

Project Proposal - Subscription Management System

1. Introduction

In this project, you will create a fundamental part of any SaaS service - a subscription management subsystem.

The fun part of this project is that in addition to building an important element for the client's business, the team will co-own the rights to the IPR created - benefiting directly own future business projects or to provide a broadly useful demonstrable reference. There is also a lot to learn, as the topic covers important aspects of service design and security.

Subscription management, in typical SaaS product, takes care of a vital part of the business:

- a secure credit card charging
- reliable e-invoicing for the billed accounts
- trial codes, freemium logic and test period accounts, with maximized engagement
- product packaging and pricing, with the mapping to actual product features
- billing dashboard with history and detailed, reliable, line-items

In this project, these typical subscription management features are complemented with a "business benefit dashboard" - to prove the paying customers the value for money with analytics and visualised data.

The project customer, Rescomms Oy, is a one-year old SaaS company, gradually moving away from stealth mode towards a public launch. Our business is a rapidly growing solution for resource management and sales automation. Our clients include some of the largest players of their industrial domain, which will use subscription management system to purchase, configure and monitor the use of the service.

2. Project Goals

Main goals of the project are to:

- Make a well-functioning subscription management subsystem for the Rescomms' B2B product - many software services have a similar system, like [Jira](#)
- Integration with mapping Rescomms core system features to the subscriptions
- A web application to provide a self service portal, with billing dashboard and analytics

3. Technologies

We use a modern tech stack applicable for various types of projects:

- PostgreSQL with GraphQL
- NodeJS w/ Typescript
- Python for analytics
- React for web apps
- Flutter for mobile apps
- AWS cloud, with Terraform IaaS

The system will likely be built on top of an existing subscription management or charging service, such as [Stripe](#) or [Chargebee](#).

Our experienced personnel in tech, service design and creative UX will be available to help you out. While we prefer the subscription management system to be built with the same technologies, we are open to any technology suggestions made by the project group.

4. Requirements for the students

The topic difficulty can be adjusted from moderate to demanding, based on your competence. The core skills required are frontend and API design, with some database design and quality assurance. Based on your desires and skills it can involve deep architectural and infra challenges as well as service design and interaction design work.

5. Legal issues

Intellectual Property Rights (IPR)

The client (Rescomms Ltd) gets all IPRs to the results. The team will have an equal right to use the created code and other non-branded intellectual property for their future work.

Non-disclosure agreement (NDA)

Signing the NDA included in Aalto's contract template is recommended but not required. Understanding the clients' business in detail is a fun part of the project.

6. Client

Rescomms Ltd is a SaaS startup that aims to solve the flexible workforce problem. If we do our job well, then working as a freelancer, an hourly paid worker or a small subcontractor company becomes more viable and interesting alternative to a regular day job. From employers' viewpoint, they will always find the available and best fitting persons or subcontractors for their tasks.

Our office is located in downtown Helsinki, just across the Helsinki railway station, or a direct metro line from Aalto. We are currently a team of 8 and growing. Our office can provide the facilities for co-designing the solution and other events. Like most other software companies, we provide the necessary oil for running your engine (free coffee and cola).

Client Representatives

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