**Sprint Review Report – Team Portion**

**IOWR-NIDS**

**Sprint dates: 09/27 – 10/11**

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

**Point Scale:**

Priority letter grade A-F that identifies what priority we feel should be assigned to each user story. Where A is the highest priority that needs to be done soon and F is the lowest priority for tasks that should be put on the backburner.

Expected time number grade is the roughly estimated number 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**

We do not currently have a backlog of activities that are not in the form of user stories, all current user stories are in the New/Pending section.

**New/Pending**

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

**Task 1:** Attend meetings

**Points:** A-

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

**Task 2:** Create Wireframes

**Points:** A1

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

**Task 3:** Discuss with team

**Points:** A-

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

**Task 4:** Complete documentation

**Points:** A-

**Members:** Andrew, Alex, Joe

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

**Task 1:** Research Dash to understand its capabilities

**Points:** B2

**Members assigned:** Joe

**Task 2:** Design Wireframes

**Points:** A1

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

**Task 3:** Implement the finalized wireframe using Dash

**Points:** B4

**Members assigned:** Joe

**Task 4:** Populate inputs and outputs with data from a middleman between itself and the model.

**Points:** C4

**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 1:** Find Packets from network sniffer

**Points:** B

**Members assigned:** Andrew

**Task 2:** Identify packets using machine learning

**Points:** C3

**Members assigned:** Alex

**Task 3:** Classify packets as unknown if no classification exists

**Points:** C2

**Members assigned:** Alex

**Task 4:** Provide a way to view packet data

**Points:** B2

**Members assigned:** Joe

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

**Points:** D

**Members assigned: ???**

**Task 6:** Provide a way to retrain model of re-identified packets

**Points:** C2

**Members assigned:** Alex

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

**Task 1:** Create a machine learning model

**Points:** B3

**Members assigned:** Alex

**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 5:** As a developer I want to get immediate feedback on the quality of my code so I can tell when I break something or new changes I make don’t work as expected.

**Task 1:** Implement automated unit testing

**Points:** A

**Members assigned:** Andrew

**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**

**Ready**

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

**Task 3:** Implement the finalized wireframe using Dash

**Points:** B4

**Due Date:** 10/27

**Members assigned:** Joe

**Task 4:** Populate inputs and outputs with data from a middleman between itself and the model.

**Points:** C4

**Due Date:** 11/16

**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 2:** Identify packets using machine learning

**Points:** C3

**Due Date: 10/27**

**Members assigned:** Alex

**Task 3:** Classify packets as unknown if no classification exists

**Points:** C2

**Due Date: 10/31**

**Members assigned:** Alex

**Task 4:** Provide a way to view packet data

**Points:** B2

**Due Date:**

**Members assigned:** Joe

**Active/Ready for review/Complete**

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

**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 2:** Create Wireframes

**Points:** A1

**Due Date: October 19th**

**Status: Complete**

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

**Task 1:** Create a machine learning model

**Points:**

**Due Date: Undecided**

**Status: Active**

**Members assigned: Alex**

**Story 5:** As a developer I want to get immediate feedback on the quality of my code so I can tell when I break something or new changes I make don’t work as expected.

**Task 1:** Implement automated unit testing

**Points:** A

**Due Date:** 10/11

**Status:** Complete

**Members originally assigned:** Andrew

**Members Completed:** Andrew

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

**Task 1:** Research Dash to understand its capabilities

**Points:** B2

**Due Date:** Continuous

**Status:** Active

**Members originally assigned:** Joe

**Members Completed:**

**Task 2:** Design Wireframes

**Points:** A1

**Due Date:** 10/19

**Status:** Complete

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

**Members Completed:**

**Backburner**

**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**

**Scrum Meetings**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Members Present** | **Progress** | **Challenges** | |
| September 27 | Andrew  Alex  Joe | Completed Vision Document Draft | Still not met with client | |
| September 29 | Andrew  Alex  Joe | GitHub repository set up. | Still not met with client | |
| October 2nd | Andrew  Alex  Joe |  | Still not met with client | |
| October 4th | Andrew  Alex  Joe | Look at GitHub Projects | Still not met with client | |
| October 6th | Andrew  Alex  Joe | Vision Document  Assignment:  Make wireframes | Looming Due Date for Vision Document | |
| October 9, 2023 | Andrew  Alex  Joe | Wireframes  Assignment:  Outline user stories | Sprint report | |
| October 11th | Andrew  Alex  Joe | Outlined User Stories | Imminent deadline for sprint report. | |
|  |  |  |  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Platform (in person, Zoom, Slack, Discord, MS Teams..)** | **Members Present** | **Progress** | **Challenges** |
| September 27 | In-Person | Andrew  Alex  Joe | Completed Vision Document Draft | Still not met with client |
| September 29 | In-Person | Andrew  Alex  Joe | GitHub repository set up and explained. Initial email communication with client began. | Still not met with client |
| October 4th | In-Person | Andrew  Alex  Joe | Started work on code | Still not met with client |
| October 6th | In-Person | Andrew  Alex  Joe | Finished Vision Document | Client did not give many details |
| October 9th | Discord | Andrew  Alex  Joe | Compare Wireframes  Wrote Glossary | Different visons |
| October 11th | In-Person | Andrew  Alex  Joe | Completed Sprint Report | Delayed too long |

**Client Meetings**

|  |  |  |
| --- | --- | --- |
| **Date** | **Members Present** | **Challenges/issues by the client** |
| October 5 | Andrew  Alex  Joe | Time limitations due to client schedule and concurrent projects. |
|  |  |  |
|  |  |  |
|  |  |  |

**Retrospective (***At the end of the sprint a* ***Retrospective*** *should be held to see how the team is performing.* ***Psychological Safety*** *needs to be upheld at a Retrospective to ensure best results (hence no names in the table below.* ***Psychological Safety*** *occurs when everyone feels comfortable with speaking to everyone in the room. A study on Psychological Safety can be found with Google’s Project Aristotle. Go-to schedule for a Retrospective:*

*Check-in activity*

*Energizer*

*Review goals from last retrospective*

*Gather data*

*Determine goals for the next sprint*

*Check-out*

*Examples of each activity can be found at funretrospectives.com.*)

|  |  |  |
| --- | --- | --- |
| **Challenge** | **Resolution** | **Impact/Result** |
| Meeting sparsity | Contact Professor | Supervisor Intervention |
| Requirement ambiguity | Ask client a list of questions at the meeting | Nearly-complete vision document |
| Python resisting complex project structure | Temporary hacky one-liners | Cleaner code-base |
|  |  |  |
|  |  |  |

**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).**

* Met with client
* Began drafting
* CICD / dev environment
* Began copying code from research

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

* Preliminary User Interface
* Better client communication network
* Preliminary neural network code