**Sprint Review Report – Team Portion**

**IOWR-NIDS**

**Sprint dates: 10/25 – 11/8**

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

**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**

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:** Beyond MVP

**Members assigned**: Joe

**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 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 2:** Select Model version using Dash

**Points:** C?

**Members assigned:** Joe

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

**Points:** A3

**Members assigned:** Joe, Alex

**New/Pending**

**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:** Beyond MVP

**Members assigned**: Joe

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

**Points:** B4

**Due Date:** 10/27

**Status:** Complete

**Members assigned:** Joe

**Story 8:** As a practitioner I want to define packet structure and storage so that we can deliver data to project subsystems.

**Task 1: Define packets to store in Database**

**Points:** A1

**Members assigned:** Andrew

**Task 2: Store packets in Database**

**Points:** A2

**Members assigned:** Andrew

**Task 3: Send packets to Dash interface**

**Points:** B1

**Members assigned:** Andrew, Joe

**Task 4: Send packets to model**

**Points:** B2

**Members assigned:** Andrew, Alex

**Task 5: Store returned packets from model**

**Points:** B1

**Members assigned:** Andrew, Alex

**Ready**

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

**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 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 5:** UML Diagrams

**Points**: B3

**Due Date**: 11/8

**Status**: Complete

**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

**Due Date:** Continuous

**Status:** Complete

**Members originally assigned:** Joe

**Members Completed:** Joe

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

**Points:** B4

**Due Date:** 10/27

**Status:** Complete

**Members assigned:** Joe

**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

**Due Date:** 11/1

**Status:** Complete

**Members assigned:** Andrew

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

**Points:** C3

**Due Date:** 10/27

**Status**: Complete

**Members assigned:** Alex

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

**Points:** C2

**Due Date:** 10/31

Status: Complete

**Members assigned:** Alex

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

**Points:** C2

**Due date**: 11/4

**Status**: Complete

**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:** A

**Due Date:** Undecided

**Status:** Complete

**Members assigned:** Alex

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

**Task 1:** Save Models as pth files.

**Points:** C3

**Due Date**: 10/31

**Status**: Complete

**Members assigned:** Alex

**Task 3:** Load Model from pth file

**Points:** B2

**Due Date**: 11/3

**Status**: Complete

**Members assigned:** Alex

**Story 8:** As a practitioner I want to define packet structure and storage so that we can deliver data to project subsystems.

**Task 1: Define packets to store in Database**

**Points:** A1

**Due Date:** 11/8

**Status:** Complete

**Members assigned:** Andrew

**Task 2: Store packets in Database**

**Points:** A2

**Due Date:** 11/15

**Status:** Active

**Members assigned:** Andrew

**Task 3: Send packets to Dash interface**

**Points:** B1

**Due Date:** 11/20

**Status:** Active

**Members assigned:** Andrew, Joe

**Task 4: Send packets to model**

**Points:** B2

**Due Date:** 11/15

**Status:** Active

**Members assigned:** Andrew, 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** | |
| October 25th | Andrew  Alex  Joe | Completed Sprint Report 2  Plans for Friday:  Dataflow Diagram (Andrew)  Model code (Alex)  Dash implementation (joe) | Midterms | |
| October 26th | Andrew  Alex  Joe | Plans for Monday:  UML (Andrew)  UML and ModelTests (Alex)  UML (joe) | Midterms continued | |
| October 30th | Andrew  Alex  Joe | Plans for Wenesday:  UML (joe)  Prototype Dash (Joe)  Model Load all from folder (alex)  Sample Data (Andrew) | UML incomplete |
| November 1st | Andrew  Alex  Joe | Joe did not complete his goal but did upload documentation for client to view.  Plans for Thursday:  Model unit tests again (alex)  Plan for meeting (all)  Meeting too early to complete things, update after meeting | Halloween activities taking time |
| November 3rd | Andrew  Alex  Joe | Plans for Monday:  More Unit tests and Start SAD (Alex)  Formatted Data (andrew)  Get rough Dash interface working (Joe) | Meeting was Thursday |
| November 6th | Andrew  Alex  Joe | Formatted data did not work  Sad not worked on  Dash has no data  Plans for Wednesday:  Continue trying data formats (andrew)  Add polish to Dash (Joe)  SAD (alex) | SAD seems more complicated than first assumed |
| November 8th | Andrew  Alex  Joe | Everyone got some work done on their goals |  |

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Platform (in person, Zoom, Slack, Discord, MS Teams..)** | **Members Present** | **Progress** | **Challenges** |
| 10/25 | In-Person | Andrew  Alex  Joe | Finished Sprint report 2 | Magical Re-appearing image in Final Sprint Report  Tried to delete it. |
| 10/30 | In-Person | Andrew  Alex  Joe | Discussed interactions using UML | Midterm |
| 11/1 | In-Person | Andrew  Alex  Joe | SRS document |  |
| 11/8 | In-Person | Andrew  Alex  Joe | Sprint report 3 and SAD work |  |
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**Client Meetings**

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| --- | --- | --- |
| **Date** | **Members Present** | **Challenges/issues by the client** |
| November 2nd | Andrew  Alex  Joe | None identified. |
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**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.*)

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| --- | --- | --- |
| **Challenge** | **Resolution** | **Impact/Result** |
| Midterms | Resolve to finish as much as possible during in-person meetings. | Deadlines met. |
| Incomplete UML/system interaction schema | Continuing to develop components under presumptions of how it’ll probably work. We also worked to finish the UML. | Deadlines met; the system seems to be coming together fine. |
| Halloween | Same as with the midterms. | Deadlines met. |
| Underestimated SAD workload | Same as midterms and Halloween. | Deadlines met.. ? |
| Lacking presentation style | Coordinate materials and speakers. | TBD. Meetings are once every 2 weeks. |

**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).**

Finished network page implementation in Dash, model was sufficiently set up, implemented packet scanning and reading, .

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

Connect the model, network, and interface components.