Game of Three - Coding Challenge

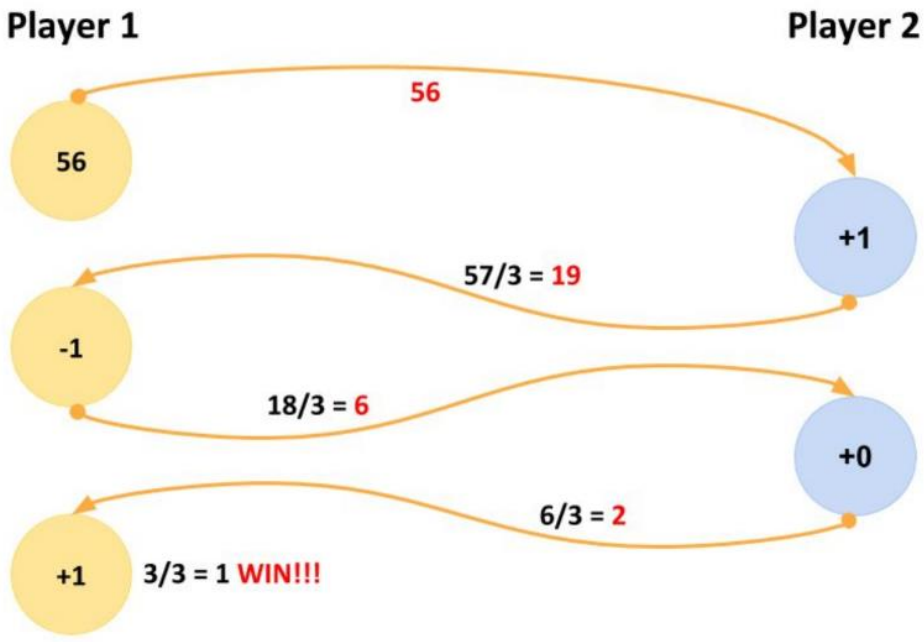
Goal

The Goal is to implement a game with two independent units – the players – communicating with each other using an API.

Description

When a player starts, it incepts a random (whole) number and sends it to the second player as an approach of starting the game. The receiving player can now always choose between adding one of {-1, 0, 1} to get to a number that is divisible by 3. Divide it by three. The resulting whole number is then sent back to the original sender.

The same rules are applied until one player reaches the number 1(after the division).
See example below.



For each "move", a sufficient output should get generated (mandatory: the added, and the resulting number). Both players should be able to play automatically without user input. The type of input (manual, automatic) should be optionally adjustable by the player.

Notes

- Each player runs on its own (independent programs, two browsers, web-workers, ...).
- Communication via an API (REST, Sockets, WebRTC, ...).
- A player may not be available when the other one starts.
- If you are applying for a frontend position, think of a fancy easily configurable layout. Otherwise terminal output is okay.
- Please share your project on GitHub and send us the link.
- Try to be platform independent, in other words the project must be runnable easily in every environment.

Hints

- Check configurability
- Review your concepts from DDD
- Watch out for the anemic domain model
- Using events will be considered a plus

Good luck!

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