

COP701: Software Systems Laboratory

Lecture 2

Assignment 1

Feedback?

Submit *today* on Moodle

- Full source code
- Report: major components of system, how they interact, rationale for this architecture. Also work division between group members

Demos will be scheduled by TAs afterwards

For future assignments, all must form groups of 2-3

Assignment 2: Online gaming

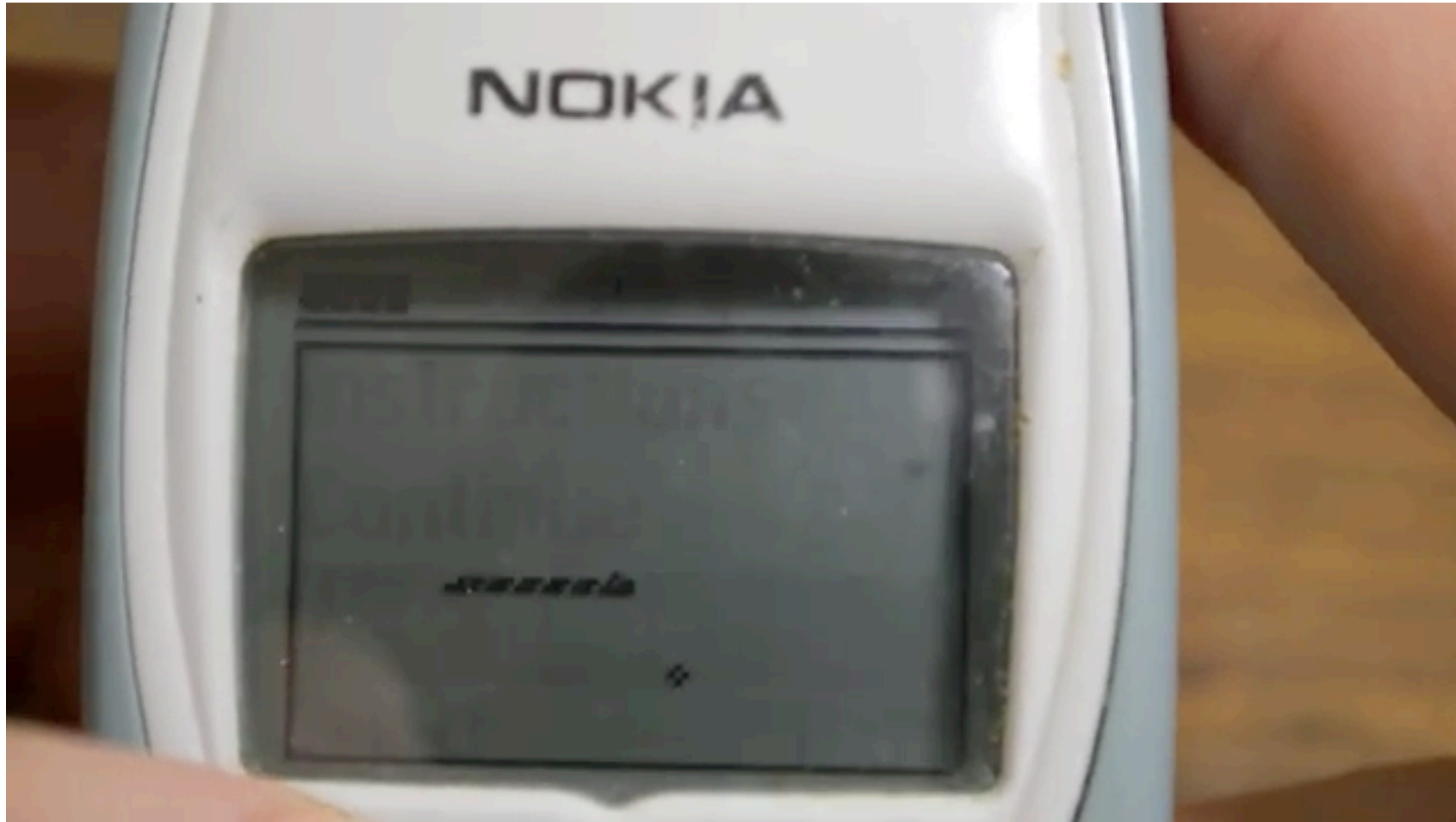
Implement a real-time network multiplayer game

Any type of game you want, as long as it is:

