Supervised Learning - CSGO Round winner

Problem Statement -

The objective of this project is to build and compare multiple machine learning algorithms for the classification of round winners in the game CS:GO.

Dataset Description -

CS:GO is a tactical shooter, where two teams (CT and Terrorist) play for a best of 30 rounds, with each round being 1 minute and 55 seconds. There are 5 players on each team (10 in total) and the first team to reach 16 rounds wins the game. At the start, one team plays as CT and the other as Terrorist. After 15 rounds played, the teams swap side. There are 7 different maps a game can be played on. You win a round as a Terrorist by either planting the bomb and making sure it explodes, or by eliminating the other team. You win a round as CT by either eliminating the other team, or by disarming the bomb, should it have been planted.

CSGO round winner dataset contains 122410 records with 97 attributes. Some of the important attributes description is given below -

Attributes	Description
time_left	The time left in the current round
ct_score	The current score of the Counter-Terrorist team
t_score	The current score of the Terrorist team
map	The map the round is being played on
bomb_planted	If the bomb has been planted or not
ct_health	The total health of all Counter-Terrorist players
t_health	The total health of all Terrorist players
ct_armor	The total armor of all Counter-Terrorist players
t_armor	The total armor of all Terrorist players
ct_money	The total bankroll of all Counter-Terrorist players

t_money	The total bankroll of all Terrorist players
ct_helmets	Number of helmets on the Counter-terrorist team
t_helmets	Number of helmets on the terrorist team
ct_defuse_kits	Number of defuse kits on the Counter-Terrorist team
ct_players_alive	Number of alive players on the Counter-Terrorist team
t_players_alive	Number of alive players on the Terrorist team
ct_weapon_X	Weapon X count on Counter-Terrorist team
t_weapon_X	Weapon X count on Terrorist team
ct_grenade_X	Grenade X count on Counter-Terrorist team
t_grenade_X	Grenade X count on Terrorist team
round_winner	Winner

Implement all machine learning algorithms that you have learnt. Explore the data and apply feature selection and engineering. Check which machine learning models perform best on this dataset.