

USER REQUIREMENTS SPECIFICATIONS

2. FUNCTIONAL REQUIREMENTS AND USE CASES

2.1 REQUIREMENTS

Nr	Description	MOSCOW
1	A player rolls a dice	M
2	A player moves his piece to the starting square	M
3	System notifies players of their opponents rolls	M
4	System updates to show opponents piece movements	M
5	<i>after each move</i> A players chooses his color	S
6	When a player's piece lands on an opponent's piece, the opponents piece is then removed from its position and returned to the rest area	M
7	When a player's piece lands on his own piece, the system will display both piece as being next to each other	S
8	A player can communicate with other players through the chat window	S
9	A player moves the number of squares he rolls	M
10	The system allows players to move his piece towards the victory area only when the roll equal to or smaller than the amount of squares between the players piece and the last unoccupied square of the victory area	M
11	A player can choose which piece he wishes to move	M
12	A player rerolls when rolling a six	M
13	Minimal 2 players required to play	M
14	A player can only move his own piece	M
15	System displays the winner of the game <i>at the end.</i>	M
16	Players are able to join an ongoing game	C
17	Players are able to spectate ongoing games	W
18	When a room is full, players can no longer join	W M
19	When starting a game, players are <u>allowed to make private rooms</u> <i>what is this?</i>	W
20	Players can log in to play the game <i>or must?</i>	S
21	Players can register to play the game <i>or must?</i>	S
22	System tells players whose turn it is	M
23	System decides who starts at the beginning of the game	M
24	A player can invite other players to his game	S
25	A player can challenge a player to a game	S

UML case diagram

USER REQUIREMENTS SPECIFICATIONS

2.2 USE CASES

• Registration in the game

Goal- level	Registering in the game
Pre-condition	The user is not registered in the game yet
Actor	User
MSS	1.The User fills the registering blank with his data 2. The User chooses an username and a password 3. The User clicks on the button "register" 4. System notifies User if his register was successfully
Extension	2.1 If the username already exist, the system notifies the user to choose another username
Post Condition	The user successfully registered.

• Log into the game

Goal- level	To log in the game
Pre - condition	The user has to be already registered in the game
Actor	User
MSS	1. The User types the username 2. The User types the password <i>and then nothing?</i>
Extension	1.1 If the User has typed the username wrong, the system will notify the User with a message to retype it 1.2 If the User has typed the password wrong, the system will notify the User with a message to retype it
Post Condition	The user successfully logged in the game

• Chat during the game

Goal- level	To chat with opponent during the game
Pre - condition	1.The game has already started
Actor	User
MSS	1.The User type a message in the chat box 2.The User receives a message in the chat box
Extension	<i>I send and receive my own message?</i>
Post Condition	

The system sends the message!

• Global Chat

Goal- level	To chat with all registered players that are online
-------------	---

USER REQUIREMENTS SPECIFICATIONS

Pre - condition	The User is logged in the game and he/she is in the lobby
Actor	User1 User2
MSS	1. User1 types a message in the Global chat box 2. The system shows the message in the Global chat box <i>to all portal users</i> 3. User2 receives a message in the Global chat box <i>- all users?</i>
Extension	All of this can be repeated with User2 sending a message and User1 receiving it.
Post Condition	User1 send a message to all online players.

• Roll die

Goal-level	Roll the die
Pre-condition	Current player (user) turn
Actor	User
MSS	1. The user clicks on the die <i>- and then nothing? *</i>
Extension	
Post Condition	<i>1</i> The system shows the die result

• Place token

Goal-level	Place a token on the board
Pre-condition	1. Current player (user) turn 2. The die result must be 6
Actor	User
MSS	1. The user clicks on the desired token that he wants to place on the board 2. <i>The system moves the token * and shows to all opponents the moved token.</i>
Extension	<i>↑</i>
Post Condition	The token is placed on the starting area

• Move token

Goal-level	Move token
Pre-condition	Token should be on the board
Actor	User
MSS	1. The user clicks on the die 2. Clicks on the token that he wants to move <i>*</i>
Post Condition	Token moved to the new position

• Remove token

Goal-level	Remove a token from the board
Pre-condition	You land on an enemy token

USER REQUIREMENTS SPECIFICATIONS

Actor	System
MSS	1.System checks if a player lands on a token that does not belong to him 2.System removes enemy token and places the user's token on that spot
Extension	1.a token belongs to the user 1.b user token gets overlapped by his own token 1.a.1Token lands on opponents while on the opponents starting square 1.a.2 Token is not removed from the board
Post-Condition	Players token takes the position of enemy token

/ consequence of move a token

• Start Game

Goal	Begin the game
Pre-condition	Other Players are readied and awaiting the user
Actor	User
MSS	1.User clicks the start game button 2.System informs players that the game will begin 3.Game begins
Extension	2.aNot all players are ready 2.b System informs user that not all players are ready 2.c System does not start the game
Post-Condition	GUI changes to the game GUI

