Battle of Golems Rulebook

Version 2.0

Battle of Golems - educational game algorithmic and programming for 2 players.

Game components:

1. Two 2-Players boards: 4x4 and 6x6 squares.
2. One red and one blue Golems stands-up.
3. 44 Cards

   Action Cards (18):

   3.1. " Forward" - 3 per player;
   3.2. "Backward" - 3 per player;
   3.3. "Turn Left" - 2 per player;
   3.4. "Turn Right" - 2 per player;
   3.5. "Stand in place" - 3 per player;
   3.6. "Attack" - 2 per player;
   3.7. "Defence" - 2 per player;
   3.8. "Take" – 1 per player

   Bonus Cards:

   3.9. "Is enemy?" - 1 per player;
   3.10. "Under attack?" - 1 per player;
   3.11. "LOOP 2 times" - 1 per player;
   3.12. "LOOP 3 times" - 1 per player;
4. Life Tokens - 3 per player;
5. Barriers Tokens – 10 Barrels, 5 Waters and 6 Walls.
6. Dice or spinning tops.

Game Rules

The goal of the game is to kill the opponent Golems, by making the winning algorithms.

Barrier Tokens

There's three types of Barriers:

1. Barrel.
   ○ Golems cannot move in this Square
   ○ Is perceived as Enemy by Golems
   ○ Can be destroyed by Golem's attacks
   ○ Can be picked-up by Golems (but it can release it only when it strikes an opponent).
2. Wall
   ○ Golems cannot move in this Square
   ○ Is not perceived as Enemy by Golems
   ○ Cannot be destroyed by Golem's attacks
   ○ Cannot be picked-up by Golems
3. Water.
   ○ If a Golem move in this Square it looses 1 Life Token then returns to the previous position
   ○ Is not perceived as Enemy by Golems
   ○ Cannot be destroyed by Golem's attacks
   ○ Cannot be picked-up by Golems

Starting the game

1. Players chooses the Board (4x4 or 6x6).
2. The Golems are then placed in the opposite corners of the board, unless otherwise specified by the script.
3. A Deck of 18 Action Cards is dealt to each Player. Each Deck is built in this way:
   ● " Forward" - 3 cards
   ● "Backward" - 3 cards
   ● "Turn Left" - 2 cards
   ● "Turn Right" - 2 cards
   ● "Stand in place" - 4 cards
   ● "Attack" - 2 cards
   ● "Defence" - 2 cards
   ● "Take" – 1 card
   ● "Is enemy?" - 1 card
   ● "Under attack?" - 1 card
   ● "LOOP 2 times" - 1 card
   ● "LOOP 3 times" - 1 card

1st STEP: Programming Golems algorithms.

Each Player programs his own Golem actions using 4 Action Cards.
The Players chooses what Cards to use and lay them in the order they want to be execute by the Golems.
It is recommended to play the cards face down, to not reveal the plan to the opponents.

If the players are more experienced and can make a more complex program, it is necessary to throw dice bonuses (steep top) - they show the presence of the current round of LOOP 2, LOOP 3 blocks and IF. (LOOP 2 is a repeat steps 2 times, LOOP 3 – 3 times).

If a player drops out IF, it is the current course can choose a variant of the proposed and take the appropriate card. A player may refuse the use of IF or LOOP in the current round.

Stroke is defined by set program from one to four cards (not more). Program may consists only 4 action cards, exclude situation If a player has a card in the hands of the IF or LOOP. In that his can also add additional movies or action by putting on top of the left and right margins IF or LOOP cards desired Action Card.

2nd STEP: Execution of the algorithms:

Player's Golems now "executes" the program step by step, from the first Action Card to the last one.

Each Player reveals the topmost Action Card, and the Golems executes the instructions, simultaneously.

