

Reflection Robot Challenge

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Working with Zumi

At the beginning of the challenge, I saw Zumi as a near-perfect model for learning. I didn't anticipate how many external factors could influence its behavior. Lighting conditions, reflective surfaces like screens, and even small folds in the course map could easily disrupt its performance. Over time, we learned how to manage these challenges. For example, we reduced environmental "noise" around the contest board and avoided placing it near windows. Each trial run taught us more about how Zumi reacts and how to adapt to unpredictable issues. This process of testing, troubleshooting, and refining gave me a much deeper understanding of how real-world environments affect robotics.

Coding

The learning curve at the start of the course was steep, especially for those of us newer to robotics. In hindsight, a structured introduction to Zumi's sensors, technical capabilities, and the programming environment would have been beneficial. Fortunately, we received support from other students. Lukas helped Mischa set up SSH access for Zumi, which allowed us to run code directly through Visual Studio Code instead of the browser-based interface. This significantly improved our workflow and made the development process much smoother. It also gave me more confidence in working with tools like terminal commands and remote programming setups.

Teamwork

Our team faced challenges from the very beginning. Communication issues and a lack of alignment led to repeated misunderstandings and frustration. To try and improve the situation, we brought in Robert as a coach and had two facilitated coaching sessions. We developed rules and guidelines aimed at improving collaboration and resolving conflict. However, despite our efforts, the conflicts continued, and we eventually decided to split the team into two smaller groups. This change led to a noticeable improvement in communication and productivity. I learned how critical it is to establish clear roles, expectations, and mutual respect in teamwork especially under pressure.

The Challenge Itself

Being part of the first group of students to go through this challenge came with its own set of unique obstacles. One of the most frustrating issues was the lack of notifications for updated material on Spaces. Important changes were made without announcement, which meant we had to constantly and manually check the "Porträt" section to stay informed. Despite this, the challenge offered valuable hands-on experience. It was an excellent opportunity to work independently, apply what we learned in a practical context, and adapt to a dynamic and sometimes unpredictable project environment.

Takeaways

Throughout this challenge, I significantly improved my Python skills and overall programming confidence. I also developed a deeper understanding of GitHub, using it not only as a storage platform but as a real version control tool for team collaboration. Personally, I grew in ways that go beyond technical skills. I learned how to confront unfair behavior and stand up for myself in a respectful but firm way. Finally, I developed stronger project management abilities, learning how to plan, define tasks, and adapt when things didn't go as expected. These are lessons I will carry with me into future projects and beyond.