**Agritech Decentri-net**

**A decentralized network of agricultural producers, suppliers, and consumers to facilitate greater sharing of goods, make the agricultural market more efficient, and empower smaller farmers to compete with larger industry.**

1. Agritech decentri-net is a decentralized network of agricultural producers, consumers, and suppliers. Each node in the network contains a list of all their yearly production/consumption, as well as a list of all other nodes that they supply to or receive from. Each user stores a list of their own needs and output as well as their neighbors. Whenever they are pinged by the network, they will send the source of the ping the requested information. Each node locally stores a list of all its neighbors, and so the entire decentralized graph can be constructed from flooding through the network and recursively asking each neighbor for their neighbors. This way, each user can create an entire graph of every graph on the network and how they are connected, and explore that graph and its information.
2. Each node is uniquely identified by its IP address (as a string). The Graph class is a local representation of the total network. It has a set of nodes and a set of edges between nodes. The ActorData class is a sparse class that defines several fields such as yearly production, IP address, neighbors (list of IPs), type of actor (producer/supplier/consumer), and the name of that node.