Cards Rules
Movement Cards
Movement Cards affect the position of the Golem. They are:
- Forward: when executed, the Golem walks 1 square in the direction he's facing
- Backward: when executed the Golem walks 1 square in the opposite direction he's facing
- Turn (Left or Right): when executed, the Golem rotates 90° in the given direction, remaining on the square he's occupiyng
- Stand in Place: the Golem does not move at all

If two players are trying to go to the same cell, the action is considered to be unenforceable and does not count any of the players. Similarly, a move is not performed when the edge of the field or impassable barriers (barrels or stone wall) on the field. The Walls and the Water is not perceived as the enemy and the Golem will try to move on this cell!
For example, first Card in program of player 1 is "Forward" and first card of player 2 is "Turn

Left". Players moving his Golems simultaneously in the same time, First golem will moving to the top cell, second – turn to left, staying on the cell.

Loop Cards

If the current course is a LOOP, then the player performs an action card specified number of times.

Conditions Cards

If current progress is IF card, then it has a priority lower than that of movement cards. If there is a condition "Is enemy?", the check is performed only after the movement of the opponents of this move. Condition "Is enemy?" applies to barrels and other destructible objects in the game.

Attack and Defense Cards

The player may take the attack just right in direction to the next cell. The player can defend against any attacks - front, back, side.

Card Priorities

Movement Cards has the higher priority: ...

On a successful attack the enemy the player loses one life from the Golem (there are 3) and it is drawn map of life. Player is killed, when he has no cards of lives.

Then begins the next round and the game continues until one player wins.

The winner is the player whose Golem left alone on the field.

Optional Rules

Game for beginners

To play the game in a simpler way, suitable for beginners, follows these steps:
1. Remove all IF and LOOP cards:
   - "Is enemy?"
   - "Under attack?"
   - "LOOP 2 times"
   - "LOOP 3 times"
2. Do not use any Barrier Token
3. Play on the 4x4 board.

Standart game

4x4 field or 6x6 for 2 players. Cubes (spinning tops) rush at the beginning of the course, determining the possibility of using LOOP or IF.

Autonomous golems

The game runs on the field 4x4. Initially given by the movement algorithm using loops and conditions. After setting the program the players begin to move in an endless cycle of repetition rounds. Conditions and related actions are checked anyway. You can use a LOOP inside condition IF (but not vice versa).

Sceneries

Field represents one of the scenarios. Next to the victory of one of the parties must perform in a given scenario, the goal

Puzzles

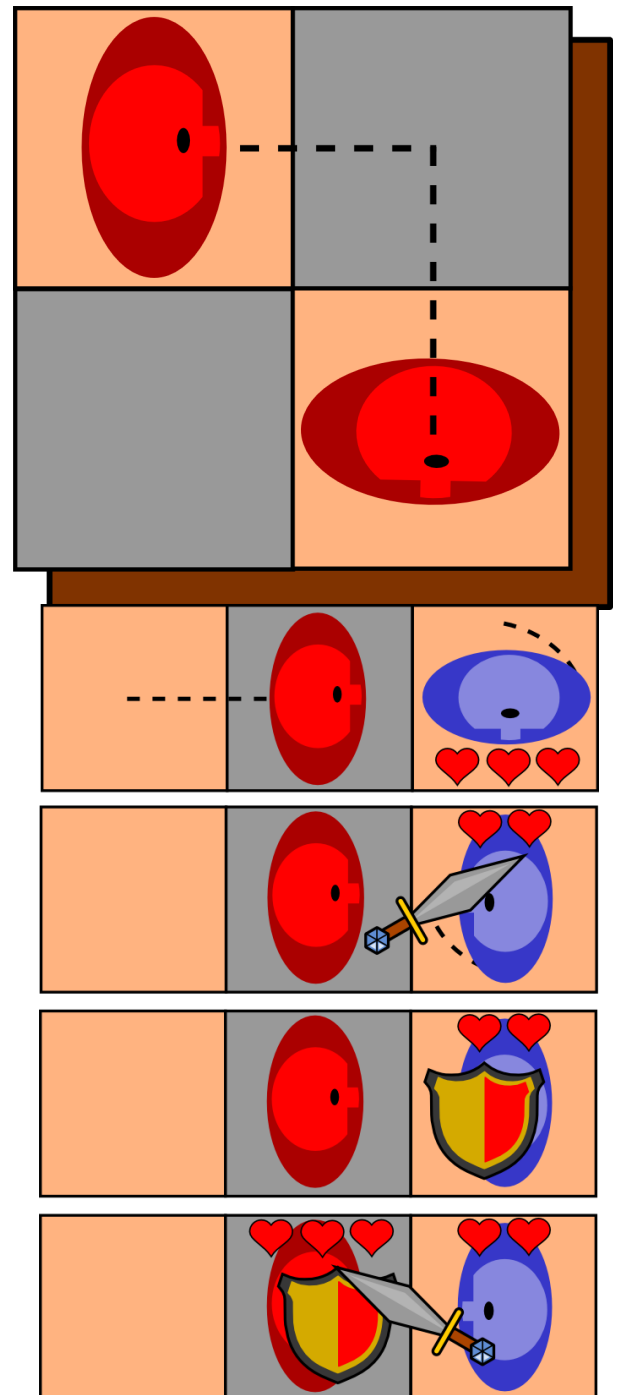Puzzles designed for one player. You need to specify the initial field and draw up a program

