AGENT PLAYING BLACKJACK USING MDP

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We propose an agent that will play Blackjack effectively.

Our agent will use Markov decision process (MDP) to learn about the game world of Blackjack and will exploit its knowledge eventually to play successfully and decide which action to take at each state.

Value iteration will be implemented which will allow the agent to propagate its knowledge back to every state from the terminal states.

We plan to use feature-based representation in examining how close the player hand is currently to 21 which will speed up the learning process, because the agent then will require fewer training games to learn about the world.

We plan to make a user interactive game which will demonstrate the choices the agent would make at each state.