# Engineering Notes No. 1.1

#### INFORMATITON

NAME: Serena Conticello

**DATE:** 09/17/24 - 09/23/24

Sprint: 1

# JIRA BACKLOG

#### Responsible for:

• Write Note Template for Polyverif Research

#### Contributed to:

- Meet with Dr. Akbas to Determine Project Scope
- Read PolyVerif Papers
- Begin Project Proposal
- Establish Meeting Times

# RESOURCES & DOCUMENTS CONTRIBUTED TO

### Table 1 - Contributions

Date	Resource/Docu ment	Location	Contribution Description
09/17/24	Senior Design OneNote	One Drive	Jotted down notes from the class discussion
9/19/24	Project Proposal Document	One Drive	Contributed to the rough draft skeleton

# COMPONENTS TESTED

Table 2 - Testing

Date Tested	Component	Result	Comments
n/a	n/a	n/a	n/a

# PROBLEMS SOLVED

Table 3 - Solutions

Date	Problem	Solution & Notes
09/17/24	Access to MicaPlex	Send Dr. Akbas student IDs so we have access to the building.
09/26/24	Declare roles	Created roles for the project in the Project Proposal Document.

# PROBLEMS TO ADDRESS NEXT

Table 4 - Future Problems

Problem	Description
Access to necessary hardware for PolyVerif	Contact Quentin.
Set team members in roles	Figure out time constraints and skills for best role delegation, current procedure is to assign as necessary.
Intersection	Choose and model an intersection at ERAU DB.

# MEETING NARRATIVE NOTES:

# Table 5 - Meeting 1

09/17/24 Meeting Type: Class			
Met with Product Owner(s): Y - Dr. Akbas, Clay			
Problems Brought Up:	Problems Brought Up:		
Problem	Proposed Solution		
Access to hardware	Get in touch with Quentin for		
	SSH access to machine or		
	machine login.		
Access to MicaPlex	Send student id to Dr. Akbas		
	for access to building and		
	parking.		
Setting and delegating roles	Set on project proposal.		
Other Items Updated on:			
n/a			
Additional Notes:			
Set to have another meeting later tonight in order to go over			
proposal document and Jira.			

# Table 6 - Meeting 2

09/17/24	Meeting Type:	Standup
Met with Product Owner(s): N		
Problems Brought Up:		
Problem		Proposed Solution
What to put on t	the project	Meet/talk with Dr. Akbas and
proposal documen	nt.	Clay to understand project
		better.
Other Items Updated on:		
n/a		

#### Additional Notes:

Focused mostly on how to tackle the senior design project. Dealt with making a prelim draft of the proposal so we can keep forward pushing momentum on the project.

Went over how the project essentially will work. We developed questions that we wanted to know more about when we talk to the product owners.

#### Table 7 - Meeting 3

09/18/24	Meeting Type: Standup
Met with Produc	t Owner(s): Y - Dr. Akbas

#### Problems Brought Up:

Problem	Proposed Solution
Access to Hardware	Get in contact with Quentin
Modeling intersections	Find an intersection for this
	semester and model it, ideally
	at ERAU

#### Other Items Updated on:

#### Main Goal:

"expanding the application space and examples within polyverif and integrating polyverif with machine learning validation tools."

- "Example to learn the tool and to find potential issues and fix them"
- "How can it be combined with tools in the lab to provide more complex research cases"
- "Future uses in machine learning, like neuroevolution, once the tool is stably integrated"

#### Goal:

Make everything other than the main vehicle preplanned, where the vehicle would be in a reactionary state.

#### Goal:

Model an intersection on ERAU-DB campus, make sure:

- Every action is possible to occur
- Multiple scenarios
- Atomic scenarios, low num of decisions

#### Goal:

Get project members familiar with simulation environment, should be able to run 1-2 sims each.

#### Additional Notes:

n/a

#### Table 8 - Meeting 4

09/19/24	Meeting Type:	Class

Met with Product Owner(s): Y - Dr. Akbas, Clay

#### Problems Brought Up:

Problem	Proposed Solution
Project Proposal	Getting it finished

### Other Items Updated on:

#### Goal:

Will should be able to produce a render by tonight or soon

#### Additional Notes:

Clay is our TA.

No additional meeting tonight. Meeting during class was sufficient.

CS490 - Autonomous Vehicle Design

# NOTES:

n/a