?



which players?

opponents/ player of the game

• Create Game

Goal	User creates a game
Pre-condition	The User is logged in the game and he/she is in the lobby
Actor	User
MSS	1.User clicks the create game button 2. System shows the user the Game creator screen.
Extension	
Post-Condition	The user created a game

• Invite a Player to a game

Goal	User 1 invites User2 to a game.
Pre-condition	User1 created a game, there is at least one other player online.
Actor	User1, User2
MSS	1. User 1 browse through the Player list. 2. User 1 right-clicks on User2's name and chooses the invite option. 3. System informs User1 that he/she invited User 2 to a game. 4. System informs User 2 that he/she was invited to a game.
Extension	2.1 The players chosen by User1 have to be online.
Post-Condition	User1 invited user 2 to a game.

- accept/decline?

USER REQUIREMENTS SPECIFICATIONS

• Join Game

Goal	Join a game
Pre-condition	User is logged in and gets invited
Actor	User
MSS	1. User clicks on the join game button
Post-Condition	User joins game lobby

• Exit Game

Goal	Exit a game
Pre-Condition	User is in game
Actor	User
MSS	1. User clicks on the exit game button 2. System asks user if he wants to leave
Post-Condition	User leaves the game

• Choose Color of Token

Goal	User want to choose a token color
Pre-Condition	User is creating a game or he/she is a guest in a game
Actor	User1 User2
MSS	1. User1 clicks on one checkboxes showing the different token colors. 2. System indicates that this User 1's token color and informs User 2.
Exceptions	1.1 If the color is already occupied User1 will receive an appropriate error message that he needs to choose another token color. 2.1 User 2 cannot choose the same token color as User1.
Post-Condition	User leaves the game

• Spectate Game

Goal	User wants to spectate a game
Pre-condition	User in the lobby
Actor	User
MSS	1. User selects one of the players that are in game 2. System drops down a menu 3. User clicks the spectate button 4. System changes GUI of that of the game - ??? explain
Post-condition	User is now spectating an ongoing game

USER REQUIREMENTS SPECIFICATIONS

• Replay Game

Goal	User wants to replay the actions of the game
Pre-Condition	User just finished a game
Actor	User
MSS	1. User clicks on the replay button X 2. System changes current GUI — now? the system starts a new game
Post-condition	User is now watching his replay of his last game

• Pause Game

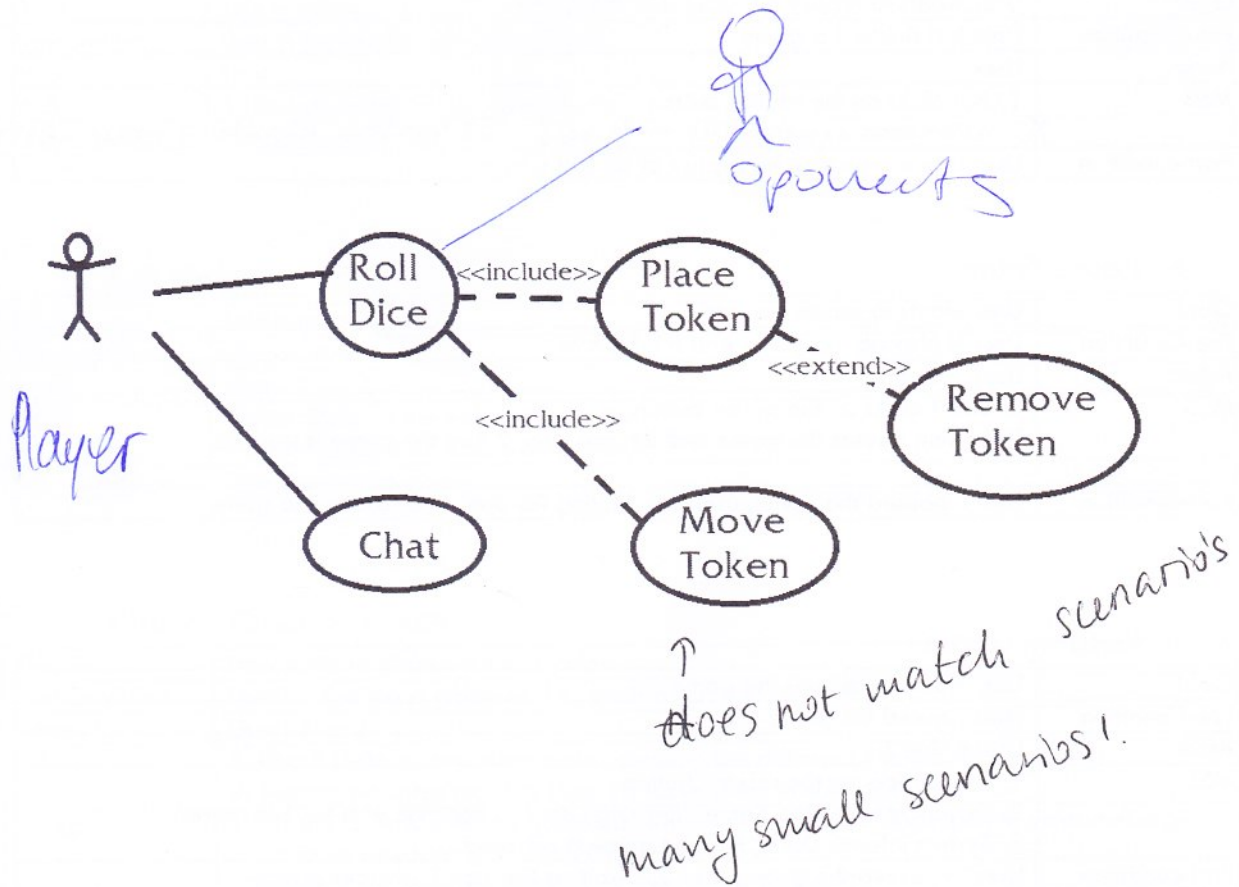
Goal	User wants to pause the game
Pre-Condition	User is playing the game and it is his turn
Actor	User 1 User 2
MSS	1. User1 clicks on the pause button. 2. System pauses the game and informs User 2 that the game is paused.
Post-condition	User1 paused the game, user 2 is waiting for user 1 to resume the game

