Engineering Notes No. 4.1

INFORMATION

NAME: Isabella Acosta

DATE: 10/29/24 - 11/4/24

Sprint: 4

JIRA BACKLOG

Responsible for:

• Complete sections 2.4 - 2.7 of the SRS document

Contributed to:

• Complete SDD Document following the same breakdown as SRS

RESOURCES & DOCUMENTS CONTRIBUTED TO

Table 1 - Contributions

| Date | Resource/Docu | Location | Contribution Description |
|---------|---------------------|-------------|---|
| 11/4/24 | SDD shared document | Word online | I uploaded the link to the shared SDD document to the links and resources page in Discord |

COMPONENTS TESTED

Table 2 - Testing

| Date Tested | Component | Result | Comments |
|----------------|-------------------------|---------------|--|
| 10/29/24 | Polyverif simulation | Failed to run | Need to revert back to Ubuntu 20.02 |
| 10/30/24 | Polyverif simulation | Failed to run | Need to reinstall Python to correct version |
| 10/31/24 | Polyverif simulation | Failed to run | LGSVL error now, no longer a docker problem, verified Docker, NVIDIA, and CUDA were downloaded properly. Reached out to Kunal, Quentin, and Dr.Akbas for assistance. |

PROBLEMS SOLVED

Table 3 - Solutions

| Date | Problem | Solution & Notes |
|----------|---------------------------|--|
| 10/29/24 | PolyVerif stopped working | Revert to Ubuntu 20.02 and reinstall Docker and NVIDIA as well (Jackson Baker helped with this) |
| 10/30/24 | Polyverif stopped working | Checked Python version |
| 10/31/24 | Polyverif stopped working | LGSVL error |
| 10/31/24 | Polyverif stopped working | Docker was installed properly |
| 10/31/24 | Polyverif stopped working | NVIDIA was installed properly |
| 10/31/24 | Polyverif stopped working | Found CUDA version 12.2 |

PROBLEMS TO ADDRESS NEXT

Table 4 - Future Problems

| Problem | Description | |
|---------------------|-----------------------------------|--|
| Continue working on | All team members will continue to | |
| SDD Document | contribute work on SDD Document. | |
| Presentation | Prepare for our presentation | |

MEETING NARRATIVE NOTES:

Table 5 - Meeting 1

| 10/29/24 Meeting Type: St | tandUp/ <mark>Class</mark> /ETC | |
|--------------------------------|---|--|
| Met with Product Owner(s): Y/N | | |
| Problems Brought Up: | | |
| Problem | Proposed Solution | |
| PolyVerif stopped working | Revert to Ubuntu 20.02 and reinstall Docker and NVIDIA as well (Jackson Baker helped with this) | |
| Other Items Undated on: | | |

Other Items Updated on:

- Create Scrum Backlog
- Complete the System Requirement Specification.
- Send an email to Acclivis for scene / environment creation.
 - Ask the Acclivis guys what their next steps are.
- Create a guide for environment creation.
- Create a simple scenario that can simulated, log and display the results.
- Scenarios: (0) stop at red light or (1) run a red light.
- Improve efficiency of simulation, discussing noise.
- Autoware is looking to implement and merge with PolyVerif.
- Sections for SRS were assigned
 - Section 1 -> Isabella & Hannah
 - Section 2 -> William & Isabella
 - Section 3 -> Hannah, Isabella, and Davian
 - Section 4 -> Davian
 - Section 5 -> Davian
 - Section 6 -> Serena
 - Section 7 -> Serena
 - Section 8 -> Davian & Isabella
 - Hannah and Serena will do diagrams
- Get recording of simulation

Additional Notes:

Table 6 - Meeting 2

Met with Product Owner(s): Y/N

Problems Brought Up:

| Problem | Proposed Solution |
|---------------------------|------------------------|
| Polyverif stopped working | Checked Python version |

Other Items Updated on:

• Pip install -no-cache-dir <module>

Additional Notes:

Table 7 - Meeting 3

| 10/31/24 | Meeting Type | : StandUp/Class | S/ETC |
|----------|--------------|-----------------|-------|
|----------|--------------|-----------------|-------|

Met with Product Owner(s): Y/N

Problems Brought Up:

| Problem | Proposed Solution |
|---------------------------|-------------------------------|
| Polyverif stopped working | LGSVL error |
| Polyverif stopped working | Docker was installed properly |
| Polyverif stopped working | NVIDIA was installed properly |
| Polyverif stopped working | Found CUDA version 12.2 |

Other Items Updated on:

- Micaplex Meeting
- Continued issues with Polyverif
- Possibly an issue with our computer, currently investigating issues
- Reached out to Kunal, Quentin, Akbas, Serena/Hannah for Polyverif guidance.

Additional Notes:

NOTES:

This sprint was difficult as we started with multiple errors within Polyverif. It was working one day and then crashed and we had many different errors to deal with. We were able to work on the SDD and continue to troubleshoot and work through the errors that we had.