Project Scope
The project scope stays the same:

My idea is to implement the video game, *Snake*. Snake is as it sounds, a snake hunting for food. Once the snake eats the food, a new piece of food appears in a new location and if the snake hits a wall, the game is over. Similar to pacman, I plan to implement various search algorithms (BFS, DFS, greedy, uniform cost, and A* search) to see which can repeatedly find the food the fastest. Additionally, I plan to create a few heuristics and compare their speed in finding the food.

Goals

Goal: For the game *Snake*: implement 4 search algorithms, a couple heuristics, and compare the speed in which snake finds for the food between the heuristics

- Implement DFS
- Implement BFS
- Implement Uniform Cost Search (UCS)
- Implement A* search
- Implement 2 heuristics
- Compare heuristics

Milestones

Grade	**Milestones**
B	• 2 out of the 4 search algorithms have been implemented into the code • The final report is complete, including the explanation for both of the search algorithms.
B+	• 3 out of the 4 search algorithms have been implemented into the code • The final report is complete, including the explanation for all 3 of the search algorithms.
A-	• All 4 of the search algorithms have been implemented into the code • The final report is complete, including the explanation for all search algorithms.
A	• All 4 of the search algorithms have been implemented into the code • A couple heuristics are implemented into the code. • The code file includes a readme comparing and contrasting the heuristics. • The final report is complete, including the explanation for all search algorithms and a brief explanation of the heuristics.