

There has been little accomplished since I last worked on this project as I've been too sick to work on anything for the past couple of weeks, but I have a basic outline of how I picture this assignment will work. Breaking down the running feature in most Super Mario games, I focused on only jumping forward and/or jumping upwards as those two are where the most moves one can make. The DFA for this design is either one feature or another where the choice is really up to the player if they want to either jump forward (f) or jump up (u) in whatever they would like until the moves are either invalid or results in the completion of the assignment, similar to the man-wolf-goat-cabbage problem where only a certain set of sequences is correct even though said sequence can also vary depending on if you decide to 'spam' a certain button. The physical requirements for this DFA is a functioning computer keyboard and an output device like a TV screen or laptop LCD screen where one can look at what we are doing to the character.

The motivation of this paper is to break down how the most popular mobile game functions through the eyes of a software developer as the ordinary player will not notice what effort has gone into making that game fully interactable and working as it should. Games similar to this one includes older models like Pac-Man, where the ghosts chase around Pac-Man until he either gets all the points to move onto the next level or he gets killed by the ghosts, whose moves are all randomized depending on the ghost as all 4 of them have different movement. Anyway, for the user manual bit, Mario starts moving right off the back with multiple obstacles in his way whether it be enemies, gaps, or tall pipes that litter the world which requires good navigation from the user as it's easy to lose health or die all together from the varied difficulty of the world. The DFA can consist of a combination of fffuffuuffuf and so on, which repetition and sometimes there will not be a need to use the jump feature although it's still done fruitlessly. This milestone was reached with little effort and with a limited goal in mind.