

University of Tartu
Faculty of Mathematics and Computer Science

System Modelling
Mancala Project

User story

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Version Control

Date	Changes	Comments	Author
08.11	User story.	A user story that covers one full game between two human players.	Raigo

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User story

1.

Title: Bob makes a move from pit 1

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 4, pit 2 – 4, pit 3 – 4, pit 4 – 4, pit 5 – 4, pit 6 – 4, pit 7 – 4, pit 8 – 4, pit 9 – 4, pit 10 – 4, pit 11 – 4, pit 12 – 4. There are 0 counters in Bob's big pit and 0 counters in Alice's big pit.

Action: Bob picks up 4 counters from pit 1 and moves to other pits in anti-clockwise direction, dropping on counter into four next pits.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 5, pit 3 – 5, pit 4 – 5, pit 5 – 5, pit 6 – 4, pit 7 – 4, pit 8 – 4, pit 9 – 4, pit 10 – 4, pit 11 – 4, pit 12 – 4. There are 0 counters in Bob's big pit and 0 counters in Alice's big pit.

2.

Title: Alice makes a move from pit 7

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 5, pit 3 – 5, pit 4 – 5, pit 5 – 5, pit 6 – 4, pit 7 – 4, pit 8 – 4, pit 9 – 4, pit 10 – 4, pit 11 – 4, pit 12 – 4. There are 0 counters in Bob's big pit and 0 counters in Alice's big pit.

Action: Alice picks up 4 counters from pit 1 and moves to other pits in anti-clockwise direction, dropping on counter into four next pits.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 5, pit 3 – 5, pit 4 – 5, pit 5 – 5, pit 6 – 4, pit 7 – 0, pit 8 – 5, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4. There are 0 counters in Bob's big pit and 0 counters in Alice's big pit.

3.

Title: Bob makes a move from pit 2

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 5, pit 3 – 5, pit 4 – 5, pit 5 – 5, pit 6 – 4, pit 7 – 0, pit 8 – 5, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4. There are 0 counters in Bob's big pit and 0 counters in Alice's big pit.

Action: Bob picks up 5 counters from pit 2 and moves to other pits in anti-clockwise direction, dropping on counter into four next pits. One counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 6, pit 4 – 6, pit 5 – 6, pit 6 – 5, pit 7 – 0, pit 8 – 5, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4. There is 1 counter in Bob's big pit and 0 counters in Alice's big pit. Bob gets an additional move.

4.

Title: Bob makes a move from pit 3

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 6, pit 4 – 6, pit 5 – 6, pit 6 – 5, pit 7 – 0, pit 8 – 5, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4.

There is 1 counter in Bob's big pit and 0 counters in Alice's big pit.

Action: Bob picks up 6 counters from pit 3 and moves to other pits in anti-clockwise direction, dropping one counter into five next pits. One counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 0, pit 4 – 7, pit 5 – 7, pit 6 – 6, pit 7 – 1, pit 8 – 6, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4.

There are 2 counters in Bob's big pit and 0 counters in Alice's big pit.

5.

Title: Alice makes a move from pit 7

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 0, pit 4 – 7, pit 5 – 7, pit 6 – 6, pit 7 – 1, pit 8 – 6, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4.

There are 2 counters in Bob's big pit and 0 counters in Alice's big pit.

Action: Alice picks up 1 counter from pit 7 and moves to other pits in anti-clockwise direction, dropping a counter into next pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 0, pit 4 – 7, pit 5 – 7, pit 6 – 6, pit 7 – 0, pit 8 – 7, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4.

There are 2 counters in Bob's big pit and 0 counters in Alice's big pit.

6.

Title: Bob makes a move from pit 4

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 0, pit 4 – 7, pit 5 – 7, pit 6 – 6, pit 7 – 0, pit 8 – 7, pit 9 – 5, pit 10 – 5, pit 11 – 5, pit 12 – 4.

There are 2 counters in Bob's big pit and 0 counters in Alice's big pit.

Action: Bob picks up 7 counters from pit 4 and moves to other pits in anti-clockwise direction, dropping a counter into next 6 pits. One counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 0, pit 4 – 0, pit 5 – 8, pit 6 – 7, pit 7 – 1, pit 8 – 8, pit 9 – 6, pit 10 – 6, pit 11 – 5, pit 12 – 4.

There are 3 counters in Bob's big pit and 0 counters in Alice's big pit.

7.

Title: Alice makes a move from pit 10

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 0, pit 4 – 0, pit 5 – 8, pit 6 – 7, pit 7 – 1, pit 8 – 8, pit 9 – 6, pit 10 – 6, pit 11 – 5, pit 12 – 4.

There are 3 counters in Bob's big pit and 0 counters in Alice's big pit.

