Engineering Notes No. 12.2

INFORMATION

NAME: Isabella Acosta

DATE: 03/26/25 - 04/01/25

Sprint: 12

JIRA BACKLOG

Responsible for:

• EGR Notes 3

• Set up Scenic-Sumo - Isabella

• Test Introductory test cases

Contributed to:

- Plan out AI and neuroevolution scope of project
- Set up Scenic-Sumo -- Micaplex PC

CS491 - Autonomous Vehicle Design

RESOURCES & DOCUMENTS CONTRIBUTED TO

Table 1 - Contributions

Date	Resource/Docu ment	Location	Contribution Description
N/A	N/A	N/A	N/A

COMPONENTS TESTED

Table 2 - Testing

Date Tested	Component	Result	Comments
03/27/25	Scenic and SUMO	It ran!	Quentin helped us successfully install Scenic and SUMO.

PROBLEMS SOLVED

Table 3 - Solutions

Date	Problem	Solution & Notes
03/27/25	Scenic and SUMO setup	Scenic and SUMO were properly installed.
04/01/25	Map needs to be properly implemented.	Map has been generated but needs to be implemented into Scenic-SUMO.

PROBLEMS TO ADDRESS NEXT

Table 4 - Future Problems

Problem	Description
Map Integration	Properly integrate map into Scenic SUMO.
Final Test Plan	Continue working on final test plan
VerifAI implementation	Decide on VerifAI test cases and finishing determining scope for implementation.

MEETING NARRATIVE NOTES:

Table 5 - Meeting 1

03/27/25	Meeting Type:	
	Class/Standup/Presentation/MicaPlex	

Met with Product Owner(s): Y/N

Problems Brought Up:

Problem	Proposed Solution
Implement Scenic and SUMO	We were having issues
correctly	implementing SUMO, but
	Quenting was able to help us
	download it successfully.
Test scenario creation	Use SUMO built in tools and
	OSM tools to determine test
	cases.

Other Items Updated on:

Additional Notes:

Met in MicaPlex 224

Scenic is working!!!
Need to get SUMO up and running

Hannah on da puter fo today

Ensure that all proper compatible versions are installed, possible different way to run it or possibly missing something

Quentin is helping us out.

He got Scenic and SUMO installed!!! Yay!

SUMO files are dependent on specific maps. SUMO comes with a built in map generator, need to design and create the scenario cases.

Can import files from .OSM

Read up on Quentin's publications about ScenicSumo

Plan to implement VerifAI with ScenicSumo to automate the test cases

Review the examples folder for ideas.

CurvyRoad map resembles ERAU campus

Final Test plan due on April $15^{\rm th}$ FURC discovery day Wednesday April $16^{\rm th}$

Table 6 - Meeting 2

04/01/25 Meeting Type:	Class/Standup/Presentation	
Met with Product Owner(s): Y/N		
Problems Brought Up:		
Problem	Proposed Solution	
Implement Map into SUMO	Files need to be converted	
	into .xml and then imported.	
Final test plan completion	Update from PolyVerif to QSS	
Other Items Updated on:		

Additional Notes:

Met in LB 374

Showed Akbas the videos,

Map is generated, but needs to be implemented (AFAIK) Maps are .net.xml files

Final Test Plan is due two week from today, going to need quite a bit of revisions

- Likely mostly cutting out the PolyVerif components and replacing it with QSS.
- We can focus on actually testing simulations now

Took a survey for potential extra credit.

NOTES:

Scenic-SUMO has been properly installed on the computer and we are focusing on implementing the map into the program.