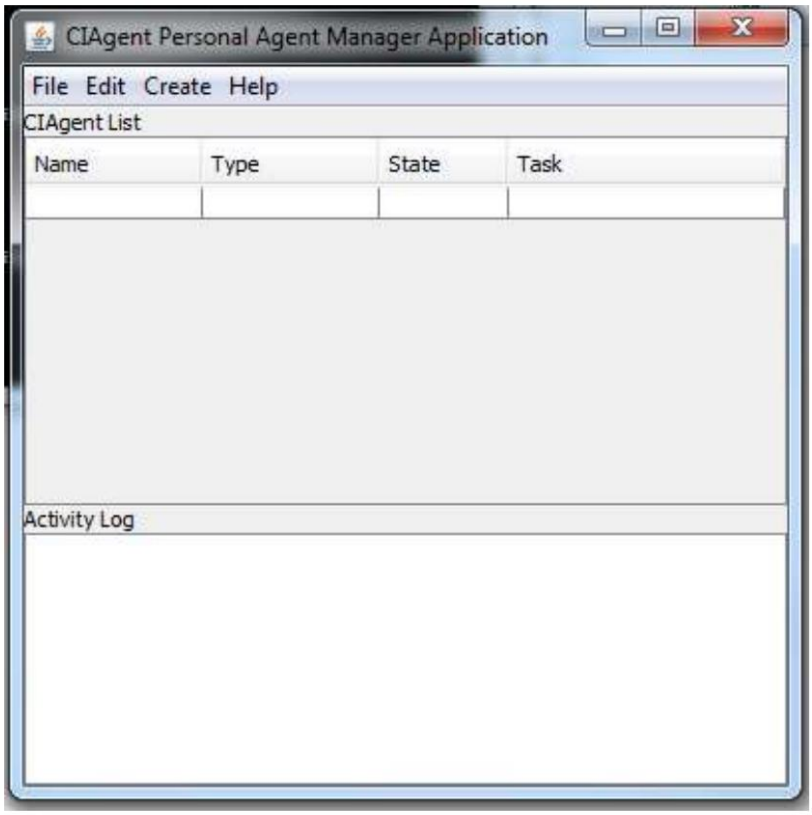
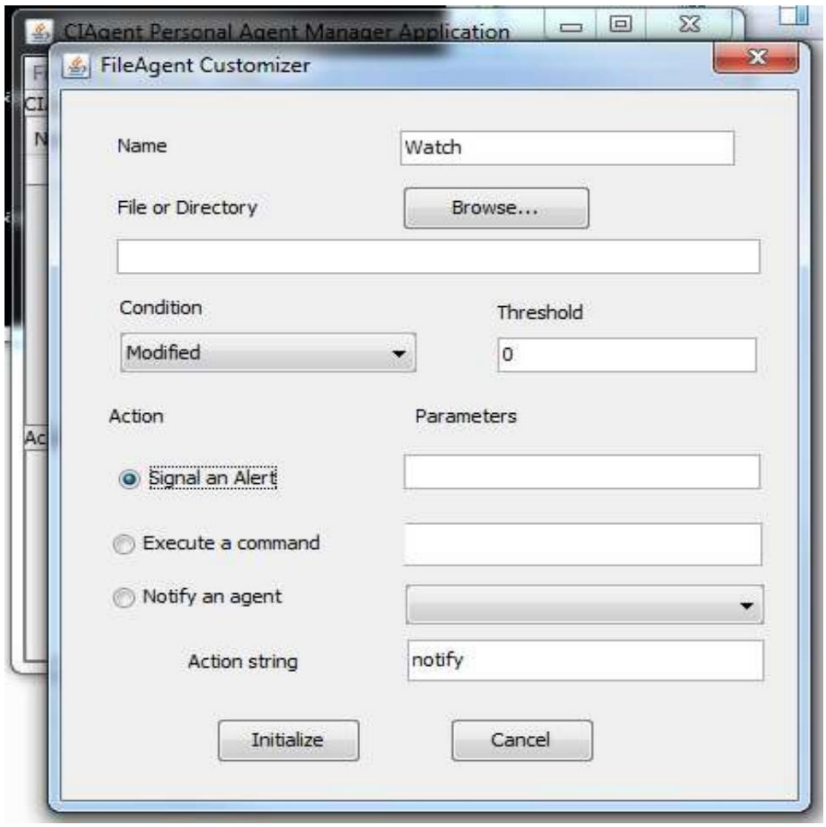
Lab #5. Intelligent Agent Framework

1. Read Chapters 7. (Text: Constructing Intelligent Agents Using Java).
2. Implement the CIAgent framework, an agent development environment. The source code is provided attached to this documentation. Report on the results of your implementation effort: what worked, did not work, what you experimented with etc., and sample outputs with descriptions of what is happening.
3. Read Chapter 8. Implement "PAManager" and "FileAgent".
Note: The PAManger.properties file may not be configured correctly from the CD (first find it, and then place it in the correct directory).

