



## Description

**Display** – Main driver for GUI display, initializes and connects the various pieces together at start.

**FileParser** – Parses the configuration file and generates a ConfigInfo object, which other parts of the program use for determining what settings to use.

**ConfigInfo** – Container for all the configuration information, struct-like.

**AgentManager** – Responsible for initializing and keeping track of all the agents. Its main function is to compute the neighbors of the agents, give them the correct configuration settings, and then start them on separate threads.

**AgentDrawer** – Responsible for drawing all of the agents on a JavaFX canvas.

**Agent** – Represents the object that sends and receives diseases. Communicates with neighbors via a blocking queue of messages.

**MessageBuilder** – Builds the various kinds of messages that agents send between one another, such as the “get sick” or the “become immune” message.

**Message** – A functional interface representing some kind of action that the agent takes when receiving the given message.

**GraphDisplay** – Display the cartesian plot of the number of agents with a given state at a certain time.

**LogDisplay** – Display all the events that are happening as the simulation is running.

**BoardType** – The type of board we can have, whether random, grid, or randomgrid.

**AgentState** – The various states of the agents such as sick, immune, etc.

**Tuple** – Helper class, literally just represents (x,y) as a data type.