Graphs IV

AGENDA

- Social Graph II

- Sprint Challenge Intro

- *I will have an AMA tomorrow from 6-7PM PST*

Social Graph II

GETTING ALL SOCIAL PATHS

• Return a user's extended social network and chain of friendships that link them

• Use a dictionary and BFT to traverse the graph and record the connections

• Remember: **shortest path = breadth-first**

Getting All Social Paths Demo

RANDOM SAMPLING

• What's the runtime of *populate_graph*? Can we do better?

• Yes!

RANDOM SAMPLING

• *"Each individual is **chosen randomly** and entirely by chance, such that **each individual has the same probability of being chosen** at any stage during the sampling process"* - Wikipedia

• Let's modify our populate_graph to be more efficient:

    • Choose two random users (vertices) and try to make them friends (edges)

Random Sampling Demo

Adventure Maze

ADVENTURE MAZE

- This will be your sprint challenge

- Traverse all 500 rooms and output its path

- The least amount of steps the better

- [Link](#)