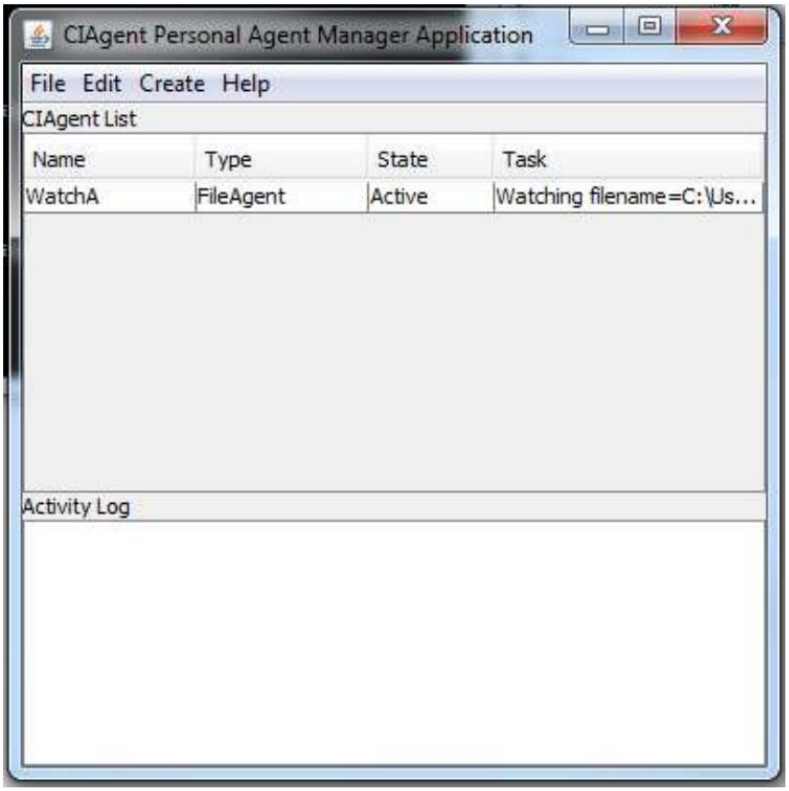
On its own the CIAgent does not do anything, other programs such as PAManager is dependent on CIAgent to rule. Upon running the program we may receive errors as it turns out, the name of the object 'enum' is something java now refers as a keyword meaning enumerator, which was why we receive the error. To fix the error we have to change the object name to something else. To run the app the user must type in the following command: 'java pamanager.PAManager', the application will then open as shown below:



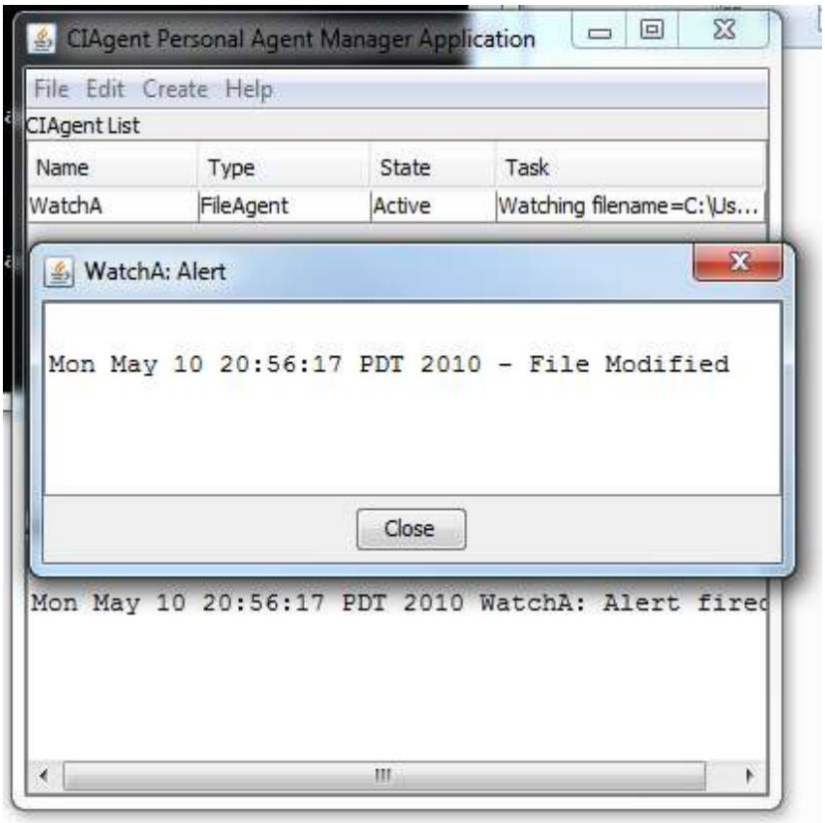
The application function simply as notification system that informs the user whether or not the file as been modified or deleted from the system. To run the agent the user is to navigate to Create then FileAgent. The FileAgent Customizer would then pop up, the user can name the agent and also select a file that user wants to monitor. Under the condition the user is to either Modified, Delete or Over Threshold. The user can also specify a certain amount of threshold. Under Action the user has the choice to Signal an Alert, Execute a command, or Notify an agent for this application we will use the first action.



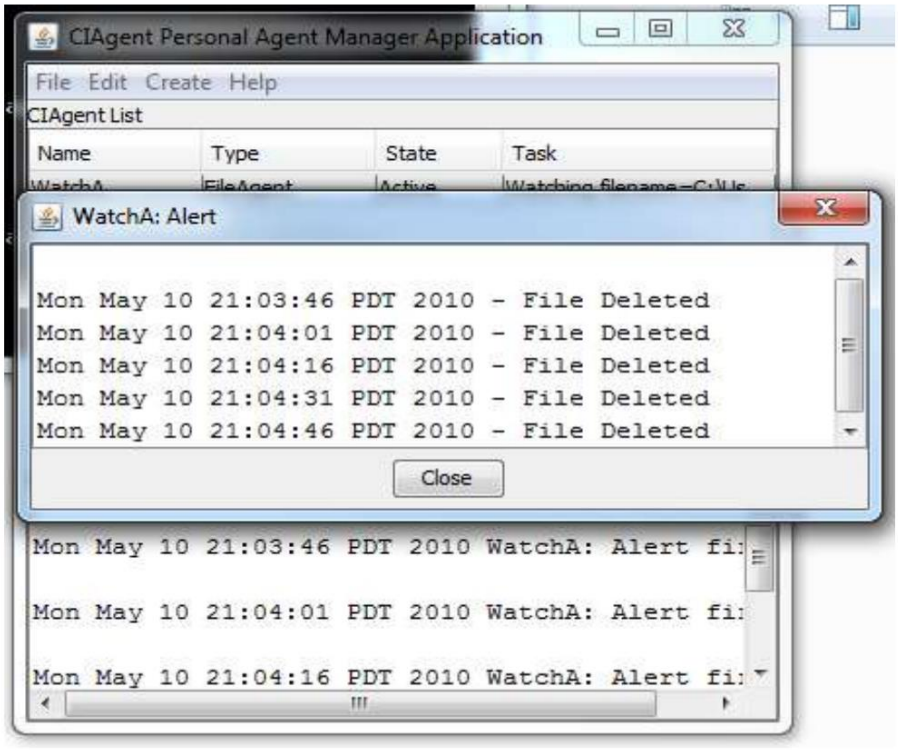
For the first condition we will have the agent monitor a file that will be modified. To start the process we would first select the agent listed in the table and then navigate to Edit then Start processing. The agent's State will change to Active.



When we modify the sample document the agent will fire out an alert that lists the date, time and parameter the user typed earlier.



Next we try the Delete condition, much like the Modified condition, it initialized the first alert after the file was deleted. However the app seems bugged as the agent continues to fire multiple alerts unless the user closes the agent. We don't need the agent to notify us multiple times.



Playing around with the Over Threshold we get the same results as the Delete condition in which the agent fired multiple times.