Mid-Quarter Presentation

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Initial Planning

1. **Quarter 4 Project - Notes App**

   The Notes App would serve as a place to record and store information of a person's choosing in a way that can be easily retrieved.

   -> By April 26: Starting cover page and creating two functions for making or viewing notes

   -> By May 3: Finishing cover page and finishing function for creating notes

   -> By May 10: Finishing function for viewing notes and starting to make that more complex

   -> By May 17(Last Day of School): Finishing any new additions and finalizing project

2. **CHANGE OF PLANS**

   I am taking the CS50AI Course on Learning.edx and upload my notes as I continue.

Steps Taken - Notes App

1. Created a dictionary where a users notes would be stored
2. Prompted the user to choose whether they would like to create a new note or view a previously created note
    a. If they picked new note then the user was then prompted to enter a title and a note which would then be stored in the dictionary
    b. If they picked to view a note then the user would be prompted to enter the title of the old note, returning their previously entered note

I did not finish this tast because I decided to pursue something else.

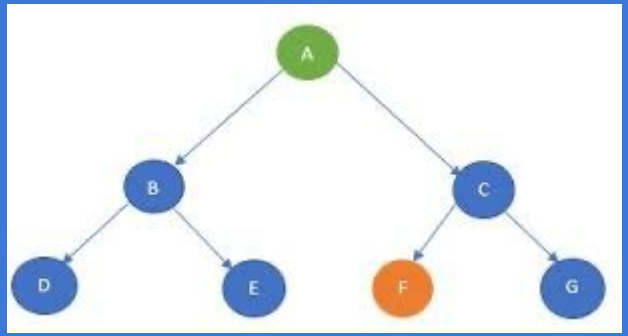
Steps Taken - CS50AI

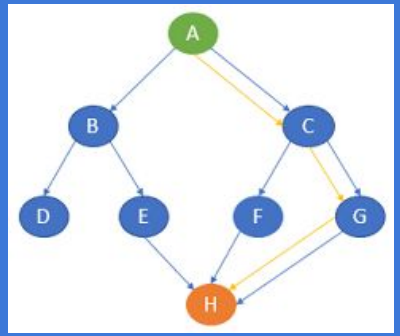
- I am currently taking the CS50AI course on edx.org, where I am learning the basics of python coding in artificial intelligence
- Throughout this course so far, I have watched a lecture and have taken notes on the basics of Search Problems, applying that to my past knowledge of python

Learning - CS50AI

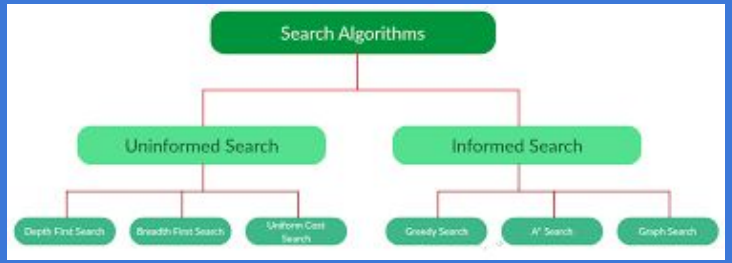
So far, I have covered Search Problems which include figuring out the sequence of actions that will take someone to their desired goal.

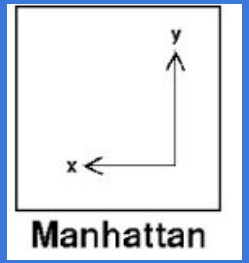
- Search problems involve many features, one of the most important ones being Nodes which are data structures that keep track of a state, parent(node before the current one), action, and a path cost.





Learning - CS50AI





- There are Uninformed Searches which do not use any specific knowledge
  - Breadth First Search involves looking at all surrounding nodes while Depth First Search explores from the first node until a solution is found.
- Informed Searches use knowledge specific to a problem to find a solution
  - Greedy Best-First Search is a search algorithm that expands a node using heuristic functions(chooses the smallest Manhattan Distance or cost to reach goal when approaching solution). A* Search does a similar thing but also looks at the cost to reach the node as opposed to just the cost to reach the goal.

Goals

My goal for the end of this project is to get a deeper understanding of python so that I can continue to pursue AI over the summer and throughout my college years.