Action: Alice picks up 6 counters from pit 10 and moves to other pits in anti-clockwise direction, dropping a counter into next 5 pits. One counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 8, pit 6 – 7, pit 7 – 1, pit 8 – 8, pit 9 – 6, pit 10 – 0, pit 11 – 6, pit 12 – 5.

There are 3 counters in Bob's big pit and 1 counter in Alice's big pit.

8.

Title: Bob makes a move from pit 6

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 8, pit 6 – 7, pit 7 – 1, pit 8 – 8, pit 9 – 6, pit 10 – 0, pit 11 – 6, pit 12 – 5.

There are 3 counters in Bob's big pit and 1 counter in Alice's big pit.

Action: Bob picks up 7 counters from pit 6 and moves to other pits in anti-clockwise direction, dropping a counter into next 6 pits. One counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 8, pit 6 – 0, pit 7 – 2, pit 8 – 9, pit 9 – 7, pit 10 – 1, pit 11 – 7, pit 12 – 6.

There are 4 counters in Bob's big pit and 1 counter in Alice's big pit.

9.

Title: Alice makes a move from pit 7

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 8, pit 6 – 0, pit 7 – 2, pit 8 – 9, pit 9 – 7, pit 10 – 1, pit 11 – 7, pit 12 – 6.

There are 4 counters in Bob's big pit and 1 counter in Alice's big pit.

Action: Alice picks up 2 counters from pit 7 and moves to other pits in anti-clockwise direction, dropping a counter into next 2 pits.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 8, pit 6 – 0, pit 7 – 0, pit 8 – 10, pit 9 – 8, pit 10 – 1, pit 11 – 7, pit 12 – 6.

There are 4 counters in Bob's big pit and 1 counter in Alice's big pit.

10.

Title: Bob makes a move from pit 5

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 8, pit 6 – 0, pit 7 – 0, pit 8 – 10, pit 9 – 8, pit 10 – 1, pit 11 – 7, pit 12 – 6. There are 4 counters in Bob's big pit and 1 counter in Alice's big pit.

Action: Bob picks up 8 counters from pit 5 and moves to other pits in anti-clockwise direction, dropping a counter into next 7 pits. One counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 1, pit 7 – 1, pit 8 – 11, pit 9 – 9, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 5 counters in Bob's big pit and 1 counter in Alice's big pit.

11.

Title: Alice makes a move from pit 7

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 1, pit 7 – 1, pit 8 – 11, pit 9 – 9, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 5 counters in Bob's big pit and 1 counter in Alice's big pit.

Action: Alice picks up 1 counter from pit 7 and moves to other pits in anti-clockwise direction, dropping a counter into next pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 1, pit 7 – 0, pit 8 – 12, pit 9 – 9, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 5 counters in Bob's big pit and 1 counter in Alice's big pit.

12.

Title: Bob makes a move from pit 6

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 1, pit 7 – 0, pit 8 – 12, pit 9 – 9, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 5 counters in Bob's big pit and 1 counter in Alice's big pit.

Action: Bob picks up 1 counter from pit 6 and moves to other pits in anti-clockwise direction, dropping a counter into next 0 pits. One counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 12, pit 9 – 9, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 6 counters in Bob's big pit and 1 counter in Alice's big pit. Bob gets an additional move.

13.

Title: Bob makes a move from pit 3

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 12, pit 9 – 9, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 6 counters in Bob's big pit and 1 counter in Alice's big pit.

Action: Bob picks up 1 counter from pit 3 and moves to other pits in anti-clockwise direction, dropping a counter into next 0 pits. 1 counter is dropped into player's big pit. Bob captures additional 9 counters from opposite pit and they are dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 0, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 12, pit 9 – 0, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 16 counters in Bob's big pit and 1 counter in Alice's big pit.

14.

Title: Alice makes a move from pit 8

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 1, pit 3 – 0, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 12, pit 9 – 0, pit 10 – 2, pit 11 – 8, pit 12 – 7. There are 16 counters in Bob's big pit and 1 counter in Alice's big pit.

Action: Alice picks up 12 counters from pit 8 and moves to other pits in anti-clockwise direction, dropping a counter into next 9 pits. 3 counters are dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 2, pit 3 – 1, pit 4 – 1, pit 5 – 1, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 3, pit 11 – 9, pit 12 – 8. There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

15.

Title: Bob makes a move from pit 1

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 2, pit 3 – 1, pit 4 – 1, pit 5 – 1, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 3, pit 11 – 9, pit 12 – 8. There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

Action: Bob picks up 2 counters from pit 1 and moves to other pits in anti-clockwise direction, dropping a counter into next 2 pits.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 3, pit 3 – 2, pit 4 – 1, pit 5 – 1, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 3, pit 11 – 9, pit 12 – 8.

