



A. Distributed Systems: A consensus group communication with Restful

Write a Python program using the RESTful architectural style with the Flask library to simulate asynchronous communication between agents attempting to reach a **consensus on the majority choice of a random number**.

Implement 3 agents, each generating a random number. If a majority is reached (i.e., at least two agents generate the same number), the process ends. If not, the agents generate new random numbers and attempt to reach a consensus again. Log the number of attempts.

- Explain how you handle message exchange between the agents and the role of each agent (i.e., the services they expose) to facilitate negotiation.
- Do you think this method of communication is suitable for establishing group communication?

Deliverable:

- Include this project in a public repository (i.e. GitHub, Bitbucket, etc.). The Readme file should have technical information about the communication process.
- Pack the project in a docker-compose file.
- Attack the url at Task/Auladigital.