CO327 : Mini Project
Implementation Details
E17219
Nawarathna K.G.I.S.

Gateway Implementation

1. Gateway is connected to port 3000 as it is used as the broadcast port.

2. Whenever any gateway receives a udp data segment packet from the broadcast port, that packet data is converted to a monitor object.

3. In the Gateway.java there is a list to maintain monitors that are connected to the gateway. The connected monitor ids are stored in this list. This list is static.

4. When the gateway has received the monitor as a packet, it is checked if the monitor is already connected to the server. If so, the gateway just ignores it.

5. If the monitor is not connected, it is not in the list. Then the monitor id is added to the list and then created a thread to handle that monitor.

6. This monitor handling thread is created in the MonitorHandler class.

7. In the MonitorHandler , the thread is created. Also run and stop methods are created to start the thread and stop the thread.

8. There is also a name for the thread as well as the id of that monitor.

9. A boolean value called exit is maintained in the MonitorHandler method , which is used to signal if the thread should be stopped or keep running.

10. When there is a SocketException occurs, which means the socket is closed i.e. the vitalMonitor related to that socket is stopped.

11. In there , the monitor id of that closed monitor should be removed from the list and also the thread should be stopped.

12. Whenever a thread/monitor is stopped, the corresponding thread will look if the monitor id list is empty. If so, it just prints a statement to the console to indicate it.