## Bot!Battle! Project: Web Server Application -Glossary of Terms

About Us Page - Displays information to users about those involved in the Bot!Battle! project.

**Account –** Represents a user in the Bot!Battle! System. Everything that a user does in Bot!Battle! Will be tied to their account.

Admin - See Administrator.

**Admin Account –** an entity on the database, one maintained for each Admin, that holds all of the Admin's information supplied during registration. An Admin Account is a User Account, with added capabilities.

**Admin Creator –** The administrator that created the lesson, challenge, or contest.

**Administrator** – An administrator is a User who has administrative privileges enabled for their account. Administrators have the option to create, edit, and manage lessons, challenges, and contests.

**Administrator Page –** Displays options to an administrator to allow them to create new lessons, challenges, or contests.

**Anonymous User –** Any person browsing the Bot!Battle! site who has not logged in to an account.

**API –** Stands for Application Program Interface. The API is for other programmers to interact with the system.

**Bot –** Bots are the main characters of the game. Users will write Java code to dictate the artificial intelligence of a bot.

**Bot!Battle!** – Bot!Battle! is an educational game targeting K-12 students who wish to learn programming skills. The game will be played in a web browser, and can be played through single-player challenges or through competitive contests. The Web Server Application will provide lessons for completing challenges and improving one's programming ability.

**Broadcast** – When the user plays a challenge against a public bot, the system will queue the game via the DBMS. The system will poll the server to see when the bot has finished being evaluated, and will redirect the page to the Game Display page.

**Category –** Lessons and challenges will have categories associated with them. These categories are useful for grouping similar or related lessons or challenges together. Categories are different between lessons and challenges, and lessons and challenges will not be grouped together.

**Challenge** – A Challenge provides a scenario with a unique set or combination of conditions and variables that must be met and accounted for. Challenges may be played against public bots.

**Challenges List Page –** Displays and sorts all challenges in the Bot!Battle! system. Users can select a challenge to view its challenge page.

**Challenge Page** – Each challenge has a Challenge Page associated with it. The Challenge Page retrieves and displays from the database information associated with the challenge, and presents users with options to complete challenges and view lessons for the challenges.

**Completion Information –** Contains text that provides a user with the information needed to write a bot to complete the associated challenge.

**Contact Us Page –** Displays information to users on how best to get in contact with the appropriate administrators.

**Contest –** A Contest is a competitive challenge fought by bots submitted by many users.

**Contest Date –** The day and time the contest will be run.

**Contests List Page –** Displays and sorts all contests in the Bot!Battle! system. Users can select a contest to view its contest page.

**Contest Page** – Each contest has a Contest Page associated with it. The Contest Page retrieves and displays from the database information associated with the contest, and presents users with options to participate and view results of contests.

**Contest Results** – A contest that is in progress or completed will have contest results associated with it for each challenge that was fought between bots.

**Contest Status** – A contest status can have three values: "upcoming" for when a contest has not yet taken place, "in progress" for once an administrator has begun to run a contest, and "completed contests" for once a contest has finished being run.

**Credentials –** An account will have a username, password, and email associated with it. These are an account's credentials.

**Database** – The database contains information of the various systems that comprise Bot!Battle!. Content from dynamic pages are stored and loaded from the database.

**Difficulty** – Lessons and Challenges have a difficulty associated with them. Less experienced users may want to complete less difficult and challenges before they attempt more difficult ones.

**Landing Page –** A public webpage which provides users the capability to log in.

**Lesson –** A lesson provides a tutorial relating to programming techniques or writing bots.

**Lesson Text –** Contains the lesson that the user is reading.

**Lessons List Page –** Displays and sorts all lessons in the Bot!Battle! system. Users can select a lesson to view its lesson page.

**Lesson Page** – Each lesson has a Lesson Page associated with it. The Lesson Page retrieves and displays information from the database associated with the lesson.

**Link** – A web link to another page in the Web Server Application.

**Matches** – (Get this from Josiah)

**Maps** – (Get this from Josiah)

**My Account Page –** Provides options for users to manage their account. Users can change their password and email address from this page, or can unsubscribe from the system.

**Name –** The unique identifier and title for lessons, challenges, and contests.

**Optional Video –** Contains a video associated with the lesson. A lesson does not need to have a video associated with it.

**Published Bots** – A bot which a user has decided to publish for a challenge. Users may choose to fight against bots published for a challenge.

**Relevant Lessons** – Each challenge has a set of lessons associated with it that help less experienced users complete them. These are stored as Relevant Lessons.

**Result –** The current status of an in-progress contest or the winnings of a completed contest.

**Run A Contest –** Contests are run either by running the entire round of contest in parallel or by running individual games in a series. The administrator chooses which one they want to do, and the results are stored in the database as contest results.

**System –** Synonymous with the Web Server Application.

**Testing Arena –** A Testing Arena allows the user's bot to be tested for the selected challenge.

**Tournament** – Synonymous with Contest.

**Uploaded Bot** – A bot which a user has uploaded for participation in a contest. This is not to be confused with the ability a user has to upload a bot for a challenge. Bots uploaded for a challenge are not stored on the database unless a user chooses to publish them.

**User –** A user is a person who has an account with Bot!Battle!.

**User Account –** an entity on the database, one maintained for each User, that holds all of the User's information supplied during registration.

**User Homepage –** Shows navigation options to a user once they have logged in to their account.

**Web Server Application –** The part of the Bot!Battle! project which handles user accounts, administrative options, dynamic web pages, and navigating challenges, contests, and lessons.