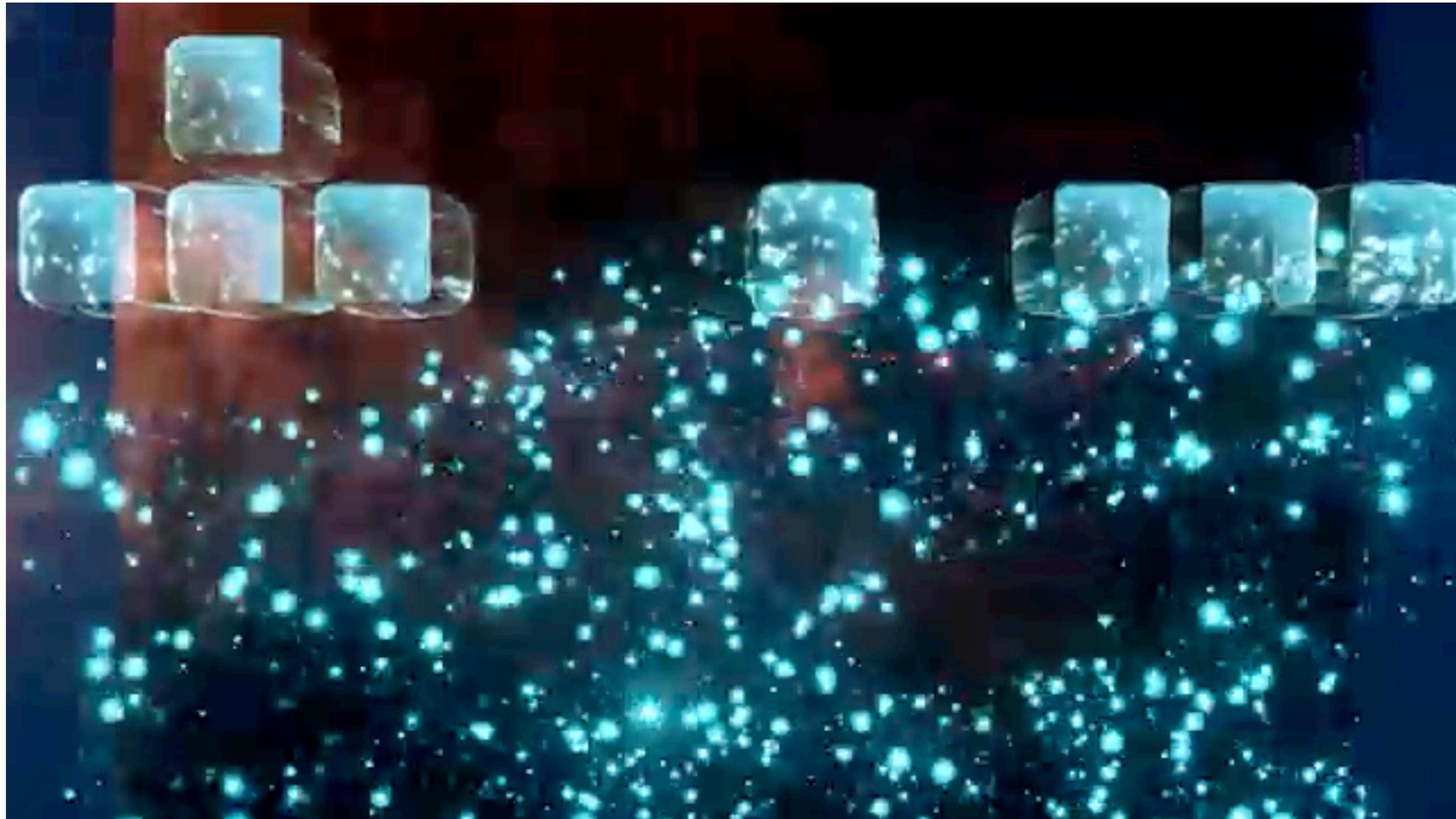
- **Real-time**, not turn-based: players can do actions at any time
- **Multiplayer**, whether competitive or co-operative
- **Networked**, with different players on different machines