• Resume Game

Goal	User wants to resume the game
Pre-Condition	User paused the game
Actor	User1 User2
MSS	1. User1 clicks on the resume button. 2. System resumes the game, allowing User1 to continue with his/her move. 3. System informs User2 that the game is resumed.
Post-condition	User1 resumed the game, user 2 is waiting for user 1 to make a move.

USER REQUIREMENTS SPECIFICATIONS

2.3 USE-CASE DIAGRAM



should come first

USER REQUIREMENTS SPECIFICATIONS

3.3 Lobby form

Lobby [minimize] [maximize] [close]

Hello ...

Wins...

Player List:

Top players:

Create Game

Join Game

explain

List of games

USER REQUIREMENTS SPECIFICATIONS

3.4 Game Creator form

The screenshot shows a window titled "Game Creator" with standard Windows window controls (minimize, maximize, close) in the top right corner. The interface is divided into several sections:

- Players:** A rectangular box on the left side of the window.
- Token color:** A label positioned above a vertical column of four square boxes. The top box contains a blue token icon, while the others are empty.
- checkBox1, checkBox2, checkBox3, checkBox4:** A vertical column of four checkboxes located to the right of the token color boxes.
- Player List:** A large rectangular box on the right side of the window.
- Start Button:** A rectangular button located in the bottom right corner of the window.

↑
explain

USER REQUIREMENTS SPECIFICATIONS

Rename
3.5 Guest form

explain

set up the game

The 'Guest' form window has a title bar with a small icon and the text 'Guest'. It contains two main sections. The left section is titled 'Players:' and features a rectangular area with a dotted border and four small square handles at the corners, with three horizontal lines drawn inside. The right section is titled 'Token color:' and contains four rows, each with a dashed square box followed by a checkbox and a label: 'checkBox1', 'checkBox2', 'checkBox3', and 'checkBox4'. At the bottom right of the window is a 'Ready' button.

Join the game

3.1 Game form

The 'Game' form window has a title bar with a small icon and the text 'Game'. It is divided into several sections. On the left is a 'Chat' section with a large text area. On the right is a 'Board Information:' section containing a list box labeled 'listBox2'. Below this is a 'Turn' section with a 'Dice Roll' button. At the bottom right is an 'Exit Game' button. At the bottom left is a text input field labeled 'listBox1' with a 'Send' button to its right.

We will look in more detailed way at the forms in the next version of the document.

USER REQUIREMENTS SPECIFICATIONS

4. Non-functional requirements

Nr	Description
1	GUI should be easy to use
2	System should display outputs from one user to the others users within the same session
3	System should respond fast to user inputs
4	System should have stable connectivity in order to provide stable user interaction
5	System should relay information from one user to the other
6	System should display the output of the session to all current users within the session before ending the session
7	The application will be programmed in C#, which means Windows operation system version windows 7 or windows 8 are the required environments for it. WCF!!
8	The application can run on a basic computer.

5. Work division

Name:	Tasks:
Todor	GUI, 6 use-cases, use-case diagram, MoSCoW
Ivana	Introduction, functional requirements, 6 use-cases, use-case diagram
Zair	Non-functional requierments, 6 use-cases, use-case diagram, MoSCoW