

Team 3

Andres Martin, Matt Mahan, and Matt Rundle

CSE40746 - Advanced Database Projects

Requirements Document

1. Technical

1.1. Back-end

1.1.1. The data will be stored in an Oracle Database

1.1.1.1. Stored data will consist of, at least, a list of animals, animal types, interactions between types, and battle moves

1.1.1.2. Information on individual users will not be saved in this database at runtime or between sessions. As such, the data will be highly available and consistent.

1.1.2. The product will utilize Apache and PHP for its web server. The web server will be highly available.

1.1.3. All supporting software will be installed on a virtual machine running a Red Hat Enterprise Linux Server

1.2. Front-end

1.2.1. The website interface will utilize Javascript libraries to respond quickly and consistently to user interaction.

1.2.2. The website will function in the latest versions of Google Chrome and Mozilla Firefox.

2. User Interface

2.1. General Use

2.1.1. The user interface will be intuitive to use.

2.1.2. Fast start up time.

2.1.2.1. It will not take more than a minute to start a battle if the user is familiar with the website and there are other users online looking to play

2.2. Home Screen

2.2.1. Will allow users to select a username

2.2.2. Will allow users to see how many others are online

2.2.3. Will allow users to view a list of all animals and battle information for each animal

2.2.4. Will allow users to enter into a battle with another user

2.3. Team Selection

- 2.3.1. Animals can be sorted during selection.
 - 2.3.1.1. Animal taxonomy, biome, and alphabetical
- 2.3.2. There will be a minimum of 12 animals to select from (which will support 2 unique teams of 6 animals each)
 - 2.3.2.1. Each animal will possess a unique combination of attributes/stats
- 2.3.3. There will be, at minimum, 6 “types” of animals (a team may, if desired, contain one of each type with no overlaps)
- 2.4. Battles
 - 2.4.1. Consistency in all battle calculations, with the exception of “critical hits,” which depend on a random number generator.
 - 2.4.2. Animal sprites and very basic animations
 - 2.4.3. Appropriate battle music
 - 2.4.4. Clearly communicated controls
 - 2.4.5. Clearly communicated battle information
 - 2.4.5.1. HP (“health points”), PP (“power points”), animals remaining, move effectiveness, type chart, etc.
 - 2.4.6. “Game Over” screen which provides users with options
 - 2.4.6.1. Options include “Try again with same battle team,” “Try again with different battle team,” “New battle all together,” and “Quit”
 - 2.4.7. Satisfying winning screen which provides users with “Next battle” and “Quit” options.