**Gameplay Datasets: CODGames1 and CODGames2**

**Map1, Map2, Choice, MapVote, DidPlayerVote**

(Pre-game lobby variables) The battlefield on which a multiplayer match is played is call a map. Prior to each online match, players in the game lobby have the opportunity to cast a vote between two randomly selected map options for the upcoming match. The map options are shown in “Map1” and “Map2” and the vote is recorded in “MapVote.” The winning map is recorded in “Choice”. The “DidPlayerVote” variable indicates whether the player participated in the vote or not. Some notes:

* In the event of a tie vote, the map option in Map1 is selected
* If the player joined the lobby after the map vote was completed, Map1, Map2, and MapVote are missing.
* The official map names may be found in the Maps dataset.
* Particularly in CODGames2, there are potentially typographical errors in Map1, Map2, and/or Choice

**Date**

The date on which the game was played.

**FullPartial**

Describes whether the player participated in the complete match (FullPartial = Full) or only participated in a portion of the match (FullPartial = Partial). There are several reasons that the player may have only participated in a partial match. First, the player may have encountered internet issues and was disconnected from the server before completing the game. In such cases, the player is likely missing statistics related to the match performance. Second, the most common reason for a partial match is that the player was assigned to the match after the game had already started. When the player joined an in-progress game, the player only completed a partial match. FullPartial is missing if the player was in the lobby for the map vote but left before the game started.

**Result**

Each online match consists of two competing teams that earn points for various tasks. The match ends when one team reaches the point limit OR when time expires. (Both the point limit and time limit may be found in the GameModes dataset.) “Result” shows both team scores at the end of the match. Some notes:

* The player's team score is listed first and the opposing team score is listed second
* the team with the higher score is considered the winner
* Example: If Result is “100-97”, the player’s team won by a score of 100 to 97
* Example: If Result is “76-89”, the player’s team lost by a score of 89 to 76
* ties are possible

**Eliminations, Deaths, Score, and Damage**

(Game play performance data) These variables describe the player’s performance during a match.

* “Eliminations” represents the number of enemies on the opposing team that the player eliminated.
* “Deaths” represents the number of times the player was eliminated by enemies on the opposing team.
* “Score” represents points earned by the player for actions completed during a match. For instance, capturing an enemy location in the Domination game type earns 200 points while eliminating an enemy in Team Death Match (TDM) earns 50 points. (This “Score” is different than the team scores contained in Result.)
* Damage represents the amount of damage issued by the player on the opposing team's players, weapons, and vehicles.

**TotalXP**

In the game, players progress through a series of ranks (Private, Corporal, Sergeant, etc.) by earning eXperience Points (XP). The amount of XP the player earned in each match is contained in “TotalXP”.

**PrimaryWeapon**

During each match, the player selects a primary weapon to use for the match. The player's choice is listed in “PrimaryWeapon”. Some notes:

* The official weapon names may be found in the Weapons dataset.
* Particularly in CODGames2, there are potentially typographical errors in PrimaryWeapon

**XPType**

XPType describes the method used for calculating experience points (XP). This variable takes on the values “10% Boost” and “Double XP + 10%”, although some typographical errors may exist especially in CODGames2. Players can earn and use tokens that grant double the amount of XP for short periods of time (e.g., 30 minutes) or earn double XP during special events.

Some examples to illustrate the calculation of XP:

* Suppose that eliminating an enemy player earns the player 50 XP.
  + With the 10% Boost scoring, the player earns 55 XP (50 + 50\*0.1).
  + With the Double XP + 10%, the player would earn 105 experience points (50\*2 + 50\*0.1).

**GameType**

There are a variety of different types of games that may be played. (A list of game types may be found in the GameModes dataset and include Domination, Kill Confirmed, Hardpoint, Team Death Match (TDM), Control, Search and Destroy, and Free-for-all.) The different types of games have different objectives for the game. For instance, in the game type “Hardpoint”, teams earn points by capturing and defending a location. In Team Death Match (“TDM”), teams earn points by eliminating enemy opponents.

Some values in the “GameType” variable contain an "HC" designation. In the lingo of the game, this is meant to distinguish "Core" games from "Hardcore" games. Unlike Core games, players start with less health and health does not regenerate in Hardcore games.

**Confirms, Denies, Objectives, ObjectiveKills, Captures, Diffuses, Plants, Time\_Sec, Time\_Min**

The remaining variables are specific to certain game types. If the variable is not measured for the game type, then the values are reported as NA’s.

* Confirms is the number of enemy tags called in Kill Confirmed
* Denies is the number of teammate tags called in Kill Cofirmed.
* Objectives
  + sum of confirms and denies in Kill Confirmed
  + sum of objective kills and captures in Domination
* ObjectiveKills is the number of enemies eliminated while controlling a location in Hardpoint or Domination
* Captures is the number of locations captured in Domination
* Diffuses is the number of bombs diffused in Search and Destroy
* Plants is the number of bombs planted in Search and Destroy
* Time\_Sec is the time, in seconds, spent holding the critical location in Hardpoint
* Time\_min is the time, in minutes, spent holding the critical location in Hardpoint

CODGameModes Dataset

**Mode**

The type of game played. This variable is related to the GameType variable in the gameplay datasets, but will not include the Core/Hardcore designation.

**PointLimit**

The team point limit for the game mode. When either team reaches a team score equal to the point limit, the match ends.

**TimeLimit**

The time limit for the game mode. If both teams fail to reach the point limit before the time limit expires, the match ends.

CODMaps Dataset

**Name**

The official names of the maps included in the game.

**FirstAvailable**

This indicates the season during which the map become available. Maps listed as “Launch” were available when the game was first released, but other maps were added later, such as during the different “Seasons”.

**Date**

The date at which the map become available.

CODWeapons Dataset

**Weapon**

The official names of weapons in the game.

**Class**

The weapon class. Similar weapons are assigned to the same weapon class.