for the golem to the required conditions: a certain number of moves, all the cards, the use of repeat or conditions, etc.

Examples of moves

Golem moving

1 Forward
2. Turn Right
3. Forward
4. Forward

Since in the course of 4 to Golem edge of the field, the course is ignored.

Attack and Defence

Golem 1 (red)

1. Forward
2. Attack
3. Stand in place
4. Defence

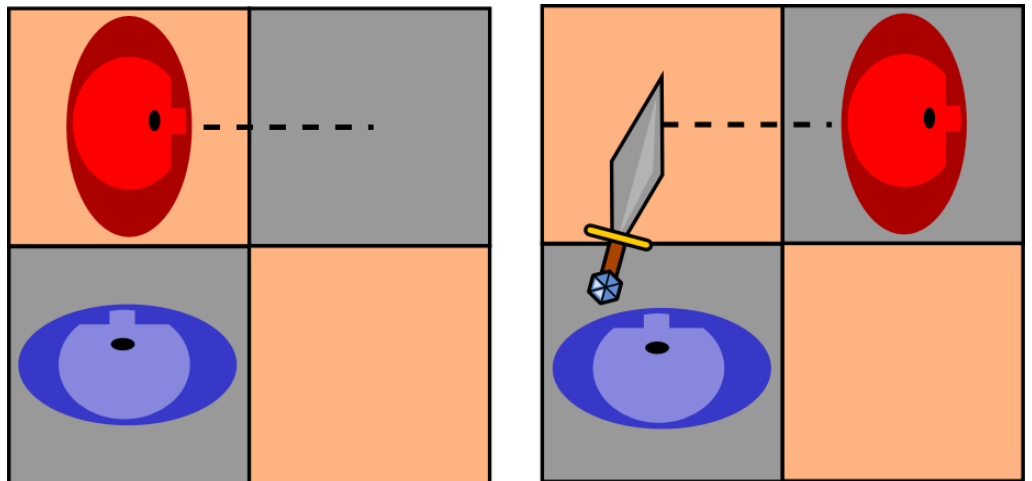Golem 2 (blue)

1. Turn Right
3. Turn Right
4. Defence
5. Attack

Attack avoiding

Golem 1 (red)

1. Forward
2 ....

Golem 2 (blue)

1. Attack
2. ...

The Attack will not be executed, since red Golem already gone to the next cell.

Destroyable obstacle

1. Forward (the course will not be made, as in the way of Barrel)
2. Fight (Barrel destroyed)
3. Forward
4. Forward