# Final Project

#### March 17, 2020

# 1 TODO Finish Project [66%]

- 1.1 DONE create google form for member strengths
- 1.2 DONE Write Requirements
  - Input
    - Multiple Types
      - \* User inputs two names (wikipages)
      - \* ~ user inputs one name (wiki page)
  - Processing
    - Convert string to related node id
    - Find the paths such that all possible paths are <= |path|
  - Interaction
    - 1. Take user input
    - 2. Say if we found a link or not
      - If found a link keep going, else terminate
    - 3. Ask user for a guess about the path length
      - The number of guesses is yet to be decided
      - Allow user to skip guessing
    - 4. Show the output.
  - Output
    - 1. The length

- 2. The actual path
  - Should be sorted using lexicographical to sort the paths
    - \* Least obvious
      - · Least category change
  - A module to wrap around the SQLite module provided by Java
- 3. Interface
  - Responsible for input and output
  - State of interaction process
    - \* Input step, etc.
- 4. Traversal Module
  - Responsible for finding the shortest path between two nodes
- ADT
  - Path
    - \* Stores the solutions sequences
  - Node
    - \* node number
    - \* set of neighbouring nodes numbers, not ADT
- 1.2.1 DONE Split req into functional and non-functional bullet points
- 1.3 TODO Implement program [37%]
- 1.3.1 DONE Assign implementation
- 1.3.2 DONE Distribute modules work
- 1.3.3 DONE Write assignment
- 1.3.4 ASSIGN General Project Management [100%]
  - State "ASSIGN" from "TODO" [2020-03-10 Tue 20:54] Omar Alkersh
  - 1. **DONE** Write .gitignore
  - 2. **DONE** Remove any extra files from repo
  - 3. **DONE** Write makefile
  - 4. **CANCELLED** Look into CI in gitlab [0%]

**ARCHIVE** 

## 1.3.5 ASSIGN Algorithm Implementation [0%]

- State "ASSIGN" from "TODO" [2020-03-10 Tue 20:55] Nihal Azavedo
- Can be a class with just abstract methods, with no constructor. It can be private.
- Let me know if you want to add some tasks
- 1. **TODO** Decide on implementation
  - maybe write some pseudo code?..

#### 1.3.6 ASSIGN SQLite Driver

- $\bullet$  State "ASSIGN" from "TODO" [2020-03-10 Tue 20:56] Mike Tee
- Needs to be a singleton

### 1.3.7 ASSIGN ADTs [0%]

- State "ASSIGN" from "ASSIGN" [2020-03-10 Tue 20:56] Jingze Dai "David"
- 1. **TODO** Implement NodeT
- 2. **TODO** Implement PathT

#### 1.3.8 ASSIGN CLI Implementation

- State "ASSIGN" from "TODO" [2020-03-10 Tue 20:57] Harshveer Gaba
- Needs to be a singleton

#### 2 Member roles

Name	Role
Harshveer Singh Gaba	UI Designer
Jingze Dai	ADTs
Mike Tee	SQL Interface
Nihal Azavedo	Graphing algorithm
Omar Alkresh	Project Management