Class Responsibility Collaboration Identification Team 3 - We Showed Up

1. UIView

This class is made in QT, contains a collection QTWidgets that conform to the graphical user interface.

- 1.1 Display graphical user interface to analyst.
 - Collaborations: UIController (2.1), GraphController (6.1), Vector (7.1, 7.2), Node (8.1, 8.2), Graph (9.1, 9.2, 9.3), LogEntry (10.1), LogFile (11.1), Icon (12.1), EventConfiguration (13.1), EnforcementActionReport (14.1), Relationship (15.1), VersionControl (16.1)

2. UIController

This class contains the necessary implementation to call all user interface functionality regarding user interaction.

- o 2.1 Contains utilities for the graphical user interface
 - Collaborations: UIView (1.1)
- o 2.2 Call functions that interact with UI
 - Collaborations: UIView (1.1)
- 2.3 Changes data from input from buttons, text boxes, and other interactive elements of the UI.
 - Collaborations: UIView (1.1), Vector (7.1, 7.2), Node (8.1, 8.2), Graph (9.1, 9.2, 9.3), LogEntry (10.1), LogFile (11.1), Icon (12.1), EventConfiguration (13.1), EnforcementActionReport (14.1), Relationship (15.1), VersionControl (16.1)
- o 2.4 Connects UI widgets to relevant controllers for functionality
 - Collaborations: UIView (1.1), IngestionController (3.1, 3.2, 3.3, 3.4, 3.5, 3.6), TableController (4.1, 4.2, 4.3), NetworkController (5.1), GraphController (6.1)

3. IngestionController

This class initiates the appropriate procedure of ensuring all log entries are adequately imported onto the system.

- 3.1 Gather logs from the directories
 - <u>Collaborations:</u> EventConfiguration (13.1), EnforcementActionReport (14.1)
- 3.2 Delegate log formats to appropriate transcriber
 - Collaborations: LogFile (11.1)
- o 3.3 Cleanse logs
 - Collaborations: EnforcementActionReport (14.1), LogFile (11.1)

- o 3.4 Validate logs
 - <u>Collaborations:</u> EventConfiguration (13.1), Log File (11.1), LogEntry, EnforcementActionReport (14.1)
- 3.5 Sends log entries to SPLUNK
 - Collaboration: LogEntry (10.1)
- 3.6 Keep track of deltas in the directories
 - <u>Collaborations:</u> EventConfiguration (13.1), EnforcementActionReport (14.1)

4. TableController

This class provides the following features to filter log entries by associated properties.

- 4.1 Format table for representation in QtWidgets
 - Collaborations: Node (8.1, 8.1), LogEntry (10.1)
- 4.2 Filter by timestamp range
 - Collaborations: LogEntry (10.1), Node (8.1, 8.1)
- o 4.3 Filter by keyword(s) on attribute
 - Collaborations: LogEntry (10.1), Node (8.1, 8.1)

5. NetworkController

This class handles network authentication and connectivity to host databases.

- 5.1 Connect analysts and host DB
 - Collaborations: EventConfiguration (13.1), VersionControl (16.1)

6. GraphController

This class utilizes Maltego for updating graphical representations from extracted nodes and relationships.

- 6.1 Interacts with Maltego tool to create a graphical representation of nodes and relationships
 - <u>Collaborations:</u> Graph (9.1, 9.2, 9.3), Nodes (8.1, 8.1), Relationship (15.1)

7. Vector

This class contains all vector relevant data used for vector association.

- o 7.1 Stores nodes relevant to an event vector
 - Collaborations: Node (8.1, 8.2)
- 7.2 Stores a description of an event vector
 - Collaborations: n/a

8. Node

This class contains all the relevant data used for the representation of a log entry in a vector.

- 8.1 Represents a relevant part of a vector event (from a log entry or userdefined)
 - Collaborations: LogEntry (10.1)
- 8.2 Stores information relevant to the origin of the action. (red, white, blue)
 - Collaborations: Icon (12.1), EventConfiguration (13.1)

9. Graph

This class contains the relevant data for the graphical representation of the vector as well as the export settings for it.

- 9.1 Stores position information for nodes
 - <u>Collaborations:</u> Node (9.1, 9.2, 9.3)
- 9.2 Stores position information for relationships of nodes
 - Collaborations: Relationship (15.1)
- 9.3 Stores graph display/export information
 - Collaborations: n/a

10. LogEntry

This class contains a single log event formatted according to SPLUNK.

- o 10.1 Stores information about events enacted by a team
 - Collaborations: n/a

11. LogFile

This class contains a raw collection of log entries of the actions done by a team.

- o 11.1 Store the raw information of a series of events
 - Collaborations: n/a

12. Icon

This class contains the information for the icons to be used on the nodes.

- o 12.1 Stores information for the graphical identifier of events
 - Collaborations: n/a

13. EventConfiguration

This class contains all the relevant configuration data for the assessment.

- o 13.1 Stores information of the source of data for the event
 - Collaborations: n/a

14. EnforcementActionReport

This class contains the information for the logs under the ingestion process

- o 14.1 Stores information of the ingestion process of the logs.
 - Collaborations: n/a

15. Relationship

This class contains all relevant configuration data for node relationships

- o 15.1 Stores information about the type of relationship two nodes share
 - Collaborations: Node (8.1)

16. VersionControl

This class contains all relevant information for the vector DB

- o 16.1 Stores information of the changes made to the hostDB
 - Collaborations: n/a