

Grid Wars 2016

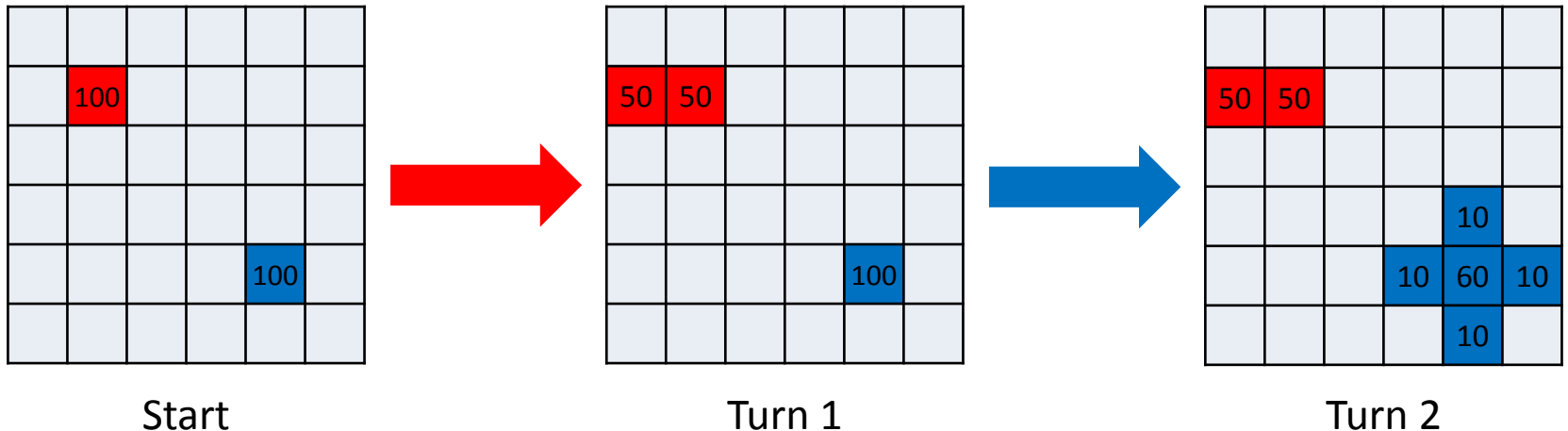
A Game AI Coding Competition

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Let's PLAY !

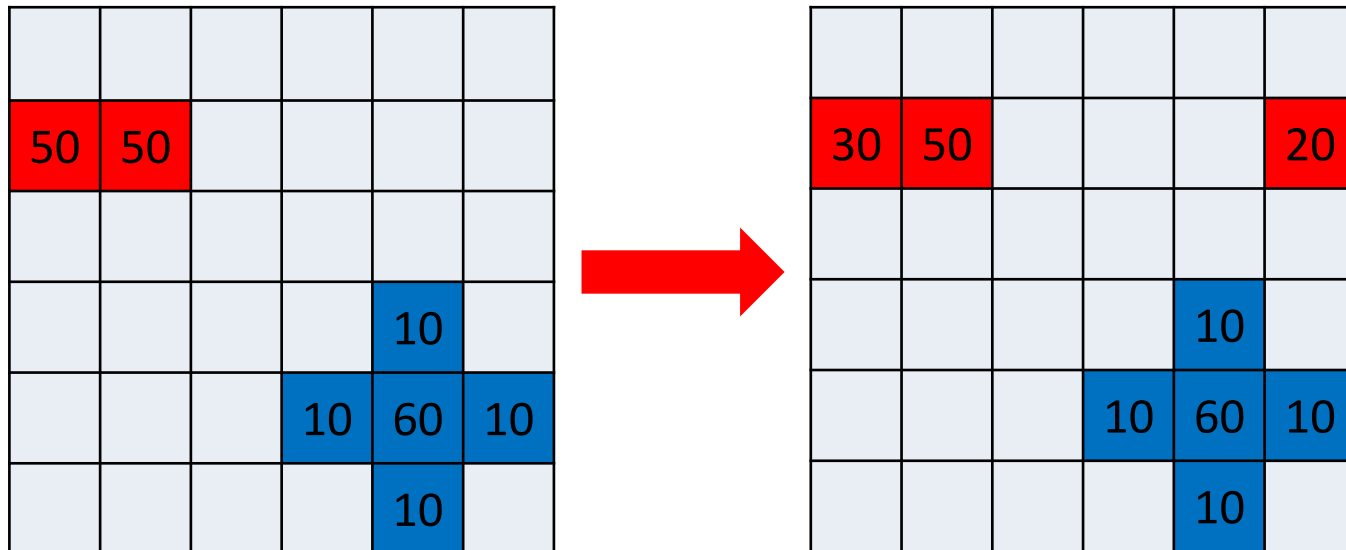
Mechanics

- Start:
 - 50x50 cells board
 - 100 troops per player in one random cell
- Players take alternating turns to move troops