There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

16.

Title: Alice makes a move from pit 9

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 3, pit 3 – 2, pit 4 – 1, pit 5 – 1, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 3, pit 11 – 9, pit 12 – 8.

There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

Action: Alice picks up 1 counter from pit 9 and moves to other pits in anti-clockwise direction, dropping a counter into next pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 3, pit 3 – 2, pit 4 – 1, pit 5 – 1, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 4, pit 11 – 9, pit 12 – 8.

There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

17.

Title: Bob makes a move from pit 2

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 3, pit 3 – 2, pit 4 – 1, pit 5 – 1, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 4, pit 11 – 9, pit 12 – 8.

There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

Action: Bob picks up 3 counters from pit 2 and moves to other pits in anti-clockwise direction, dropping a counter into next 3 pits.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 2, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 4, pit 11 – 9, pit 12 – 8.

There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

18.

Title: Alice makes a move from pit 10

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 2, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 4, pit 11 – 9, pit 12 – 8.

There are 16 counters in Bob's big pit and 4 counters in Alice's big pit.

Action: Alice picks up 4 counters from pit 10 and moves to other pits in anti-clockwise direction, dropping a counter into next 3 pits. 1 counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 2, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 – 9. There are 16 counters in Bob's big pit and 5 counters in Alice's big pit.

19.

Title: Bob makes a move from pit 5

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 2, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 – 9. There are 16 counters in Bob's big pit and 5 counters in Alice's big pit.

Action: Bob picks up 2 counters from pit 5 and moves to other pits in anti-clockwise direction, dropping a counter into next pit. 1 counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 0, pit 6 – 1, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 – 9. There are 17 counters in Bob's big pit and 5 counters in Alice's big pit. Bob gets an additional move.

20.

Title: Bob makes a move from pit 6

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 0, pit 6 – 1, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 – 9. There are 17 counters in Bob's big pit and 5 counters in Alice's big pit.

Action: Bob picks up 1 counter from pit 6 and moves to other pits in anti-clockwise direction, dropping a counter into next 0 pits. 1 counter is dropped into player's big pit. Bob gets an additional move.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 – 9. There are 18 counters in Bob's big pit and 5 counters in Alice's big pit.

21.

Title: Bob makes a move from pit 3

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 3, pit 4 – 2, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 – 9. There are 18 counters in Bob's big pit and 5 counters in Alice's big pit.

Action: Bob picks up 3 counters from pit 3 and moves to other pits in anti-clockwise direction, dropping a counter into next 3 pits.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 0, pit 4 – 3, pit 5 – 1, pit 6 – 1, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 –

9. There are 18 counters in Bob's big pit and 5 counters in Alice's big pit.

22.

Title: Alice makes a move from pit 11

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 0, pit 3 – 0, pit 4 – 3, pit 5 – 1, pit 6 – 1, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 10, pit 12 –

9. There are 18 counters in Bob's big pit and 5 counters in Alice's big pit.

Action: Alice picks up 10 counters from pit 11 and moves to other pits in anti-clockwise direction, dropping a counter into next 7 pits. 3 counters are dropped into player's big pit. Alice captures additional 1 counter from opposite pit and it is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 1, pit 4 – 4, pit 5 – 0, pit 6 – 2, pit 7 – 1, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 –

10. There are 18 counters in Bob's big pit and 9 counters in Alice's big pit.

23.

Title: Bob makes a move from pit 6

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 1, pit 4 – 4, pit 5 – 0, pit 6 – 2, pit 7 – 1, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 –

10. There are 18 counters in Bob's big pit and 9 counters in Alice's big pit.

Action: Actions: Bob picks up 2 counters from pit 6 and moves to other pits in anti-clockwise direction, dropping a counter into next pit. 1 counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 1, pit 4 – 4, pit 5 – 0, pit 6 – 0, pit 7 – 2, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 –

10. There are 19 counters in Bob's big pit and 9 counters in Alice's big pit.

24.

Title: Alice makes a move from pit 7

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit

2 – 1, pit 3 – 1, pit 4 – 4, pit 5 – 0, pit 6 – 0, pit 7 – 2, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 10. There are 19 counters in Bob's big pit and 9 counters in Alice's big pit.

Action: Alice picks up 2 counters from pit 7 and moves to other pits in anti-clockwise direction, dropping a counter into next 1 pits. 1 counter is dropped into player's big pit. Alice captures additional 4 counters from opposite pit and they are dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 10. There are 19 counters in Bob's big pit and 14 counters in Alice's big pit.

25.

