Air Hockey Group 42

Software Engineering Methods
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User Story Descriptions

27th November 2019

1. Keeping track of the score after goals

Use Case: Strike for goal and track score

Author: Robert Minea

Date: 25/11/2019

Purpose: In order for the game to advance, the score must be tracked

Overview: The player controls the Pusher and hits the Puck, and if the Puck enters into one of the gates, the score of the Player must be changed, and if the score limit is reached, the player either wins or loses the game.

Cross-Reference: Moving the Pusher, Keeping track of collisions

Actors: Player, Game Tracker

Pre-condition: The Game is ongoing

Post-conditions: The puck will be respawned on the side of the player that didn't get a point

2. Keeping track of collisions

Use Case: Collisions of the puck

Author: Robert Minea

Date: 25/11/2019

Purpose: When the player Pusher hits the Puck, Collisions must occur

Overview: The player will control the Pusher using the Keyboard and if the Puck is in a certain range, a collision will occur, causing the puck

to ricochet. After this happens, collisions with other objects might happen,

causing the collision cycle to repeat.

Cross-Reference: Moving the Pusher

Actors: Player, Game Tracker

Pre-condition: The Game is ongoing and puck is on screen

3. Moving the Pusher

Use Case: Move Pusher

Author: jaron Rosenberg

Date: 21/11/2019

Purpose: Move the pusher around during a game

Overview: The player presses a move button on the keyboard. The game checks if it is a valid move by checking if it doesn't exceed the field. If the move is valid, the player's pusher goes into the direction he pressed. Otherwise the pusher won't move. As long as the player holds down the button, the pusher will move that direction until it intersects with a wall and stops moving further into that direction.

Cross References: The player will be able to use the keyboard to control the pusher, Collisions with the wall

Actors: Player

Pre Conditions: Game is on the start screen

4. Show top 5 scores at the end of a game

Use Case: Show top 5 scores at the end of game

Author: Jaron Rosenberg

Date: 24/11/2019

Purpose: Player gets to know the top 5 scores

Overview: When the player finishes a game and doesn't closes the game screen, he is shown a page with the 5 highest scores there are. If he got a score higher than the current once, he goes in there before the top screen is shown as the username he authenticated himself with.

Cross References: Storing game history in a database, Authentication through login and password, Keeping track of score

Actors: Player

Pre Conditions: Game finishes, game screen is still open and top scores is updated if applicable, player is authenticated

Post Conditions: Top scores stay the same

5. Storing game history in a database

Use case: Storing game history in a database

Author: Ionut Constantinescu

Date: 26/11/2019

Purpose: Player can have an overview of his game history and the game can keep track of each player score and display a leaderboard with the highest scores

Overview: After finishing a game, the game details will be saved in a database. Each player points will be incremented according to the game score. If the player closes the application and logs-in again he/she should be able to retrieve his score and game history.

Cross References: The database will be functional and easily accessible

Actors: Player (primary), Database (secondary)

Pre Conditions: Player has finished a game

Post Conditions: Player has his last game details stored in the database and his score is updated

6. Authentication Through Login and Password

Use case: Authentication Through Login and Password

Author: Darwin Morris (Group 42)

Date: 27/11/2019

Purpose: Provide a safe way to access ones account with user specific credentials

Overview: The user will be prompted to enter their username and password on the login page. The data from the user will be fetched from the database and the hashed passwords will be compared to validate the details. This result will then cause the user to be logged in, if correct information was provided, or being prompted for another attempt if otherwise.

Cross References: The database will be functional and easily accessible

Actors: The player as well as the database

Pre Conditions: Game is on the login screen

Post Conditions: Player is logged in and directed to the start game screen or is rejected and must re-enter their credentials