IADE CREATING CREATORS

Database Documentation

Cover

Game Overview

Our game is a turn-based, 2-player, browser board game, where the hardware components of two PCs that were merged, fight each other until only one of the PCs is left.

Before the game starts, players buy any number and combination of characters using 16 Bits, a currency. There are 5 different characters to choose from.

During the game itself, players can place, move, or attack with their characters, all of which end their turn.

A player wins when all the enemy characters or CPU are destroyed.

Database Dictionary

The database of Hardware Warfare has 7 tables that make the game work!

Table player

The first table is the player, and it is where the base information of the player is located at such as the player id that helps to make connections to other tables.

Name	Type	Comments
player_id	int not null auto_increment	Primary Key.
player_wins	int not null	The number of wins a certain player has
player_losses	int not null	The number of losses a certain player has
player_username	VARCHAR(45) not null	The username of the player
player_email	VARCHAR(45) not null	The email of the player
player_password	VARCHAR(45) not null	The password of the player

Table character_

The next table is character_ where all the characters names, stats and cost show up. These values are always the same throughout the game. This table helps make connections with the match_player_character table.

Name	Type	Comments
cha_id	int not null auto_increment	Primary Key.
cha_name	VARCHAR(45) not null	The name of every character.
cha_hp	int not null	The health percentage that the characters (cha) start with.
cha_atk	int not null	The amount of damage the cha deals onto other cha
cha_spd	int not null	The amount of tiles that a cha can move in one turn
cha_range	int not null	The amount of tiles that a cha can attack from
cha_target	int not null	There're two types of targets, singular attack, only attacks one cha at a time (0) and area attack, attacks more then one cha at a time
cha_cost	int not null	The cost the each cha cost

Table match_state

The next table is the match_state, and it is where the different states of the game are. There are different types of states such as, “Buying”, “Waiting”, “Gameplay”, etc.

Name	Type	Comments
match_state_id	int not null auto_increment	Primary Key.
match_state_name	VARCHAR(45) not null	The name to differentiate the different states

Table match_

The next table is the match_, and it is where the base information of the match is located at. This table helps, in the future make connections with the player, character and inventory.

Name	Type	Comments
match_id	int not null auto_increment	Primary Key.
match_player1_id	int not null	The id of the player 1
match_player2_id	int not null	The id of the player 2
match_winner	int not null	Once the games finishes, the id of the winner will be here
match_turn	int not null	The current turn the player is on
match_state_id	int not null	The current state the player is on, a foreign key from match_state

Table inventory

The next table is the inventory, It is the inventory of one player of one certain match. After the game ends, players have to create once again, by buying characters. This table will have connection with the match_player and match_player_character to place the characters in the board (yet to be implemented)

Name	Type	Comments
inv_id	int not null auto_increment	Primary Key.
inv_match_id	VARCHAR(45) not null	A foreign key to get the match
inv_player_id	int not null	A foreign key to get the player
bits	int not null	The amount of bits the player has starting always at 16
n_rambow	int not null	The amount of Rambow’s the player has bought
n_elventito	int not null	The amount of El Ventito’s the player has bought
n_gipio	int not null	The amount of Gipio’s the player has bought
n_decibelle	int not null	The amount of Decibelle’s the player has bought
n_rommy	int not null	The amount of Rommy’s the player has bought

Table match_player

The next table is the match_player, and it is where the connection of the match with player happens and with the inventory.

