# Final Project

March 27, 2020

# TODO Finish Project [66%]

# DONE create google form for member strengths DONE Write Requirements

- Input
  - Multiple Types
    - \* User inputs two names (wikipages)
    - $\ast\,\,\widetilde{}\,\,$ 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

#### DONE Split req into functional and non-functional bullet points

# TODO Implement program [90%]

**DONE** Assign implementation

**DONE** Distribute modules work

**DONE** Write assignment

#### DONE General Project Management [100%]

- State "ASSIGN" from "TODO" [2020-03-10 Tue 20:54] Omar Alkersh
- **DONE** Write .gitignore
- DONE Remove any extra files from repo
- **DONE** Write makefile
- DONE Add a doxyegn config file
- CANCELLED Look into CI in gitlab [0%]

**ARCHIVE** 

## DONE Graphing algorithm [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
- **TODO** Decide on implementation
  - maybe write some pseudo code?..

#### **DONE** Search algorithm

• State "ASSIGN" from "TODO" [2020-03-18 Wed 00:12] Omar Alkersh

#### **DONE** Sort Algorithm

• State "ASSIGN" from "TODO" [2020-03-18 Wed 00:13] Omar Alkersh

#### **DONE SQLite Driver**

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

## **DONE** ADTs [100%]

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

#### **ASSIGN UI Implementation**

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

## Member roles

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

# Meetings

#### Discussing the interface

- <2020-03-18 Wed 22:06>
- Discussing the different "screens" provided by the UI for the user to input the data.