Can be desktop app or browser-based

Examples: multiplayer Snake



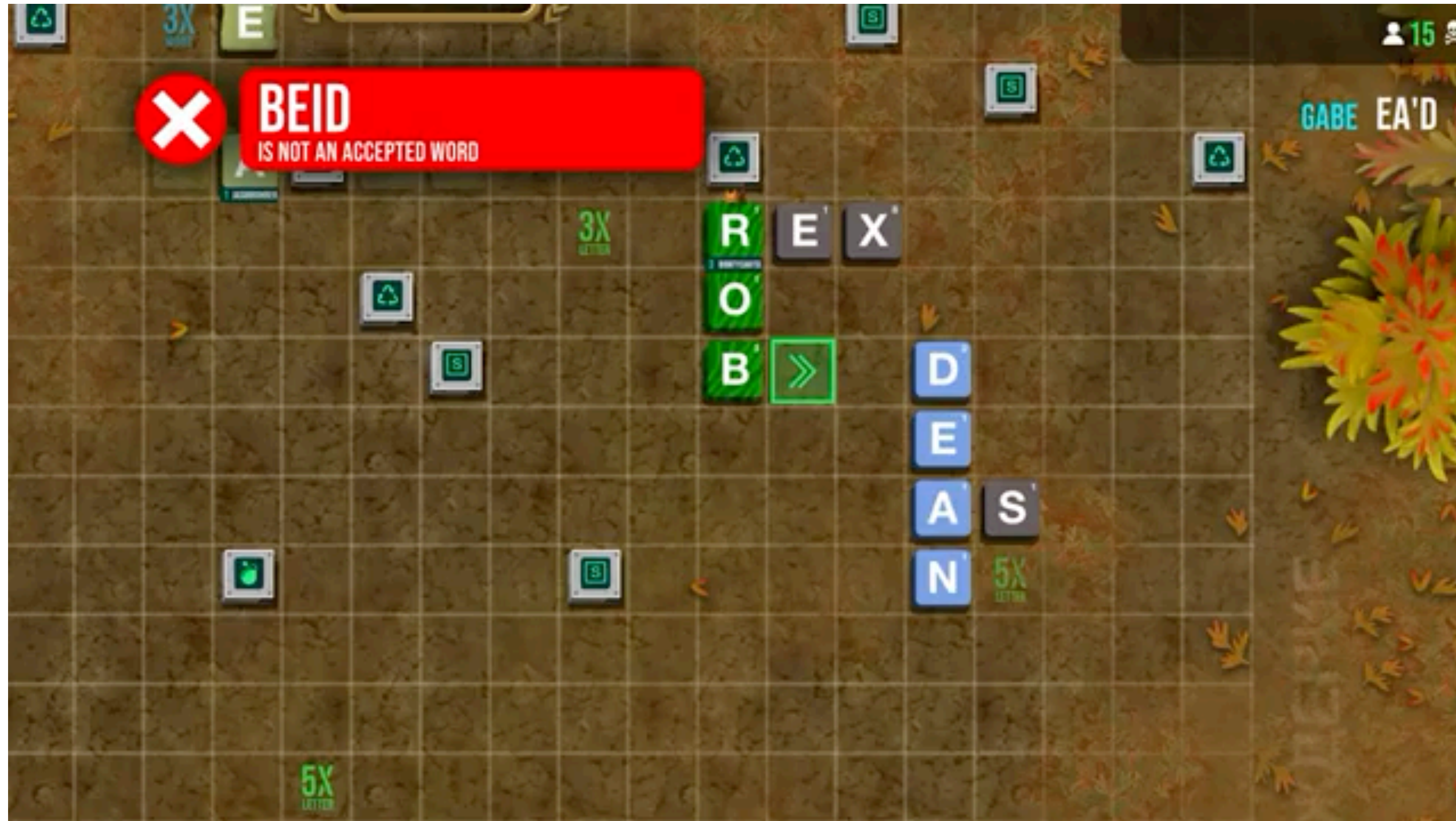
Examples: multiplayer Tetris



Examples: Agar.io



Examples: Babble Royale



Requirements

- 1 server process, at least 2 client processes on different machines
- Shared code in a separate library used by both server and client
- Clients rely on server to handle conflicts from real-time interaction
- ~~Fun gameplay, beautiful graphics, etc.:~~ **not** part of the requirements! :)

Requirements for 3-person teams: TBD

- ~~Add option to simulate high-latency connection on client~~
- ~~Predictive updates (e.g. opponent snake keeps moving instead of freezing)~~

Miscellanea

Recall extra requirements: version control, build automation, unit testing, autogenerated documentation

- Python / other interpreted languages: ~~build automation~~ → put your project into a redistributable package

Typing requirement

- Check yourself on any online typing speed test (e.g. [typingtest.com](https://www.typingtest.com))
- Give typing demo to TA during any assignment demo