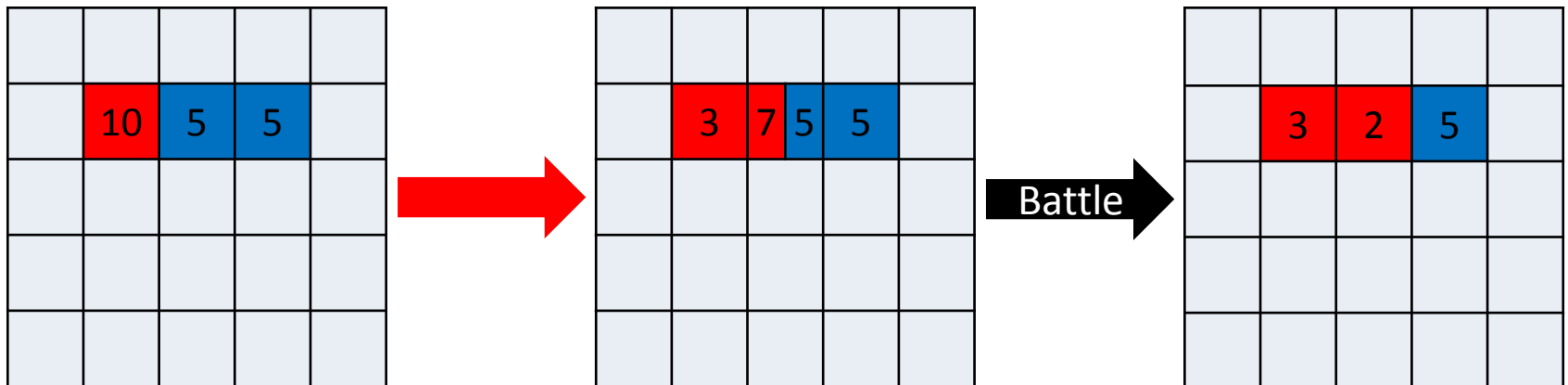
Movement

- No diagonals
- The board is a torus
 - Edges wrap around



Battle

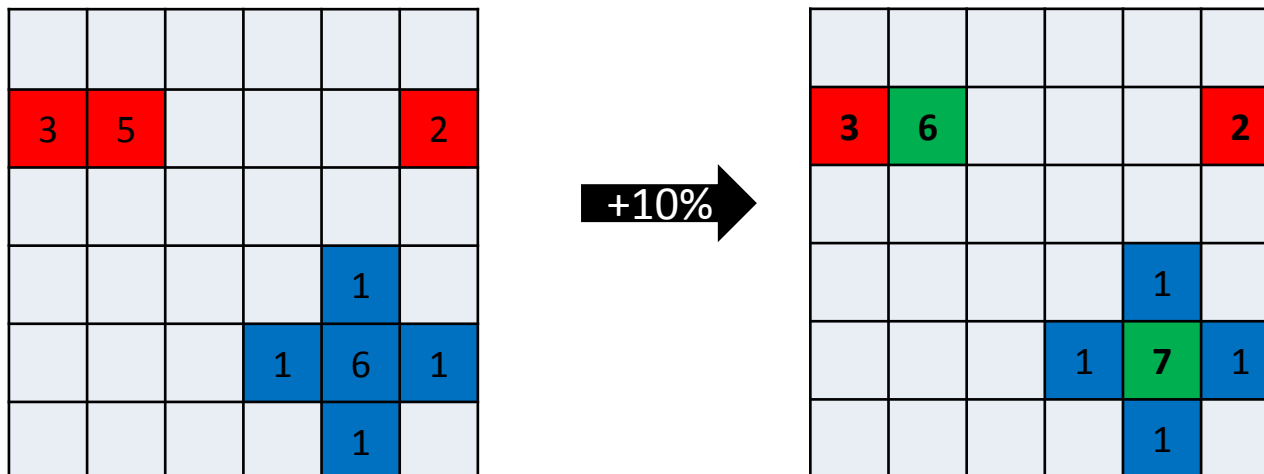
- What if I invade your cell? Fight!
 - Simple comparison (more troops wins)
 - Surviving = Winning - Losing
 - Battles occur after every turn (not round)



Population growth

- After every round (1 turn per player)
 - Growth rate (+10%)
 - Rounding ($1 * 1.4 \rightarrow 1$)
 - Maximum population 100/cell

Before	+10%	After
1	1.1	1
2	2.2	2
3	3.3	3
4	4.4	4
5	5.5	6



Winning

- Last surviving player or highest population after 1000 rounds



How to participate?

- Do I need amazing skills?
 - Basic programming knowledge is enough
 - Simple examples provided
- What if I have no clue at all?
 - You can form a team with someone who knows
 - Take part in defining the strategy

How to participate?

1. Gather a team or go Solo
2. Register a username on **gridwars.cern.ch**
3. Registration password: **SpringCampus2016**
4. Register your team under the team link on **gridwars.cern.ch**

Bot development

Demo

Competition

- Unlimited uploads
 - Last upload is considered submitted to the competition
- Server performs continuous 1v1 battles
- Play against all other active bots up to N times
- View games as soon as they are finished

Other rules

- Illegal movement = all movements ignored
- Thread creation is not allowed
- Stateful bots are allowed
- Use of external libraries is discouraged
 - Max JAR file size is 10 MB
- Time-out on constructor
 - Your bot will be idle during that match
- Time-out on each turn
 - Commands added before time-out will be OK

Schedule

- Game starts now
- Tomorrow
 - Hackathon
- Tuesday
 - Lunch: end of upload
 - Afternoon: end of competition ceremony

Let's Play !

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