Distributed projects

The projects are made in 2-person teams (3-person if justified) . In fact, the project implementation is individual but the design and the interface are common.

The concept design must specify general assumptions, system architecture, class diagrams, behavioral diagrams (state/sequence diagrams), and test plan.

The design concept must be presented to the supervisor in the middle of the semester.

Every member implements their part individually, for each member different OS and language must be chosen. The individual parts must cooperate.

The system must be multi-node. The two or more computers constitute the nodes, additional nodes can run in virtual machines or similar containers (for example separate java virtual machines).

Final documentation must refer to the concept design, and address the revisions and changes. The report of tests must be included.

The presentation should be done on two connected computers (or three), more nodes can be run in virtual machines. We will switch between the nodes during presentation. Please be prepared to show fault tolerance. I expect that the minimum is network disconnection and node failure. The system should not reset after malfunction, it should restore distributed state at least partially.

If the system contains a distinguished node, it must be elected. After its fail, a new one must be elected.