## Stats

### CRC

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| Stats | |
| Responsibilities: The purpose of the Stats class is to keep track of all the different stats for each robot. | Collaborators: Stats collaborates with Robot and RobotAI. |

### Description / Overview

The Stats class is a part of the Model in our architecture, and is a class that keeps track of all stats for each robot. Stats holds the wins, matches, distance traveled, damage taken, damage given, plays made, kills, and deaths for each robot. Stats can also increment each of these and determine the number of losses for the robot.

### Instance Variables

#### wins

Data Type:Integer

wins is an Integer that keeps track of how many times a robot has won a game.

#### matches

Data Type:Integer

matches is an Integer that keeps track of how many matches a robot has played.

#### distanceTraveled

Data Type:Integer

distanceTraveled is an Integer that keeps track of how many spaces a robot has traveled.

#### damageTaken

Data Type:Integer

damageTaken is an Integer that keeps track of how much damage a robot has taken.

#### damageGiven

Data Type:Integer

damageGiven is an Integer that keeps track of how much damage a robot has given to other robots.

#### plays

Data Type:Integer

Plays is an Integer that keeps track of how many plays a robot has made.

#### kills

Data Type:Integer

kills is an Integer that keeps track of how many robots a robot has killed.

#### deaths

Data Type:Integer

deaths keeps track of how many robots a robot has killed.

### Method Overview

*public Stats()*

*public Stats()*

*public int getWins()*

*public int getMatches()*

*public int getDistanceTraveled()*

*public int getDamageTaken()*

*public int getDamageGiven()*

*public int getPlays()*

*public int getKills()*

*public int getDeaths()*

*public int getLosses()*

*public void addMatch(boolean win)*

*public void addDistanceTraveled()*

*public void addDamageTaken(int damage)*

*public void addDamageGiven(int damage)*

*public void addPlay()*

*public void addKill()*

*public void addDeath()*

*public void mergeStats(Stats other)*

### Method Writeups

#### public void addMatch(boolean win)

This method will increment the number of matches played by the robot by one.

#### public void addDistanceTraveled()

This method will

#### public void addDamageTaken(int damage)

This method will increment the total damage taken by the robot by the Integer damage.

#### public void addDamageGiven(int damage)

This method will increment the total damage given by the robot by the Integer damage.

#### public void addPlay()

This method increments the number of plays for the robot by one.

#### public void addKill()

This method increments the number of kills for the robot by one.

#### public void addDeath()

This method increments the number of deaths for the robot by one.

#### public void mergeStats(Stats other)

This method merges the current set of variables in Stats with another set of variables Stats other.