AI Project Proposal

Stephen Olsen saolsen@uwm.edu

March 28, 2011

Introduction

A Wikipedia race is a competition between two or more people where given a start page and a goal page you try to get to get to the end page as quickly as possible by clicking on internal wikipedia links. For an example and to try it out see http://www.wikipediarace.com/

This project is my attempt at an application that tries to find the shortest path between two wikipedia pages via links, as length of path is probably the greatest determinate of how quickly one can move from the start page to the goal.

AI Algorithm: Iterative deepening search

Input: A starting page and a goal page.

Output: A List of the links in order to get from the start to the end.

Programming Language: Python (and a little JavaScript and possibly R)

Environment: It will run on both Windows and Unix but the user interaction will be via a web frontend. (See Below)

Finding the Shortest Path

The Project will take the most recent database dump of the english wikipedia site and parse it out into a graph where articles are nodes and edges are the links between them. It will then find the Shortest Path between the two nodes by using Iterative deepening search to search for the goal node from the starting node.

Bonus Points

For bonus points I'll be writing a web front-end where you can put in the two pages (start and goal) and then it'll show you a cool graphical representation of the path between the two pages.