

Glossary:

Bot: A java program stored in the Bot Database which takes a game state and returns an input command. The Testing Arena can be used to test bots.

Public Bot: A bot created by a player which has been made publicly available, allowing other players to use it.

Private Bot: A bot created by a player which has been made private, preventing other players from using it.

Preloaded Bot: A default public bot created by the Bot!Battle! programmers.

Challenge: A game mode run on the server that is played by one or more bots. Upon completion of a challenge mode match, users can view it in playback mode (using data stored in the Game State Database).

Change: A command associated with a particular turn which animates or changes the properties of an entity.

Default Timestep: The default length of every turn, in seconds.

Entity: The graphical representation of an object on screen such as a player, a wall, or a flag.

Sprite (Entity): An entity which has associated animations and can accept changes.

Object (Entity): A still, unmoving image which does not accept changes.

Text Entity: A text string drawn on the screen which can accept changes.

Game Display Module: The code which implements Phaser functionality to draw images on the Game Display Window.

Game Display Tab: A tab on the Testing Mode Webpage which displays the Game Display Window.

Game Display Window: A HTML canvas that the Game Display Module draws on, which appears on the Testing Mode and Playback Mode Webpages.

Game Initialization Message: A message which contains a background, default timestep, and list of entities for initializing the initial game state.

Game State: The state of a match at the beginning of a turn, consisting of the position and state of all entities.

Match: An instance of Bot!Battle! being played in the Testing Arena or replayed in Playback Mode.

Phaser: A HTML5 game framework used by the Game Display Module.

Playback Mode: A game mode designed for viewing replays of finished matches.

Playback Mode Webpage: A webpage displaying the Game Display Window, the Playback Mode Controls, and the Status Table.

Playback Mode Controls: Buttons displayed on the Playback Mode Webpage used to adjust replays of finished matches, including Play, Pause, Go Back One Turn, Go Forward One Turn, Go To Start, Go To End, and Change Speed.

Player Tab: A menu on the Testing Arena Webpage which displays options for bots a player can use (Upload File, Edit Code, Public Bot, or Preloaded Bot).

Server: Software hosted on a remote machine used for communication between the webpages, databases, and various external functionalities.

Status Table: A table of text output including the Turn, Standard Input, Standard Output, and Standard Error columns.

Testing Arena: A game mode designed for bot testing.

Testing Arena Webpage: A webpage displaying the Game Display Tab (including the Game Display Window), the Status Table, and a Player Tab for each player in the current match.

Turn: A game state and associated changes.