University of Tartu Faculty of Mathematics and Computer Science

System Modelling

Mancala Project

Testing Report

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Version Control

Date	Changes	Comments				Author
13.11	Testing results.	Comments	and	evaluation	of	Simo
		application according to requirements.				

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Legend

Impossible to implement.

Requirement not jet implemented.

Implementation not fully completed.

Requirement correctly and fully implemented.

Testing results

Category	Requirement	Notes
1. Players		OK
	1.1 The game is designed to be	ОК
	played by two human players.	
	1.2 The game is played behind one	ОК
	compute (no network connection).	
	1.3 Both players are using the	ОК
	same control method (the mouse).	
	1.4 Both players can choose their	ОК
	name displayed before the game.	
2. Board		ОК
	2.1 The game is played on a board.	ОК
	2.2 The board has 12 small pits (2	ОК
	rows of 6 pits in a row) and 2 big	
	pits (one in both side of the board).	
	2.3 One player has control over 1	ОК
	row of small pits and 1 big pit. The	
	other player has control over the	
	other row of small pits and the	
	other big pit.	

3. Counters		ОК
	3.1 There are 4 counters in each	ОК
	small pit at the start of the game.	
	3.2 Choosing a small pit (clicking on	ОК
	it) during the players turn will	
	redistribute all the counters in it:	
	counters will be placed one by one	
	to the next pits (excluding only	
	opponent's big pit).	
	3.3 The number of counters in one	OK
	pit is not limited.	
	3.4 It is not possible to redistribute	OK
	the counters in the big pits – every	
	counter that has been inserted to a	
	big pit will remain there till the end	
	of the game.	
4. Objectives		ОК
	4.1 The main objective of the game	ОК
	is to have more counters in the big	
	pit in the end of the game than	
	your opponent (win scenario).	
	4.2 There can be the same number	ОК
	of counters in both big pits in the	
	end of the game (draw scenario).	
5. Game flow		ОК
	5.1 Players turn consist of	ОК
	redistributing counters from one or	
	multiple of his small pits. After the	
	redistribution it is other players	
	turn.	
	5.2 All counters are redistributed	OK
	to other pits in anti-clockwise	
	direction.	

5.3 If during redistribution the last	OK
counter gets placed in the player's	
big pit, the player gets an	
additional chance to redistribute	
counters from some of his small	
pit. There is no limit on the number	
of times the additional chance for	
redistribution is given to a player	
during his turn.	
5.4 If during a redistribution the	If the opposite small
last counter is placed in an empty	pit does not contain
small pit owned by the player, and	any counters, the
the opposite small pit contains	lastly placed counter
counters, both the lastly placed	will not be placed
counter and all the opposite	into the player's big
counters are captured and placed	pit. OK
into the player's big pit.	
5.5 A player can not choose an	OK
empty small pit for redistribution.	
As long as there is at least one	
small pit that has counters in it, the	
player must redistribute counters.	
5.6 When one player no longer has	If one player no
any counters in any of his small	longer has any
pits, the game ends. The other	counters in his small
player moves all remaining	pits, the game ends
counters in his small pits to his big	and all the other
pit. The counters in the big pits are	player's counters are
then counted to decide the final	placed into his big pit
score for both players. The winner	automatically. OK
of the match is decided by the final	
score.	

6. Visualisation		ОК
	6.1 At all times during a game both	ОК
	players must see how many	
	counters there are in all the pits	
	(number format and picture of	
	counters).	
	6.2 Counters are redistributed one	ОК
	by one.	
	6.3 In the end on the game the	Winners name and
	score for both players and the	his score is displayed.
	name of the winner is displayed.	Both scores are
		visible from board.
		ОК
7. Other		
	7.1 The game has a high scores	No duplicate values
	table that can be viewed at any	are allowed in the
	time when the application is	table for player name
	running. The high scores table	or score. Almost OK
	contains top 10 scores of all time	
	and the player names who	
	achieved these scores. The high	
	scores table is resettable at all	
	times when it is viewed.	
	7.2 The application has a help	ОК
	menu that can be viewed at any	
	time when the application is	
	running. The help menu contains a	
	short overview of the game rules.	

8. Non-functional requirements		
	8.1 The application should run	Generally the
	smoothly – no action can have a	application is running
	longer response time than 0.2	smoothly, but at
	seconds.	some points has
		longer delays. No
		delay is longer than 1
		second though. The
		game is still very
		playable. Almost OK.
	8.2 The application must be simple	ОК
	- only elements that are needed to	
	implement some kind of required	
	functionality must be present.	
	8.3 The application must be	The design is nothing
	pleasant to watch – developers can	special, but also not
	choose colours for design by	disturbing to watch.
	themself.	OK.
	8.4 The application must be easy to	ОК
	run from an executable file.	
	8.5 The application must be easy to	OK
	close at any time – no more than 2	
	clicks.	