In this part we are going get started into the World of AI and build an AI that lands on the moon. This is going to be a modelled version of a spaceship but still - it will learn how to lands itself on the moon. And the key word here is learn, because the spaceship will not be given any rules on how to operate in the environment before hand - it will have to figure everything out on it's own. And to achieve that we will be using Deep Q-Learning.

Deep Q-Learning is the result of combining Q-Learning with an Artificial Neural Network. The states of the environment are encoded by a vector which is passed as input into the Neural Network. Then the Neural Network will try to predict which action should be played, by returning as outputs a Q-value for each of the possible actions. Eventually, the best action to play is chosen by either taking the one that has the highest Q-value, or by selecting one at random with a strategy called epsilon-greedy, which is used for exploration.