MatchPoint – build an application to host competitions with

2-LINER Description: Design and develop an application to host tournaments/competitions with and keep track of the scores in a leaderboard with an exposed api for external access.

Description of the assignment

- At ToThePoint we regularly host game tournaments. We've built our own (Machine learning) arcade system on which we can play a multitude of all-time classics (such as Pac Man, Mortal Kombat, Streetfighter, etc.). But because we are consultants, we are not always on premise. This is why we've built a TetriNet server so we can engage our more distant colleagues in this tournament just as if they were present.
- Each tournament exists of 1 or multiple games, with multiple participants, that all need to be invited (and/or challenged!). So we need a system to keep track of the scores.
- We'd like to have a multitude of scoringmechanisms ready.
- An external API should enable us to use the collected data for updating the leaderboard, our website content, tweets, etc.
- Your assignment will be the design and development oif an application that we can host competitions with (both online and offline). We want to keep track of the scores that we can use in our leaderboards using the above mentioned API.

[Goals]

- Functional analysis
- Design of a responsive UI
- Development of both backend and frontend following the self-contained systems architecture (Take note of Stefan Tilkov's talk about SCS on http://scs-architecture.org)
- The creation of a continuous deployment pipeline
- Deployment with Docker on a Google Cloud-hosted Kubernetes cluster

[What will you gain?]

- You will experience how to design, develop and put in production an end-to-end enterprise-grade production-ready web application.
- You will gain knowledge and experience in Docker
- Real-world knowledge about and experience with Kubernetes and Google Cloud
- That lovely feeling you get knowing your design will be used in production

[What do you need?]

- You have an interest in a real-world challenge within a next-level microservices environment
- You have basic knowledge of Java and have an eagerness to learn Spring Boot (from us)
- You are curious to use Vue.JS to build a responsive UI with
- You can't wait to learn a heck of a lot in a relative limited time period.

[Location of the assignment]

- Veldkant 33B, 2550 Kontich

[Your mentor]

- Steven Heyninck – Business Unit Manager ToThePoint

[Technologies you will be using]

- Java
- Spring Boot
- Vue.js
    - PWA's
    - Service Workers
- Docker
- Kubernetes