Super Smash Bros Brawl – SSBB
Problem Statement

CSSE 333

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Contents

Executive Summary

This document is intended to explain the purpose of the Super Smash Bros Brawl Database. The contents of this document are to be supplemented with an Entity-Relationship (ER) diagram which should be attached. In addition, this document will also contain an introduction, high level summary, detailed problem statement, and information on stakeholders.

Super Smash Bros Brawl is Nintendo's fasting-selling video game in the history of Nintendo of America [1]. Despite its immense popularity, information about the game is heavily-based on decentralized player research. Because of this, varying reputations of players are inconsistent or nonexistent across different communities. We propose a system that would keep easily keep track of the player statistics in an efficient manner to keep the social aspect alive.

Introduction

This document is the first in a series that will describe the Super Smash Bros Brawl (SSBB) management system. In addition to this document is an ER diagram. And following this milestone will be a relation schema diagram, security and data integrity analysis, status reports, and a final presentation. This documentation will give a broad overview of the proposed system including its requirements, security, and implementation details. The relational schema will further elaborate on the database and foreign key constraints and the methodology used for creating the system.

High Level Problem Summary

Elevator Statement

We are designing a player statistics system for the game Super Smash Brothers Brawl. One of the great things about Super Smash Brothers Brawl is the social aspect, and players would enjoy keeping track of their friends, win/loss records, and other statistics they can brag about. We propose a system where people can keep track of their records online to enhance their playing experience.

Primary Success Criteria

Our primary goal is to provide a system where players can keep track of their win/loss records and other player statistics, general knowledge about the game such as which game the characters were pulled from, and a friend system where players can keep up to date on the activity of their friends.

Scope

Within Scope

1. Players
2. Characters
3. Stages
4. Matches

5. Friends

Outside Scope

1. Other games where the characters/stages are from

Detailed Problem Statement

Function

1. Ability to track wins and losses of each player
2. Keep track data of every match, including data, time, and what players played as well as what characters they have selected
3. Ability to for each player to have a list of friends
4. Ability to have a favorite character for each player
5. Ability for players to login
6. Ability to keep track of which character came from which other games, as well as stages
7. Ability to keep track 'tiers' of characters, which consist of a group of characters which are considered about the same likelihood to win a match

Form

Availability

- Web based for convenient access
- Public address since anyone can sign up

Usability

- Fast response and lookup times
- Intuitive and easy to use
- Compatible with the latest versions of Firefox, Internet Explorer, and Chrome.

Performance

- Can support up to 30 users simultaneously, and should support more if needed and the hardware is available
- 98% uptime

Maintainability

- System must be easy to maintain
    - Should be easy for administrators to change stats if necessary
    - Administrators should only have to perform the following

- Only a handful of users are administrators

Economy

Though the game has been available for four years—usually enough time for a sequel or two to be produced—it is still popular in certain groups. For instance, Rose-Hulman has been hosting tournaments for the game for the past four years. In addition, it has been revealed (and expected) that the sequel be released only for the next-generation console. No work has been or will be invested towards the production of the sequel until the completion of the development team's current project. Until then, an increased amount of value is placed on enjoying the game with different networks of people.

Time

In the past, the community heavily relied on word-of-mouth and never kept any global resources to keep track of friends in the game, statistics, and wins/losses. The community grew rapidly with the release of new consoles and a new game, and now it has grown to be one of the most-anticipated games bundled with a Nintendo console.

Currently, fans of the game maintain records through a disconnected series of networks and wikis across the internet. Though some are functional, there is no universal schema to associate them altogether.

In the future, fans should be able to have seemless integration between the game and their social networks. Leaderboards will be responsive and accurate to each match, and personal statistics will be kept track of.

Key Stakeholders

Name	Role
Nadine Shillingford	Project Advisor
Sriram Mohan	Project Advisor
Richard Thai	Project Team
Trevor Krenz	Project Team
Seth Zhang	Project Team
Nintendo	Game Publisher
Smash Brothers Brawl Players	End User

References

[1] Super Smash Bros. Brawl Smash Nintendo Sales Records: http://www.nintendo.com/whatsnew/detail/AU8xLess7wISKbSMpYCj_HThii8UiBzG

Glossary

Entity-Relationship (ER) diagram – abstract and conceptual representation of data

SSBB – Super Smash Bros Brawl, a best-selling game for the Nintendo Wii console