The main goal of my thesis is to create a bot for Unreal Tournament 2004 whose behaviour will be as similar as possible to human controlled players. At the beginning, I measured game play data from both humans and bots. Then, I chose one initial bot and I did five iterations of comparing bot data with humans data, selecting one difference, improving the bot with the aim to eliminate the difference and measuring data again. The successful improvements I made were removing rotations during running, adding reactions on hit and better weapon switching. The improvements that did not make a difference were adding a camping and roaming objective and evade using visibility module. In the end, believability of the bot was tested during a study with human players. The bot will take part in a human-like bot competition named the 2K BotPrize.