

## Zycobyte (LavaTheif)

I have not finished setting up this site, soon it will be moved to [zycobyte.dev](https://zycobyte.dev) (<https://zycobyte.dev>) once I have finished rebranding

Hey! I am Charlie, a full stack freelancer who specialises in back end development. I am based in London, UK.

I enjoy problem solving and frequently take on side projects to help further my understanding of computers and how they work and enjoy exploring new areas of the industry.

I have been working in the industry since 2018, when I developed a trip booking application for my college. Since then I have been working on many projects in various types of environments.

If you think I would be a useful addition to your team, or would like some more information about my previous projects, please reach out and contact me via email down below.

## Experience

Below is some information about some of the projects I have been a part of that I enjoyed most and I feel impacted my career in some substantial way

### Dash

I co-founded Dash with Jamie as we wanted to create a bot that offered all its core features for free. Our team currently consists of 8 members, and the project is run in an agile-style environment. We first presented ourselves to the public with the release of our support server ([discord.gg/dash](https://discord.gg/dash)) and a proof of concept build of the bot to the public on the 14th June 2021. This grew in interest very quickly and was even noticed by the company Medal, which has a discord server with over 300k members! They liked what they saw and when presented with some designs for planned and upcoming features they were quick to strike a partnership with us.

Dash continued to grow and we started building a community around the bot. By launch at the start of January 2022, we were already in over 430 guilds!

The bot itself is written primarily in Node JS, and we use a modular system design to increase efficiency and make maintenance easier, which by chance led to huge benefits when it came to migrating to 'slash commands', as our command files pretty much had the supported for it.

We are also beginning to integrate Typescript into our project, and are working on rewriting the codebase however most of us are still working on our Typescript skills. This is one area I am currently focussing on improving my skills for and am excited for the benefits the language offers.

At Dash, I work as the CT0, where I organize various tasks which need to be completed, lead the development of the bot and oversee the development of our website. I work closely with the other developers sharing ideas discussed in meetings and offering advice on how to fix issues or optimize code.

We also regularly code over calls and share screens to help develop new features, I enjoy helping my teammates find bugs and I find that it allows for good communication and faster development for the team overall.

I feel as though I have already learned so many things and have improved so many of my skills, but I think my biggest improvements have been in project management. Looking back since starting the project I can see many improvements in the ways we run things and organize our ideas, and even the design of our system is far more professional.

My favorite thing about working on Dash has probably been seeing the community build around my project and I am really looking forward to seeing how far it will go in the future.

[collapse, check out our support server \(https://discord.gg/dash\),](https://discord.gg/dash)  
[invite dash! \(https://dashbot.us/invite\)](https://dashbot.us/invite)

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## **s8nmc**

I was lucky enough to work with a large social media influencer with about 2.3 mil followers, to create a hell-themed Minecraft server for his community to play on. He was called 's8n' on Twitter and was a parody account to Satan. He was wanting to create a game server on Minecraft for his followers to play on, which was called s8nMC.

I started working on s8nMC when Armful, the then manager, was wanting some help with the guilds discord bot. I began working on

the bot, which was written in node.js, along with one other member from the guild who Armful also chose to help. It was not long before some of the developers for the Minecraft server started to notice me and then not long after I was offered a job as a developer on the server.

I worked in a team of initially 8 other people consisting of designers, developers, and management. My job was to develop and configure plugins for the Minecraft server to use for both player and management requirements. These plugins were written in Java and were described as "of brilliant quality" by Management. Part of my job also included general management and maintenance on the Linux server itself. I learned a lot from the more experienced developers on this project and have since expanded on my Linux skills in many ways.

The Minecraft server, which was hell-themed, was released on Halloween and was instantly flooded by over 100 users. Within the first week, we had many regular players as well as many premium users and we released many updates to add features requested by the community and improve the user experience.

I enjoyed my time working on this project and I feel like it was a good fit for me as I had previous experience for creating plugins and running Minecraft servers so felt comfortable in my skills going into it, but also knew that I would have a lot of opportunities to learn new things.

I think the most important thing I learned from working on s8nmc was to do with dealing with many users all at once. I learned about how you can't just open yourself up to hundreds of requests per minute without setting in place some mechanisms to handle the flow and enforce rate limits, and I think that it highlighted the importance of stress testing so you know how the system may behave large capacities.

I also learned a lot about working in a team on a large project, and I feel that it really helped me to build my team skills as well as my communication skills with users of the product.

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## Uniyo

I met Aryuna for the first time outside a Nero cafe, where he explained to me his vision for an app that would allow users to book services for many types of businesses in one place. He was so enthusiastic about the app and had so many interesting ideas for ways in which the app could benefit local communities and actually

make a difference that it was impossible to turn the offer down.

The app is written in Flutter with a firebase backend. Before I joined, the team had little experience with Github and as a result, were causing bugs by overwriting code in merges or using old builds. I have since optimized the Github repo and also set up a taskboard to keep track of tasks and deadlines.

Alongside the development of new features, such as implementing stripe payments, I have also been optimizing areas of the codebase which were inefficient and have refactored a few files to include better utility modules that allow for easier code maintenance. I plan to continue working on this as I feel one of the most important parts of programming is ensuring the system has a robust and easy-to-maintain system design.

At the moment, I am planning on working with the team to introduce stricter rules for reviewing and testing code to ensure that our product meets the highest standards. This will also allow us to release quicker updates and work in a more agile development environment.

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## Trip Planner

In late 2018 my college decided it wanted to upgrade its off-site trip application system. The original system required teachers to submit a paper application to the finance managers, who would approve or deny a trip. This would then be forwarded to the principal for final approval, and then to the receptionist who would put it on the colleges' calendar. The proposed system was to allow teachers to do this from an app within their PCs, which would follow the same process, and allow edits and re-submissions for denied trips.

The requirements were for the system to be developed in Java with the database being SQL. It would be run from the teachers' computers within the colleges' network and would allow them to authenticate and create trips for their tutorial classes.

They asked me to lead the project and allowed me to get a second developer from the class to help me develop it. The project was designed in a semi-agile environment, where I created a prototype version for the system and had regular meetings with the principal, finance managers, and IT managers about progress and changes that could be made.


The system was completed in time for the summer holidays and was able to be deployed ready for staff to use at the start of the following September. The management were all very happy with the system I had designed and they came back to me the following year a couple of times for small updates and maintenance requests.

I enjoyed working on the project and I felt like the staff at my college really helped to show me how projects are run within the industry, and as a result, I feel like it is a valuable piece of experience to me.

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## My Stack

View my full stack at stackshare.io:  (https://stackshare.io/zycobyte/zycobyte)

## Achievements

UNI: 100% in module

UKMT: Best in college year

UKMT: Best in high school

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