

MCS Project Part 2: Reversi (second chance)

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The Event-B part of the new assignment is a small extension of the original assignment. The full original assignment needs to be completed in addition to the following extensions.

We introduce one extra rule: instead of making a normal move, you can may also flip one stone your opponent already has on the board, into your color. This flip move also ends your turn. Flipping a stone does not have any other effects, so no other stones are flipped alongside the flipped one. After a player flips a particular stone, the next player can not flip this stone back in his next turn.

1 Modelling

Add a new event *FlipMove* to the *Game_1* machine, which lets the current player do a flip move as described above.

2 LTL/CTL

In addition to the original statements. Add the LTL or CTL translations of these statements to your report.

- It is possible to two *FlipMoves* occur in subsequent turns
- Before the game ends, it is always possible that all stones on the board become white
- It is possible that the white player always makes the same kind of move as the black player in the previous turn. E.g. he makes a normal move if the black player made a normal move, and a flip move if the black player made a flip move.

3 Practical

The same practical guidelines hold as for the original assignment.

The new deadline is 1/9/2017, 23.59