.4%	1st Cousins
93.8%	2nd Cousins
96.5%	3rd Cousins
98.8%	4th Cousins

Closest related Jamestown colonist for each visitor

Show interesting commonalities

- Common ancestor lines
  - How to show what 5th cousins 4 times removed means
- Computer generated biographies
  - Putting vital statistics in readable form
- My ancestor and your ancestor lived in the same place at the same time
  - Did one have a journal about the environment?
  - Did one mention the other in a journal?

Common ancestor lines

NauvooPageantCousins.org   Peter Ivie | signout

You are related to the following:

Louisa Tanner
is your 3rd cousin 6 times removed
Brigham Young
is your 4th cousin 9 times removed
Mary Ann Frost
is your 4th cousin 9 times removed
Phoebe Whittemore Carter
is your 5th cousin 5 times removed
Heber Chase Kimball
is your 5th cousin 5 times removed
Eliza Roxey Snow
is your 5th cousin 5 times removed
Emma Hale
is your 5th cousin 7 times removed
Anna Bibbins Chaffee
is your 5th cousin 7 times removed
Wilford Woodruff
is your 6th cousin 5 times removed
Vilate Murray
is your 6th cousin 6 times removed
Parley Parker Pratt
is your 6th cousin 6 times removed

Heber Chase Kimball
is your 5th cousin 5 times removed

/ Anna Bibble \

Rebecca Jones	- Siblings -	Sarah Jones
James Prichard	- 1st cousins -	Ebenezer Belknap
James Prichard	- 2nd cousins -	Abiah Belknap
Sarah Pritchard	- 3rd cousins -	Meribah Roberts
Noah Rogers	- 4th cousins -	Solomon Farnham Kimball
Theodore Rogers	- 5th cousins -	Heber Chase Kimball
Hannah Lucretia Rogers	- Once removed -	
Hannah Cropper	- Twice removed -	
Ruth Ashby	- 3 times removed -	
Evan Leon Ivie	- 4 times removed -	
Peter Ivie	- 5 times removed -	

Heber C. Kimball was a leader in the early days of the Church. He served as one of the original twelve apostles, and as first counselor to Brigham Young in the presidency from 1847-1868. Kimball writes that he had always contemplated aspects of religion and salvation since he was about 12 years old. Only three weeks after receiving baptism in the Baptist Church, three elders from The Church of Jesus

Conclusion

- As we turn and look back at our ancestors, we should see in the reflection on the glass, ourselves, our families, and even our neighbors.