**1520 Project Proposal**

Our goal is to create a web-based game inspired by the parlor game Six Degrees of Kevin Bacon which is a game based on the theory of six degrees of separation. The idea of six degrees of separation suggests that any given person is only six or fewer social connections away from any other person. Our game will challenge the user to navigate from one actor to another using other actors and common movie appearances. Consider the following example where the user is given the starting actor and the goal.

Start: Will Ferrell

Goal: Michael Keaton

Anchorman Mars Attacks! Batman Returns

Will Ferrell Christina Danny Michael

Applegate DeVito Keaton

The above solution could be spoken; “Will Ferrell was in Anchorman with Christina Applegate. Christina Applegate was in Mars Attacks! with Danny DeVito. Danny DeVito was in Batman Returns with Michael Keaton.” The above solution would be a valid solution but may not be the shortest solution.

As illustrated above, the network can best be visualized as a graph where each vertex is an actor and the set of edges connected to that vertex will be the set of all movies in which that actor has appeared.

We envision some features for this game once a working MVP has been established. These features include racing to a solution against an opponent, racing against a countdown, finding the shortest path to a solution, and varying degrees of difficulty.

One potential problem that we expect is acquiring the data that this game would require. IMDb would be a great source for this data, but they do not offer free access to an API that we are aware of. There may be other legitimate avenues for acquiring this data that we are not yet aware of.

Daniel Cowan

Jerry Han

Connor Jordan

Yogi Raghav