**Sprint Review Report – Team Portion**

**IOWR-NIDS**

**Sprint dates: 1/22 – 2/2**

|  |  |
| --- | --- |
| **Team Member** | **Role** |
| Andrew | Team Leader |
| Alex | Machine learning development, Scrum logger |
| Joe | Front end development |

**Point Scale:**

The priority letter (A-F) identifies what priority we assign to each user story. A is the highest priority; tasks with it need to be done soon, and F is the lowest priority, such as for tasks on the backburner.

The number aspect is the expected time. It’s a rough estimate of weeks that we expect the task to take.

Points should be written in the form A3, where it is priority “A”, and we expect the task to take 3 weeks to complete. A dash “-” is used for the expected time when a task is continuous.

**Backlog**

Backlog of user stories that we are not currently working on.

**Story 2:** As a network administrator, I want to utilize a graphical user interface so that I can easily monitor the network.

**Task 5:** Implement the model page with Dash.

**Points:** F2

**Due Date:** 2/20/2024

**Members assigned**: Joe

**Task 8:** Store model information data in the database.

**Points:** B2

**Due Date:** 2/15/2024

**Status:** to be started

**Members assigned**: Joe, Alex

**Story 3:** As a network administrator, I want to see the unknown network packets so that I can improve the model training.

**Task 5:** Provide a way to save re-identified packets.

**Points:** D

**Members assigned:** Joe, Andrew

**Story 4:** As a network administrator, I want to see how well the model is working so that I can tell when it needs to be re-trained.

**Task 2:** Identify a method of finding model reliability.

**Points:** D4

**Members assigned:** Alex, Andrew

**Task 3:** Display model reliability on UI.

**Points:** C2

**Members assigned:** Joe

**Story 7:** As a network manager, I want to select old models so that we can revert problems if they occur.

**Task 4:** Update Dash for new model.

**Points:** A3

**Members assigned:** Joe, Alex

**Story 11:** As a developer, I want to make sure it is clear how to run the program so that it is useful to others.

**Task 1:** Write a usage manual.

**Points:** A4

**Due date:** 3/??/2024

**Members assigned:** None

**Task 2:** Write a technical report on the capabilities of the system.

**Points:** A4

**Due date:** 3/??/2024

**Members assigned:** None

**Task 3:** Determine the scale of the expected network in deployment.

**Points:** B2

**Due date:** 3/??/2024

**Members assigned: None**

**New/Pending**

**Story 11:** As a developer, I want to make sure it is clear how to run the program so that it is useful to others.

**Task 1:** Write a usage manual.

**Points:** A4

**Due date:** 3/??/2024

**Members assigned:** None

**Task 2:** Write a technical report on the capabilities of the system.

**Points:** A4

**Due date:** 3/??/2024

**Members assigned:** None

**Task 3:** Determine the scale of the expected network in deployment.

**Points:** B2

**Due date:** 3/??/2024

**Members assigned: None**

**Task 4:** Ensure correctness of the system by keeping the model up to date with the research.

**Points:** B-

**Due date:** continuous, currently up to date as of 2/4/2024

**Members assigned:** Alex

**Task 5:** Encapsulate program in Docker container.

**Points:** A3

**Due date:** 2/16/2024

**Members assigned:** Andrew

**Task 6:** Create a good base model to include.

**Points:** A2

**Due date:** 2/16/2024

**Members assigned:** Andrew, Alex

**Task 7:** Create a temporary launching script.

**Points:** D1

**Due date:** 2/4/2024

**Members assigned:** Alex, Andrew

**Story 7:** As a network manager, I want to select old models so that we can revert problems if they occur.

**Task 5:** Save training date.

**Due Date:** January 28th

**Status:** Complete

**Points:** C1

**Members assigned:** Alex

**Story 2:** As a network administrator, I want to utilize a graphical user interface so that I can easily monitor the network.

**Task 6:** Implement timeline filter functionality.

**Points:** C2

**Due Date:** 2/10/2024

**Status:** In progress

**Members assigned**: Joe

**Task 7:** Implement network graph.

**Points:** C2

**Due Date:** 2/8/2024

**Status:** In Progress

**Members assigned**: Joe

**Task 8:** Store model information data in the database.

**Points:** B2

**Due Date:** 2/15/2024

**Status:** to be started

**Members assigned**: Joe, Alex

**Ready/In-Progress**

**Story 2:** As a network administrator, I want to utilize a graphical user interface so that I can easily monitor the network.

