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7-3 Project Two  
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As for my defense, how do I explain and elaborate on my approach to my design defense? There are several questions that I will try to answer for my approach. Finding the difference between humans and machines and how they approach problem-solving. The level of intelligence on the agent's pathfinding. Finally, evaluating the algorithm for solving complex problems.

The way a human solves problems depends a lot on examining. A procedure or an approach developed from experience and used to proceed to the next obvious and closest possibility. This is the way humans mainly consider any decisions. By eliminating the need for humans to evaluate the limitless quantity of information that constantly bombards our minds, these techniques facilitate quick decision-making.

The Treasure Hunt game’s intelligence follows a rather simple and easy process for solving the maze. As long as the path the pirate chooses is appropriate – that is, not past the boundaries or an off-limits area, it will proceed with its path at random. Then the pirate will keep making decisions until it reaches the goal. The AI will repeat the process until the ideal time for reaching the goal is achieved.

The two methods don’t really overlap. The computer makes decisions randomly and repeats the process until the goal has been optimized. Humans select what would appear to be the best choice at the time. We consider every possible before making a move.

Although the word “exploitation” might feel negative, in this context I am referring to making the best use of the available resources, meaning “exploitation” does not appear to be conceptually concerned with resource use. Given that they complement one another, It is critical to balance between the two. While exploitation is the decision of what to do with a resource once it has been found, exploitation makes it possible to find new resources.

I took a few easy steps to apply a deep Q-learning for this game utilizing a neural network. Importing the libraries required to carry out the necessary operations was the first stage. The development of the training environments and the incentive structure came next. Subsequently, the learning agent was created and employed improved learning algorithms. Ultimately, an environment test was conducted on the agent. By following the deep Q-learning implementation stages, one can use a neural network to determine the best movement sequence for navigating the map and reaching the treasure cell while maximizing reward.

References:

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