

User Manual

The user can interact with the program at the bottom of the Main class in the main method.

There are two Strings labeled player1 and player2 that can be any of the names from the list below. Also, there is an int value called numHops that allows the user to find the number of players that are within a certain number of connections away from the source node. The user can manipulate any of these three values.

```
// player 1 is source, player 2 is destination
String player1 = "Udonis Haslem";
String player2 = "Ersan Ilyasova";

// the number of players within numHops from the source
int numHops = 2;

doBFS(player1, player2, numHops);
```

The program will output the distance from player1 to player2, with player1 being a distance of 0 from himself, being on a team with player1 is a distance of 1, and so forth. The program will also output the path of players taken to reach player2. Depending on the numHops value, the program will return the number of players who are within a distance of numHops from player1. Finally, the program will return the maximum distance from player1 in the graph.

```
Distance from Udonis Haslem to Ersan Ilyasova: 2
The path taken from Udonis Haslem to Ersan Ilyasova was: [Udonis Haslem, Joe Johnson, Ersan Ilyasova]
Number of players who are 2 away from source: 76
Maximum distance from source to every player: 3
```

List of Potential
Players:

Arron Afflalo
Alexis Ajinca
LaMarcus Aldridge
Tony Allen
Alan Anderson
Ryan Anderson
Carmelo Anthony
Trevor Ariza
Darrell Arthur
D.J. Augustin
J.J. Barea
Nicolas Batum
Jerryd Bayless
Michael Beasley
Marco Belinelli
Andrew Bogut
Corey Brewer
Aaron Brooks
Bobby Brown
Jose Calderon
Vince Carter
Mario Chalmers
Tyson Chandler
Wilson Chandler
Josh Childress
Nick Collison
Mike Conley
Jamal Crawford
Luol Deng
Goran Dragic
Jared Dudley
Kevin Durant
Raymond Felton
Channing Frye
Danilo Gallinari
Marc Gasol
Pau Gasol
Rudy Gay
Manu Ginobili
Eric Gordon
Marcin Gortat
Gerald Green

Jeff Green
Devin Harris
Udonis Haslem
Spencer Hawes
Nene Hilario
George Hill
Al Horford
Dwight Howard
Andre Iguodala
Ersan Ilyasova
Jarrett Jack
LeBron James
Al Jefferson
Richard Jefferson
Amir Johnson
Joe Johnson
DeAndre Jordan
Kyle Korver
Kosta Koufos
Courtney Lee
Shaun Livingston
Brook Lopez
Robin Lopez
Kevin Love
Kyle Lowry
Ian Mahinmi
O.J. Mayo
Luc Mbah a Moute
JaVale McGee
Josh McRoberts
C.J. Miles
Paul Millsap
Anthony Morrow
Jameer Nelson
Joakim Noah
Dirk Nowitzki
Emeka Okafor
Zaza Pachulia
Tony Parker
Chris Paul
Kendrick Perkins
Ronnie Price

Zach Randolph
J.J. Redick
Sergio Rodriguez
Rajon Rondo
Derrick Rose
Brandon Rush
Thabo Sefolosha
Ramon Sessions
J.R. Smith
Jason Smith
Josh Smith
Marreese Speights
Jason Terry
Anthony Tolliver
P.J. Tucker
Sasha Vujacic
Dwyane Wade
C.J. Watson
David West
Russell Westbrook
Damien Wilkins
Lou Williams
Marvin Williams
Brandan Wright
Nick Young
Thaddeus Young