**Task 6:** Implement timeline filter functionality.

**Points:** C2

**Due Date:** 2/10/2024

**Status:** In progress

**Members assigned**: Joe

**Task 7:** Implement network graph.

**Points:** C2

**Due Date:** 2/8/2024

**Status:** In Progress

**Members assigned**: Joe

**Story 11:** As a developer, I want to make sure it is clear how to run the program so that it is useful to others.

**Task 5:** Encapsulate program in Docker container.

**Points:** A3

**Due date:** 2/16/2024

**Status:** In Progress

**Members assigned:** Andrew

**Task 6:** Create a good base model to include.

**Points:** A2

**Due date:** 2/16/2024

**Status:** In Progress

**Members assigned:** Andrew, Alex

**Task 7:** Create a temporary launching script.

**Points:** D1

**Due date:** 2/4/2024

**Status:** In Progress

**Members assigned:** Alex, Andrew

**Active/Ready for review/Complete**

**Make sure to put the Complete stories/tasks before the Ready for review and before Active.**

**Story 7:** As a network manager, I want to select old models so that we can revert problems if they occur.

**Task 5:** Save training date.

**Due Date:** January 28th

**Status:** Complete

**Points:** C1

**Members assigned:** Alex

**Story 11:** As a developer, I want to make sure it is clear how to run the program so that it is useful to others.

**Task 4:** Ensure correctness of the system by keeping the model up to date with the research.

**Points:** B-

**Status**: Currently Complete

**Due date:** continuous, currently up to date as of 2/4/2024

**Members assigned:** Alex

**Backburner**

**Story 1:** As a practitioner, I want to understand the project so that I can complete the project.

**Task 1:** Attend meetings.

**Points:** A-

**Due Date:** Continuous

**Status:** Active

**Members assigned:** Andrew, Alex, Joe

**Task 3:** Discuss with team.

**Points:** A-

**Due Date:** Continuous

**Status:** Active

**Members assigned:** Andrew, Alex, Joe

**Task 4:** Complete documentation.

**Points:** A-

**Due Date:** Continuous

**Status:** Active

**Members:** Andrew, Alex, Joe

**Story 6:** As a developer, I want to define more user stories so that we have better documentation.

**Task 1:** Define more user stories.

**Points:** D-

**Members assigned: Andrew, Alex, Joe**

**Task 2:** Update GitHub with new stories.

**Points:** C1

**Due Date**: Continuous

**Status**: Active

**Members assigned:** Andrew, Alex, Joe

**Task 3**: Keep sprint report up-to-date.

**Points**: C1

**Due Date**: Continuous

**Status**: Active

**Members assigned**: Andrew, Alex, Joe

**Scrum Meetings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Members Present** | **Progress** | **Challenges** | |
| January 23rd | Andrew  Alex  Joe | Andrew assigned to Docker.  Update model struct assigned to Alex.  Timeline of SQL queries assigned to Joe. |  | |
| January 24th | Andrew  Alex  Joe | Alex and Joe made some progress on their tasks.  Note for Alex: change load model function into a generator |  | |
| January 26th | Andrew  Alex  Joe | Andrew learned a bit about Docker but has not implemented it yet.  Joe added interface options for visualization data.  Alex updated model struct.  Alex is planning on updating the model save function.  Joe will work on adding features to the interface.  Andrew will move things to Docker. |  |
| January 29th | Andrew  Alex  Joe | Andrew looked at Docker, but it takes more work.  Alex worked on saving date and time. That might be complete but needs testing.  Joe worked on network graph and pie chart, they now cross-filter.  Plans for Wednesday:  Alex- more testing  Andrew – more looking at Docker.  Joe – more buttons | Have not met with client this semester.  Issues with graph readability.  Test case did not give feedback like it should. |
| January 31st | Andrew  Alex  Joe | Tried to get the model to run and looked at Docker more – Andrew  Nothing – Joe  A couple fixes for the GPU error – Alex. | Model uses GPU only on some computers causing errors to appear. |
| Feb 2nd | Andrew  Alex  Joe | Looked at model runs -Andrew & Alex | Model is not fully optimized. |

**Other Team Meetings (longer than scrum)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Platform (in person, Zoom, Slack, Discord, MS Teams..)** | **Members Present** | **Progress** | **Challenges** |
| 1/23 | In-Person | Andrew  Alex  Joe | Discussion to make sure we are all on the same page.  Time to meet. |  |
| 1/26 | In-Person | Andrew  Alex  Joe | IP node graph worked on.  Getting started on training a final model.  Explained current work to eachother.  Discussed issues encountered. | Have not met with client this semester.  Issues with graph looking readable.  Test case did not give feedback like it should Not met with client this semester.  Issues with graph looking readable.  Test case did not give feedback like it should. |
| 1/31 | In-Person | Alex  Joe  Andrew | Explained a bit on how to run model. | Meeting was cut short by the marketing presentation. |
| 2/2 | In-Person | Andrew  Alex  Joe | Discussion on future work and work on the sprint report. |  |

**Client Meetings**

|  |  |  |
| --- | --- | --- |
| **Date** | **Members Present** | **Challenges/issues by the client** |
| February 2nd | Andrew  Alex  Joe | Did not get time to talk with client because the research groups took the whole time. |

**Retrospective**

|  |  |  |
| --- | --- | --- |
| **Challenge** | **Resolution** | **Impact/Result** |
| Picking the project back up. | Easing into work, choosing new tasks. | Progress continues. |
| No chance to speak at the client meeting. | Send an email to the client. | TBD |
| Alex works on the model, but Andrew needs to test model stuff on his end. | Real-time communication within meetings and Discord. | Bugs were fixed; training the model works on Andrew’s machine now. |

**Retrospective – continuous improvement**

**State any completed goals for the current sprint (not only project goals, but team dynamics, issues resolved within the team or team/client work).**

The process of applying Docker began, and we’re training the model on better hardware than before. The network page now has a network graph and visualization interactivity (filters may be applied by clicking on the pie chart, network nodes, and network edges).

**State any future goals for the next sprint (not only project goals, but team dynamics, issues resolved within the team or team/client work).**

We hope to make more progress on the Docker application. The model page should also see some level of implementation.