

Team C-rious

Simulation Project

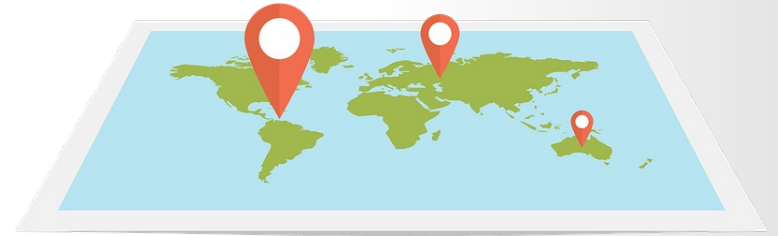
Milestone 1

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Structure

- 1) About our Team
- 2) Assessment and Quality Criteria
- 3) Team Goal
- 4)
- 5) Keeping in Touch
- 6) The Traffic Node
- 7) Data and Experiments



About our Team

Team Leader



Input Data Analyst/
Data Acquisition



Conceptual Model



Chief Software Architect



Experiment Designer



Validation and Quality Control

Assessment and Quality Criteria


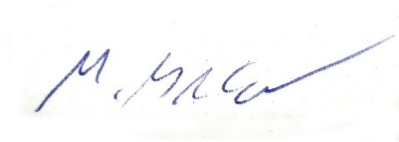
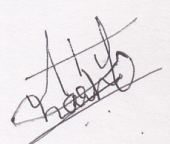
- Don't ignore member's questions/needs/opinions
- Voting if we can't agree by discussing
- Tell others if we are unhappy/in trouble
- Hand in work ASAP
- Catch up on other's work
- Pull our weight reliably
- Inform if unavailable
- Prepare for the Teammeeting



Team Goal

Our project goal is to finish the Simulation project with a good grade for every member. We will apply our mostly theoretical knowledge gained in the *Introduction to Simulation* course into practical use. We will overcome any hurdle that may be in our way by working together and combining our strenghts. We will grow and develop new skill both professional and in teamwork.

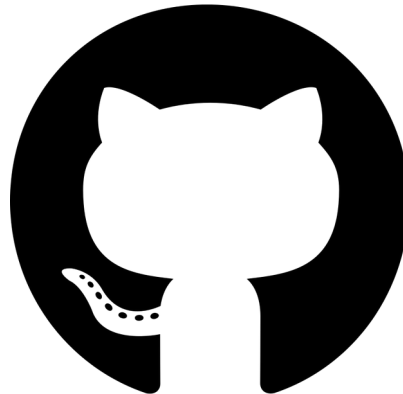
Everyone agrees to our list of performance criteria to be a valuable member and communicate properly. For our meetings we will be prepared and mind the time planned for each section by the teamleader. We are also willing to shelf our our agenda in favor of more pressing issues that need to be discussed in person.


J. Körmann

Keeping in Touch



Discord



The Traffic Node



The Traffic Node



The Traffic Node



Data and Experiments

Data Needed

- Inter-Arrival times of cars heading towards the node
(→ Waiting Time, Throughput)
- Number of cars leaving the node in X time
(Validation)
- Time cars spend in the node
(Service Times)
- Number of cars turning to any direction
(Probabilities)
- Road signs
(Design)



Data and Experiments

Planned Experiments

- Best Throughput/Waiting Time between crossroads and roundabout with and without one/two one-way streets (several Experiments or ANOVA)
- Performance crossroads (and roundabout) with increased traffic
- Best at clearing traffic jam
- Feeding five or four steers into the roundabout (combine 2)

Sources

<https://de.wikipedia.org/wiki/WhatsApp#/media/Datei:WhatsApp.svg>

https://en.wikipedia.org/wiki/Discord#/media/File:Discord_logo.svg

https://tr.wikipedia.org/wiki/GitHub#/media/Dosya:Font_Awesome_5_brands_github.svg

https://cdn.pixabay.com/photo/2018/01/31/05/43/web-3120321__480.png

https://cdn.pixabay.com/photo/2022/01/05/01/39/teamwork-6916252_960_720.jpg

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