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| Assignment 1 | | Project Summary | | |
| Course | | Fullstack Application Development with Node.js + Express.js + React.js - 2017 | | |
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| Project author | | | | |
| № | First name, last name | | E-mail | Face-to-face/ online |
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| Project name | **BrickBreaker online game for two** |

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| 1. Short project description (Business needs and system features) |
| BrickBreaker is an online game for two, in which the players compete against each other, using their reflexes and skill with the mouse or touchpad. Similar to table tennis, there is a field, one ball and each player has a paddle. Every time a player misses hitting it on his side of the field, one of his lives is substracted. There are also bricks spawned in the field and breaking them gains points. Enough points collected will gain the player additional lives to ease his survival in the battle.  The game will be developed as a *Single Page Application (SPA)* using ***React.js***, **Material-ui**, **socket.io** and ***Node.js + express****.* |

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| 1. Main Use Cases / Scenarios | | |
| **Use case name** | **Brief Descriptions** | **Actors Involved** |
| **2.1 Join any game on the server** | Any user can join any of the games listed on the start screen or create his own room (UC 2.2). | Guest |
| **2.2 Create a new game room** | Any player can create his own room where he is the host. Only the host of the game can start it. | *Host* |
| **2.3 Chat with other players** | You can chat with the other player if you have already joined a room. | *All players* |
| **2.4 Listen to music** | On both game and start screens you have a music controller to navigate game sound and music. | *All players* |
| **2.5 Dialogs** | Whenever some event occurs, such as a person joined/left room etc. modal windows appear, prompting the user. | *All players* |

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| 1. Main Views (SPA Frontend) | | |
| **View name** | **Brief Descriptions** | **URI** |
| * 1. **Start screen** | The start screen shows created rooms in which you can join. You fill the form with your name and can create your own room. | / |
| * 1. **Game screen** | This view presents the actual game field, including players pads, game chat, sound controller and score board. | */game* |

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| 1. API Resources (Node.js Backend) | | |
| **View name** | **Brief Descriptions** | **URI** |
| * 1. **Scoreboard** | GET the scores from games payed so far. | */api/scores* |
| * 1. **Rooms** | GET the rooms in which are available to join. | */api/rooms* |