Dear Mr. Johnson,

As you already know, in recent days, we have been experiencing a lot of trouble with our IT infrastructure. The computers are slow, outdated, and in my opinion, it definitely does not satisfy all the needs of us, employees. The IT compartment is also getting sick of the continuous and never-ending need of updating all the computers every week, solving various troubles and software incompatibility new updates bring.

What I propose as a solution is called “cloud computing”. It is a relatively new and smart technique of running all programs and operating systems in the cloud. By doing this, the company’s computers will stay updated all the time because all the software is on-line! This allows an unbelievable elasticity and scalability – whenever a new update comes out, thanks to SaaS (software as a service), it will be available on all computers just with one click. You certainly also remember the little quarrel which happened few months ago when the employees split in two halves – the “Unix” and the “Windows”. With PaaS (platform as a service), that would be a thing of the past – on each computer, different software could be installed. Last, but not least, cloud computing would also fix the never-ending software compatibility issues, such as not being able to open Word 2019 .docx files on another computer with Word 2008 on it. If we run in any compatibility issues, we can just easily switch to another software without having to worry about losing a lifetime license.

Our company team’s unity apart, the cloud computing would also bring by far the biggest savings in the economics of our company thanks to the “pay as you go” system – in our company, one day, a computer is being used for Photoshop one day and another day, a secretary writes e-mails from it. What a waste of computing power! With pay as you go, you pay just for the performance you use which is not just saving money, moreover, it is saving the environment! In addition, the pay as you go does not work just with hardware, it also works with software – you pay just for the time you are using the program, so there is no longer any need for expensive lifetime licenses without possibility of updating, so computers are no longer exposed to virus threats through outdated programs. Another advantage is the use of CDN (content delivery network), which would solve problems with slow download speeds on our servers – instead of all employees having to be connected to the same server, the download requests would be distributed evenly across multiple servers, resulting in save of time and money.

Setting cloud computing is the simplest part – I suggest trying a small plan just for a few employees at first. There is no need to install anything new on the computers – we just connect them to the cloud, we set up the private cloud for the secret and internal files and public cloud for company’s partners, create Unix and Windows setup and move a portion of files there for a few weeks demo. If it works and the employees like it, we could switch to a bigger plan with more storage and more software possibilities, so it is definitely worth a try.

If you decide to give cloud computing a try or have any questions concerning cloud computing (more features, downsides, setup), do not hesitate to contact me.

I’m looking forward to hear from you soon,
Andrew.

Mr. Smith,

This week, I saw your job offering on the Upwork freelancing website and I would be interested in the position of Junior PHP and Android developer. I think working in your company would be advantageous for both sides. What I expect from the job is to learn new things and advanced methods of development from experienced senior developers, on other side, as a fresh university graduate, I offer bringing new ideas into the company.

I already know all the necessary languages and technologies you mentioned in the post – XML, used for data exchanging between websites and API (access points), HTML and CSS, for creating website front-end design. I have been developing websites and programs in PHP since 2015, so I have a long experience throughout various projects, such as Minecraft servers, console games, website back-end and even more. I also know the new standard PHP 8.0 which came out just a few weeks ago.

When it comes to Android development, I have good knowledge of both Java and Kotlin – the most used Android languages. Knowing languages is a good part, however, what I think is the most important is the ability to think as a developer – know how to model real-life solutions and how to create algorithms solving them, not just knowing how to write down an existing algorithm. That's why I have studied both theoretical informatics and software engineering.

As I already mentioned, I have worked on many PHP and Android projects, such as a website for an adventurous competition where you had to visit 30 places all around Czechia in 2 months, a Sudoku game with smart auto-solver, an e-shop for schoolbooks bazaar, lyrics website with use of Google Translate API for auto-translation, church confessional reservation system or a social-network site for sharing voice records.

One of the most complex projects I have ever created that I would like to present you a little bit more is my **Rest**aurant reservation **Sys**tem – RestSys. It consists of a REST (Representational state transfer) API communicating with database of orders, tables, employees, food and allergens, website and application on which people can see the restaurant's week menu, Android application for waiters/manager and iOS application for kitchen. In the waiter's application, after logging in, you are provided a table list screen, where you see all the ongoing orders on each table. You can create a new order, close it, add food to order on certain tables etc. The restaurant manager can log in and view earnings with the possibility to print them to a PDF file. The kitchen application shows all food in ongoing orders which hasn't been served yet, so the cook knows what to prepare. The creation of such a complex system required knowing and mastering many technologies and languages, such as JSON, REST, HTTP, SQL, Android, Java, Kotlin, iOS, Swift, C and PHP.

Shall you have any questions regarding my work, don't hesitate to contact me. If you are interested in more detailed description of my projects, you can see a full list at https://www.kvetinac97.cz/projects/.

I'm looking forward to your response,

Andrew.