Title: Bob makes a move from pit 3

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 10. There are 19 counters in Bob's big pit and 14 counters in Alice's big pit.

Action: Bob picks up 1 counter from pit 3 and moves to other pits in anti-clockwise direction, dropping a counter into next pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 0, pit 4 – 1, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 10. There are 19 counters in Bob's big pit and 14 counters in Alice's big pit.

26.

Title: Alice makes a move from pit 8

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 0, pit 4 – 1, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 10. There are 19 counters in Bob's big pit and 14 counters in Alice's big pit.

Action: Alice picks up 1 counter from pit 8 and moves to other pits in anti-clockwise direction, dropping a counter into next 0 pits. 1 counter is dropped into player's big pit. Alice captures additional 1 counter from opposite pit and it is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 0, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 10. There are 19 counters in Bob's big pit and 16 counters in Alice's big pit.

27.

Title: Bob makes a move from pit 1

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 2, pit 2 – 1, pit 3 – 0, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0. There are 19 counters in Bob's big pit and 16 counters in Alice's big pit.

Action: Bob picks up 2 counters from pit 1 and moves to other pits in anti-clockwise direction, dropping a counter into next 2 pits.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 2, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0. There are 19 counters in Bob's big pit and 16 counters in Alice's big pit.

28.

Title: Alice makes a move from pit 12

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 2, pit 3 – 1, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0. There are 19 counters in Bob's big pit and 16 counters in Alice's big pit.

Action: Alice picks up 10 counters from pit 12 and moves to other pits in anti-clockwise direction, dropping a counter into next 9 pits. 1 counter is dropped into player's big pit. Alice captures additional 2 counters from opposite pit and it is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 1, pit 6 – 1, pit 7 – 1, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0. There are 19 counters in Bob's big pit and 19 counters in Alice's big pit.

29.

Title: Bob makes a move from pit 6

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 1, pit 6 – 1, pit 7 – 1, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0. There are 19 counters in Bob's big pit and 19 counters in Alice's big pit.

Action: Bob picks up 1 counter from pit 6 and moves to other pits in anti-clockwise direction, dropping a counter into next 0 pits. 1 counter is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit

2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 1, pit 6 – 0, pit 7 – 1, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0.
There are 20 counters in Bob's big pit and 19 counters in Alice's big pit. Bob gets an additional move.

30.

Title: Bob makes a move from pit 5

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 1, pit 6 – 0, pit 7 – 1, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0.
There are 20 counters in Bob's big pit and 19 counters in Alice's big pit.

Action: Bob picks up 1 counter from pit 5 and moves to other pits in anti-clockwise direction, dropping a counter into next 0 pits. 1 counter is dropped into player's big pit. Bob captures additional 1 counter from opposite pit and it is dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0.
There are 22 counters in Bob's big pit and 19 counters in Alice's big pit.

31.

Title: Alice makes a move from pit 8

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 1, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0.
There are 22 counters in Bob's big pit and 19 counters in Alice's big pit.

Action: Alice picks up 1 counter from pit 8 and moves to other pits in anti-clockwise direction, dropping a counter into next pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 0, pit 11 – 0, pit 12 – 0.
There are 22 counters in Bob's big pit and 19 counters in Alice's big pit.

32.

Title: Bob makes a move from pit 1

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 1, pit 2 – 3, pit 3 – 2, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 0, pit 11 – 0, pit 12 – 0.
There are 22 counters in Bob's big pit and 19 counters in Alice's big pit.

Action: Bob picks up 1 counter from pit 1 and moves to other pits in anti-clockwise direction, dropping a counter into next pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 4, pit 3 – 2, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 0, pit 11 – 0, pit 12 – 0.

There are 22 counters in Bob's big pit and 19 counters in Alice's big pit.

33.

Title: Alice makes a move from pit 9

Preconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 4, pit 3 – 2, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 1, pit 10 – 0, pit 11 – 0, pit 12 – 0.

There are 22 counters in Bob's big pit and 19 counters in Alice's big pit.

Action: Alice picks up 1 counter from pit 9 and moves to other pits in anti-clockwise direction, dropping a counter into next 0 pits. 1 counter is dropped into player's big pit. Alice captures additional 2 counters from opposite pit and they are dropped into player's big pit.

Postconditions: the pits on the board contain the following amount of counters: pit 1 – 0, pit 2 – 0, pit 3 – 0, pit 4 – 0, pit 5 – 0, pit 6 – 0, pit 7 – 0, pit 8 – 0, pit 9 – 0, pit 10 – 0, pit 11 – 0, pit 12 – 0.

There are 22 counters in Bob's big pit and 22 counters in Alice's big pit. 4 remained counters will be added to Bob's big pit. Bob has won the game with 26 counters against Alice's 22 counters.