Junior Developer application, summer 2021

Hi, I am Risto Halme and I am applying for the junior developer role for the summer of 2021. I have completed the pre-assignment and provided links to the <u>code</u> and the deployed version over at <u>Heroku</u> for testing purposes.

A little background: I started programming as a hobby during my second year at high school, where I participated in an open JavaScript MOOC from Helsingin Yliopisto and a robotics class where we played around with Arduino. I found programming to be an interesting subject and hobby, so I continued with it during my free time. As I spent a lot of my time gaming with friends during my early years, I naturally gravitated towards game development. This led me to starting my own game modification project towards the end of my second year, which ended up growing into my largest hobby project ever. It was a game modification for the game *Terraria* called *Terrascape*, for which the source code is available over at my GitHub.

I continued developing some small hobby projects during my free time and applying to study Computer Science at Aalto University, where I started in September 2019. I am now over halfway done with my bachelor's degree and have gotten a good overall grasp of programming from both my studies and personal projects. From my starting interest of game development, I have moved on towards web development as my main focus. My hobby and school projects have given me good knowledge of the web stack. I feel like creating responsive, efficient and visually pleasing content is one of my greatest aspirations in overall development.

Working with school group projects in Aalto has given me a great understanding of teamwork practices. I tend to be on the quieter side when working with strong leaders or more social people, but in situations where everyone in the team is on the same level, I have found great success in assuming a more leader-like role. I feel like working with a talented development team at Reaktor with good leadership would be the perfect opportunity for me to showcase my skills as a developer.

About the pre-assignment: I completed the assignment using Deno, which I learned during the Aalto course Web Software Development. The course also contained a project, which for the source code can be found here (unfortunately some updates to the dependencies and Heroku Postgres have broken the deployed version of my project). I played around with the APIs and fetching data for a little while, before settling on an idea for the execution. I found the API fetches to take way too long to be used on each request, so the application first fetches all the product information, then asynchronously fetches all manufacturer availability information in parallel. While the information is being fetched the site is usable, but the availability information for each product is "UNKNOWN". The site also informs the user of the last time when a successful availability fetch was completed, so that the user knows how recent the information is. Each request that is made to the server after the startup will start a new batch of fetches if none are currently running. Product info is being tracked separately from availability information since the latter takes much longer to fetch. As all the fetches are done asynchronously, the user experience is not compromised as loading times remain minimal.

I am available to start working in May and continue to the end of August. I am also open to the opportunity of continuing as a part-time employee after the summer alongside my studies. I look forward to hearing from you soon!

- Risto Halme