innoscripta

We scout bright ideas and transform them into high-end projects. We look for scientific breakthroughs and help them turn into reality. We are entrepreneurs with passion for science and modern technologies.

Case Studies

Based on real cases

Imagine that you have been working in the company for some time and you have a list of the following tasks. Please explain briefly, how you would solve the problems.

If you are not fullstack developer and you think that this is not your area of expertise, please just describe from your point of view how you would approach these tasks.
Please remember that there is no correct answer from the technical side, we just want to know your way of thinking.

Task 1

Our user uploads a PDF file (case study) via our system and he waits for a long time while he gets a response, that his file was successfully uploaded.

Meanwhile, on the backend, the process looks like that:

the file got uploaded -> it is saved in our database -> the system decodes the PDF file and analyzes the text -> sends it to a special service (neural network) to analyze a keyword density -> gets the result and -> sends it to our manager with a report for futher evaluation.

Only after the last step, the user sees that his file was uploaded, so it takes quite a long time.

Please, suggest, why it takes so much time, and which solution(s) can be applied to decrease waiting time?

Task 2

We have a tablesheet in CRM with 1000 employees. Everyone has a photo (avatar). The size of the employees' page is too large, so it downloads very slowly.

How we can increase the speed?

Task 3

You need to send various notification emails to customers that will be triggered by some events in the system.

Some of the notifications will be recurring within defined time-frames (for example 3, 7, 14, 18 days) if some condition is still met (for example, user haven't performed some action or didn't unsubscribe from these notification).

Describe components of such system and how you would build it.

Please, send us your answer via doc. or pdf format before or after accomplishing the test. (You will get the invitation to the test in the separate email). You can send your answer directly to your HR manager or to info-spb@innoscripta.com.

If you have any questions, please contact your HR manager.