# **Group 6 Milestone 1**

**Scope and Ideas:**

This is a web application for players to purchase games from third-party developers and interact with the gaming community by providing information about competitions, steamers, forums and other players. Players will be able to purchase and learn about the games in the game store. The store will present a game of the day for each game where the store highlights only one game for that date, provides a sale for that game on that date lasting the day and the game can be the game of the day only once. A wishlist feature allows players to flag a game while they are browsing and receive an alert if a game on their wishlist is on sale. Players will be able to find streamers for games in the streamer section. Players will have the ability to follow streamers and receive an alert if a followed streamer is streaming. Any player can sign up to be a streamer. Players will be able to learn about competitions for games in the competition section. Users will be able to find other players and forums for a game in the community section. Players will be able to friend other players and receive an alert if a friend is playing.

**Requirements:**

This project requires information about:

* The application will present information about games. Each game has a unique title, description, price, genre and many forum links.
* Each player has a unique username, password, email and permission level. A player can wishlist many or no games. A game can be on many or no wishlists. A player can friend many or no other players.
* Purchases are made by players for a game. Each purchase has a unique purchaseID, price, date, and compound purchase information of a credit card number, a derived credit card type, expiration date, credit card security number and credit card owner's name. A game may have many or no purchases. A purchase must be for one game and only one game. A purchase can be made by one player and only one player. A player may make many or no purchases.
* Games are created and released by developers. Developers have a unique name and multiple locations. A developer may release many or no games. A game can have one or many developers.
* Games can have a featured game of the day sale. Each sale has a unique date and percent reduction. Only one game will be featured for a sale. A game can have only one sale or none. A sale may have many purchases or none at all. A purchase may have no sale or one.
* Games can be streamed. Every stream has a unique streamID and stream link. A game can have many or no streams. A stream must have a game and only one game. A stream may by many or one player. A player can be part of one or no stream. A stream may have many or no followers. A player may follow many or no streams.
* Games can have competitions. Each competition has a unique title, location and date of the event. A game can have many or no competitions. A competition must be for one and only one game.

Functional & Non Functional Requirements:

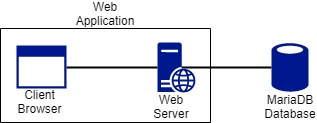
* Must be able to select games based on genre, price, title or developer
* Games must be sorted alphabetically or by price
* Sales must be sorted by date
* Players can lookup streams by game or streamers
* Game price in store must be updated automatically when a sale occurs
* Alert player when game on wishlist is on sale, followed stream is streaming or friend is playing a game
* Players must be able to find competitions and forums for a game
* Alerts must be sorted by date in a message center
* Players must have permission levels; Player, Admin and Developer that determines their capabilities
* Players can create a player, add/cancel a purchase, create/remove a stream or wishlist, follow/unfollow streams and friend/unfriend players
* Admins can remove players/developers/streams/games/competitions and add developers/competitions
* Developers can release/remove their game, set their game prices, create a sale and set the reduction amount
* Must not be vulnerable to SQL injection
* 90% of players must be able to create a player account in 10 minutes without guidance
* 90% of players must be able to find a desired game in 1 minutes without guidance
* 90% of players must be able to make a purchase in 5 minutes

**Architecture:**

This project will be using a three-tier architecture:

* Presentation Layer - This layer is the browser and will be using HTML5, CSS and JavaScript. It will provide the graphical interface for presenting information from and submitting information to the web server. This layer has no direct interaction with the data layer.
* Application Layer - This layer is the web server application which will use C# and ASP.NET. The web server will handle the logic for how information is to be presented on the browser from the database and process information from the browser to be sent to the database.
* Data Layer - This layer is the database which will use MariaDB to create a relational database. Information will be sent and received from the web server. This layer has no direct interaction with the presentation layer

**Platform:**



**Team:**

The group consists of Chris Siliski, Jonathan Wolfe, Mazin Al Ismaili and Toni Tan. Jonathan is the project manager and will submit all reports for the group. Jonathan and Mazin will work on developing the front end of the project. Toni and Chris will develop the backend of the project.