Name: Mia Ginsberg, Lisa Ayisi, Jill Rayca

## \*\*\*How to play the Wikipedia Web Crawler game\*\*\*

- Step 1. Run the .java file which will run the main method
- **Step 2.** At the prompt within the terminal, Enter the title of the page you want to start from (Source)
- **Step 3.** At the prompt within the terminal, Enter the title of the page you want to find a path to (Destination).

The terminal should look like this after both topics have been inputted:

```
Run: WikipediaWebCrawler ×

"C:\Program Files\Java\jdk-1.8\bin\java.exe" ...

Enter the start page topic

Selena Gomez

Enter the end page topic

Taylor Swift

Running...
```

Figure 1.0: Terminal prompts

**Step 4.** Processing: Some links may no longer exist and so the algorithm might print that there is an error in fetching that link. This does not mean the algorithm itself is malfunctioning. See below for better context:

```
WikipediaWebCrawler ×

Error fetching childUrls: HTTP error fetching URL. Status=404, URL=[https://en.wikipedia.org/wiki/13_Reason_Why]

Error fetching childUrls: HTTP error fetching URL. Status=404, URL=[https://en.wikipedia.org/wiki/HitPiece]

Error fetching childUrls: HTTP error fetching URL. Status=404, URL=[https://en.wikipedia.org/wiki/Brittany_Spanos]
```

Figure 2.0: Potential error handling

**Step 5.** At the end of the run, the algorithm will print out the path consisting of the links it had to enter to reach the end path if it exists or null if it couldn't reach your destination page

```
Enter the start page topic

selena gomez

Enter the end page topic

taylor swift

Running...

Shortest path:
selena gomez -> Taylor Swift
```

Figure 3.0: Shortest path is found and printed

Name: Mia Ginsberg, Lisa Ayisi, Jill Rayca

## Some fun examples we found

1. Musicians to random food

Figure 4.0: The Weeknd vs. Pork

```
Enter the start page topic
rihanna
https://en.wikipedia.org/wiki/Rihanna
Enter the end page topic
hamburger
https://en.wikipedia.org/wiki/Hamburger
Running...
Match found: https://en.wikipedia.org/wiki/Hamburger
Shortest path:
Rihanna -> Drake (musician) -> Burger King -> Hamburger
```

Figure 5.0: Rihanna vs Hamburger

```
Enter the start page topic
taylor swift
Enter the end page topic
macaroni and cheese
Running...
Match found: https://en.wikipedia.org/wiki/Macaroni_and_cheese
Shortest path:
Taylor swift -> Cultural impact of Taylor Swift -> Starbucks -> Macaroni_and_cheese
```

Figure 6.0: Taylor Swift vs Mac and Cheese

Name: Mia Ginsberg, Lisa Ayisi, Jill Rayca

## 2. Study Hard

```
Enter the start page topic

diamond
https://en.wikipedia.org/wiki/Diamond
Enter the end page topic
grading in education
https://en.wikipedia.org/wiki/Grading_in_education
Running...
Match found: https://en.wikipedia.org/wiki/Grading_in_education
Shortest path:
Diamond -> Wisconsin -> Amtrak -> Grading_in_education
```

Figure 7.0: Diamond vs. GPA

```
Enter the start page topic
happiness
Enter the end page topic
bachelor's degree
Running...
Match found: https://en.wikipedia.org/wiki/Bachelor%27s_degree
Shortest path:
Happiness -> Emotion -> Stanley Schachter -> Bachelor%27s_degree
```

Figure 8.0: Happiness vs Bachelor's degree