





# User Stories Documentation

Version 2.0

## Team A

Klaudrat Philipp  
Hauswirth Tician  
Pratljacic Dragan

User Story ID 1		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	19.10.2017	
Description	Documentation	
Chief responsibility	Dragan Pratljacic	
Quality assurance	Tician Hauswirth	

## 1 General

### ID

The ID of this user story is 1.

### Title

As a user I want to have a simple GUI with rackets.

### Priority

The priority of this user story is 8 out of 10.

### Estimated effort

The maximum estimated effort of this user story are 15 hours.

## 1.1 Acceptance Criteria

### Foundation of GUI



The foundation (matchfield) of the GUI is available.

### Performance

The program runs smoothly and does not cause flickering.

### Control

The user can move the rackets up and down via a joystick.

User Story ID 2		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	19.10.2017	
Description	Documentation	
Chief responsibility	Philipp Klaudrat	
Quality assurance	Dragan Pratljacic	

## 2 General

### ID

The ID of this user story is 2.

### Title

As a user I want to control the rackets via an Arduino Joystick.

### Priority

The priority of this user story is 9 out of 10.

### Estimated effort

The maximum estimated effort of this user story are 17 hours.

## 2.1 Acceptance Criteria

### Connection

The Arduino micro-controller is connected with the C# Client.

### Transmission



The micro-controller is able to transmit data which are read by the hardware.

### Receiving

The C# Client is capable of receiving data.

### Processing

The C# Client is able to process the received data correctly.

User Story ID 3		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	19.10.2017	
Description	Documentation	
Chief responsibility	Tician Hauswirth	
Quality assurance	Philipp Klaudrat	

### 3 General

#### ID

The ID of this user story is 3.

#### Title

As a user I want to have the opportunity to enter the players nickname and choose the color of the racket after starting a new game.

#### Priority

The priority of this user story is 4 out of 10.

#### Estimated effort

The maximum estimated effort of this user story are 7 hours.

### 3.1 Acceptance Criteria

#### Configuration



The configuration can be done before the game can be started in a separate window.

#### Colors

The colors of the rackets and the ball can be changed.

#### Nickname

The nickname of the player/players can be entered.

User Story ID 4		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	19.10.2017	
Description	Documentation	
Chief responsibility	Team A	
Quality assurance	Team A	

## 4 General

### ID

The ID of this user story is 4.

### Title

As a user I want to see my rank based on specific requirements compared to all other players.

### Priority

The priority of this user story is 6 out of 10.

### Estimated effort

The maximum estimated effort of this user story are 26 hours.

## 4.1 Acceptance Criteria

### Saving Criteria

Each score gets saved and associated with the usernames. The order of the rankings is based on the score combined with the time that it took the player to beat his opponent.

### Username



Every player has the chance to lookup his leaderboard rank on his username.

### Display

The leading players in a specific category are shown on a separate window.

### Service

The evaluation takes place on a webservice.

User Story ID 5		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	19.10.2017	
Description	Documentation	
Chief responsibility	Team A	
Quality assurance	Team A	

## 5 General

### ID

The ID of this user story is 5.

### Title

As a user I want to see the bygone time and the current score of the actual game.

### Priority

The priority of this user story is 4 out of 10.

### Estimated effort

The maximum estimated effort of this user story are 6 hours.

## 5.1 Acceptance Criteria

### Update score



If a player scores a point the new score gets displayed immediately.

### Time

The bygone time during the game gets displayed correctly.

### Congratulation

If one player wins the game a small congratulation combined with his username appears.

User Story ID 6		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	19.10.2017	
Description	Documentation	
Chief responsibility	Team A	
Quality assurance	Team A	

## 6 General

### ID

The ID of this user story is 6.

### Title

As a user I want to have the opportunity to play against the computer.

### Priority

The priority of this user story is 3 out of 10.

### Estimated effort

The maximum estimated effort of this user story are 23 hours.

## 6.1 Acceptance Criteria

### KI



The user has the opportunity to play against the computer that cannot be beaten.

### KI Ball Movement

The ball's movement speed increases as time goes by.

### Ranking „Player vs Computer“

There is a separate ranking only for „player vs computer“ for the longest times competed against the computer.

User Story ID 7		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	19.10.2017	
Description	Documentation	
Chief responsibility	Team A	
Quality assurance	Team A	

## 7 General

### ID

The ID of this user story is 7.

### Title

As a user I want a correct ball movement within the matchfield.

### Priority

The priority of this user story is 7 out of 10.

### Estimated effort

The maximum estimated effort of this user story are 15 hours.

## 7.1 Acceptance Criteria

### Consistency

The system is in a consistent state. Whenever a user is using the GUI, the system is always usable and stays consistent.



### Full GUI Usability

The GUI includes all needed control modules.

### Player VS Player Ball Movement

If the mode is Player VS Player the ball's movement speed stays the same during the whole game except a Powerup gets picked up.



Document		 
Project	Pong Game	
Creator	Pratljacic Dragan	
Created on	14.11.2017	
Description	Documentation User Story ID: 8	
Chief responsibility	Philipp Klaudrat	
Quality assurance	Tician Hauswirth	

## 8 User Story

### ID

The ID of this user story is 8.

### Title

As a user I want to have the possibility of collecting Power-Ups that are randomly spawning in the match field.

### Priority

The priority of this user story is 3 out of 10.

### Estimated effort

The maximum estimated effort of this user story is 10 hours.

## 8.1 Acceptance Criteria

### Consistency

Collecting Power-Ups should change the behavior of certain objects on the field consistently.

### Durability

The effect of the collected Power-Ups should be active until the specified time runs out.



### Reversability

After the time runs out the state of the modified objects returns into the normal state.

## **Diversity**

After a random time passed by there is a chance of spawning the following items:

- Red Half Growth – Powerup (Racket of the opponent is half the normal size)
- Green Half Growth – Powerup (Racket of the collector is half the normal size)
- Ball Speed – Powerup (Ball speed doubles)
- Green Ball Growth – Powerup (Ball size doubles)
- Red Ball Growth – Powerup (Ball is getting smaller by a half)
- Point Blocker Wall – Powerup (A wall appears in front of the collector's racket and blocks every ball)

Document		 
Project	Pong Game	
Creator	Philipp Klaudrat	
Created on	14.12.2017	
Description	Documentation User Story ID: 9	
Chief responsibility	Philipp Klaudrat	
Quality assurance	Tician Hauswirth	

## 9 User Story

### ID

The ID of this user story is 9.

### Title

As a user I want to see all ranks on a separate website.

### Priority

The priority of this user story is 4 out of 10.

### Estimated effort

The maximum estimated effort of this user story is 10 hours.

## 9.2 Acceptance Criteria

### Consistency

The website is in a consistent state. Whenever a user looks up for a rank, the system stays usable and consistent.

### Update

The ranks are being updated automatically after a specific time.

### Distinction

There are several rankings in the UI for Player vs Player and for Player vs Computer.

### Highlight

The best players are highlighted on the website.