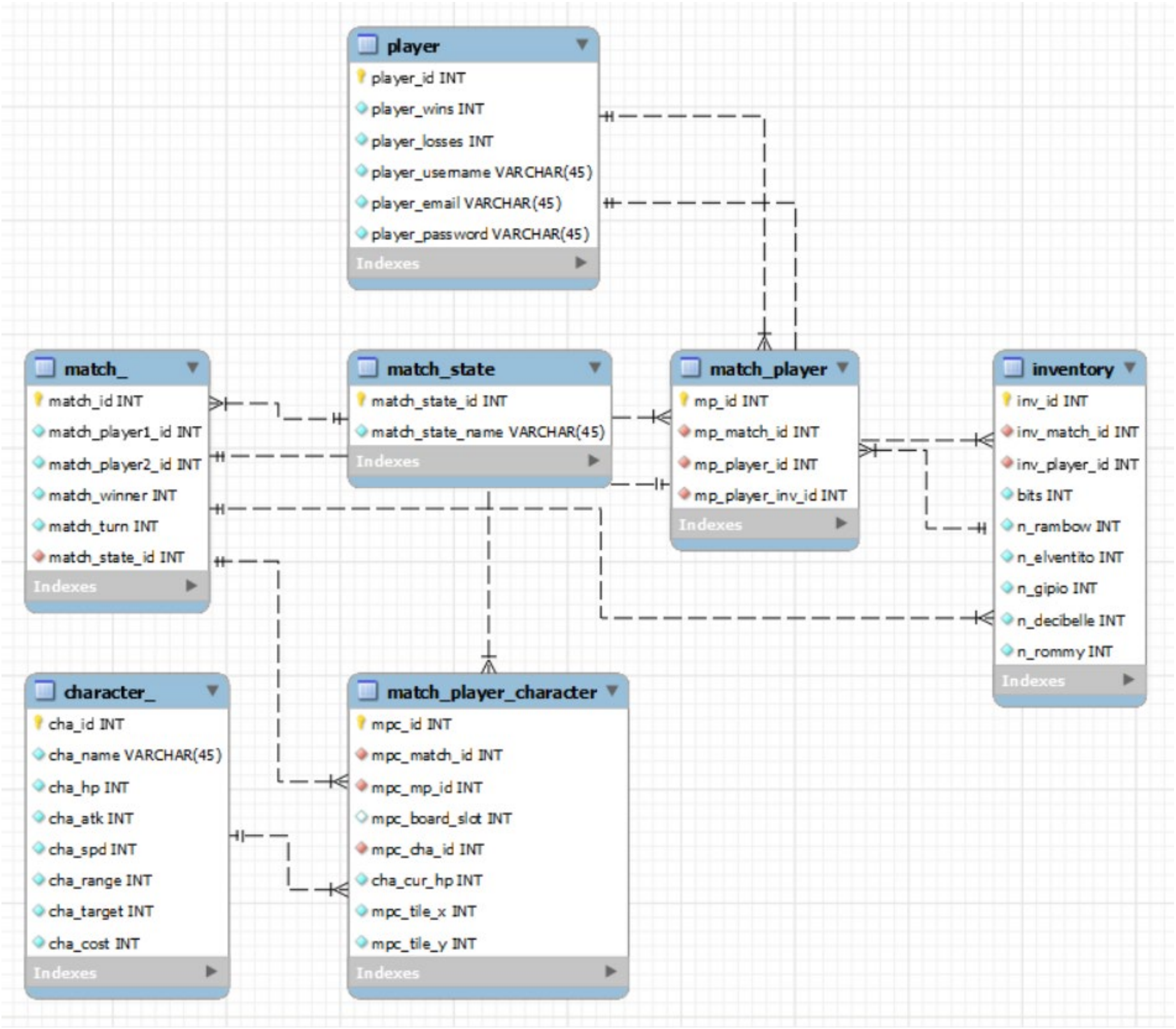
Name	Type	Comments
mp_id	int not null auto_increment	Primary Key.
mp_match_id	int not null	The foreign key that connects with the match_ and gets the match
mp_player_id	int not null	The foreign key that connects with the player and gets the player id
mp__player_inv_id	int not null	The foreign key that connects with the inventory and get the inventory of one player

Table match_player_character

The next table is the match_player_character, and it is where the connection of the match_, match_player and characters happen. Here is where the characters from the inventory will go to to be placed on the board (mpc_board_slot, mpc_tile_x and mpc_tile_y) and also the number and type of characters and the current health.

Name	Type	Comments
mpc_id	int not null auto_increment	Primary Key.
mpc_match_id	int not null	The foreign key that connects with match_ and gets the match
mpc_mp_id	int not null	The foreign key that connects with the match_player and get the match_player id
mpc_board_slot	int not null	Order by which characters are placed on the board by each player, from 1 to 5.
mpc_cha_id	int not null	Gets the character id of one character on the board
mpc_cur_hp	int not null	The current health that a character has
mpc_tile_x	int not null	The position on the x-axis of one character from 1 to 9
mpc_tile_y	int not null	The position on the y-axis of one character from 1 to 7

Database Model



Conclusion

To summarize, the database of Hardware Warfare (HW) consists of 7 tables that are connected by different types of connections, such as “one to one” or “one to many” and it’s the base of the entire game, it’s a playable, ugly, “game” just using the database!

Still, there’re some things we still want to implement in HW, such as the placement of characters from the inventory into the board, and when a character dies, not only lose all the hp but also disappear, die.