



Otto-von-Guericke-University Magdeburg

Summer Term 2023

Faculty for Computer Science

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Course: Simulation Project

## Final Report Part 2: Team

Handed in: 06.07.2023

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## 1. Assessment of the Team

### 1. 1 Team Climate

Overall we grew as a team. In the beginning workload was badly balanced with one or two members doing a few times as much as the others. With time this got more balanced. Comparing the working time of all team members, most of them had similar results. Figure 1 shows the development of our working time over the weeks. Note that it was usually not hard tasks that took a lot of time. Especially writing the report and redoing graphics was consuming.

As stated by some team members they were especially happy with the organization and with how well the project plan worked out. There were a lot of changes done to the responsibilities for each step by the team leader but this was not noticeable by the rest of the members. In fact, having the project plan even earlier would have been helpful but probably impossible.

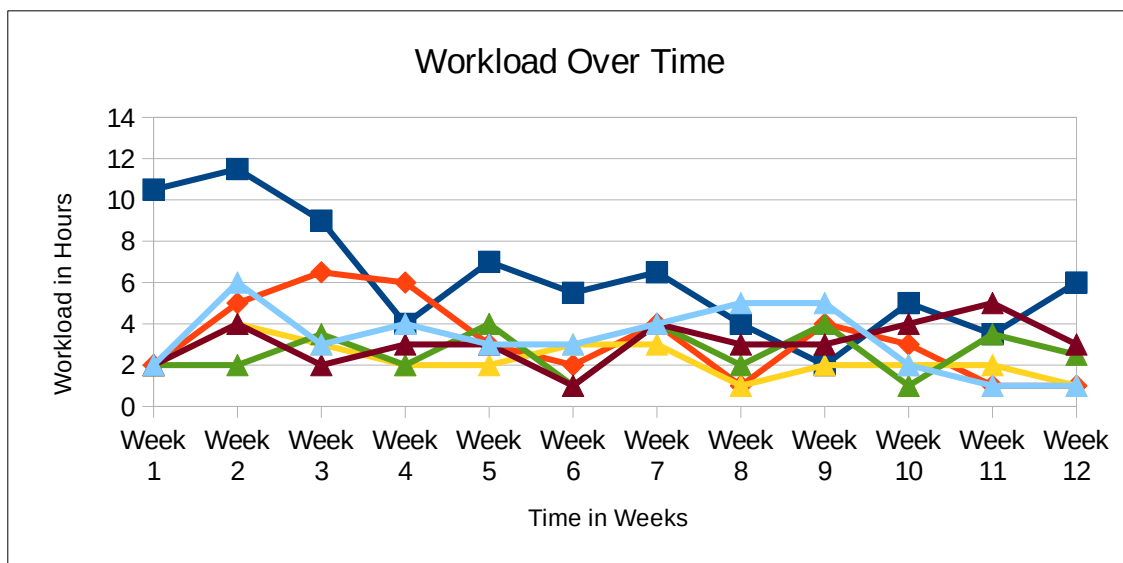


Figure 1: Workload for each team member over the course of the semester

### 1. 2 What did you Learn?

As planned in our team goal the project made us use our theoretical knowledge on a real project. So we certainly trained our abilities in planning, modeling and running a simulation. Especially learning how early later steps had to be planned and how significant early mistakes would be was an experience. We learned that organization is the key for a successful project and we learned to use collaboration tools like github.

## **2. Experiences with the Course**

### **2. 1 Specific Difficulties**

Communication was one of the biggest challenges we had to overcome. The project was done in English with no team member being a native speaker. So with one person expressing themselves with 80% perfect English and the other person understanding it 80% perfectly that would mean only 64% of the message actually reached the other person. This happened a lot and led to things having to be redone, the wrong things being done or general confusion and frustration. And, since the report is also in English, we are aware that it will contain a lot more spelling mistakes than if it was in one of our native tongues.

Furthermore the software that was used to draw the roundabouts into the streets to have nice visual representation was limited so it was hard to get these pictures done. But it ended up being rewarding seeing Anylogic's animation performed on the actual streets.

It was also very hard to determine the scope of the final report. We assumed that everything listed to be documented had to be part of the final report, but the name changing from documentation to report had us irritated. Even handing it in we were not entirely sure if what we did was the right thing.

### **2. 2 Experiences and Events**

There were little noteworthy events disrupting the flow of the work for most milestones. In the validation process there was some tension between some members as it was not fully understood what had to be done. While our coach took time answering our questions several times even at the end of the project not everything was clear to the team.

Furthermore in the data collection process we were faced with some social problems. Pedestrians stared at the collectors and even interrupted them, demanding to know what they were doing. This may even have resulted in inaccuracies for our measured data. We don't know if data collection is often disturbed by nosy people but since gawkers are known to be a problem in many situations we would assume so.

Since we collected data on paper the weather had to agree with our schedule which it mostly did. It was windy, making it more challenging than it could have been but it was manageable. From the beginning we had a somewhat different understanding what was meant to be an experiment than the teachers. So when we presented what we were planning to do about half-way through the course we had to on the spot come up with different experiments which luckily was quickly done.

### **2. 3 What would you do differently?**

At the beginning of the course we all performed the marshmallow experiment. For that we had to build a little tower out of questionable material and put a marshmallow on top in a certain amount of time.

The main takeaway was, that building anything with a marshmallow on top was a better strategy than building as high as possible and then failing to get the marshmallow to stay.

We worked that experience into our project by making sure from the beginning that every step was doable. We decided to take as few risks as possible so that we could present a finished project with a marshmallow on top at the end of the course. Looking back we could have handled some additional challenge like adding pedestrians, taking even more time to collect data or performing more creative experiments.

### **2. 4 Evaluation of the Course**

The course provided a close to real world experience for handling a project – the first one for many of us. The degree of freedom we had was something most of us were not used to and only appreciated to a certain degree. Overall a bit more guidance would have been preferable for most of us. Some constraints could aid in our ability to perform optimally.

Another challenge laid in splitting up tasks in a meaningful way. It seemed that we spend more time planning and organizing than we saved by being such a big team. Apart from measuring, a smaller more nimble team of three people would probably have been able to do the project more quickly.