Kry Code Assignment

Summary

As a part of scaling the number of services running within a modern health tech company we need a way to make sure that all are running smoothly. None of the tools that we have been looking for are quite doing the right thing for us so we decided that we need to build it ourselves. What we want you to do is to build a simple service poller that keeps a list of services (defined by a URL), and periodically does a HTTP GET to each and saves the response ("OK" or "FAIL"). Apart from the polling logic we want to have all the services visualised and easily managed in a basic UI presenting the all services together with their status.

Requirements

Basic requirements (If these aren't met the assignment will not pass):

- A user need to be able to add a new service with url, a name
- Added services have to be kept when the server is restarted
- Present whenever a service was added and when the last change was made

Extra requirements (No prioritisation on these, pick the ones that you find interesting):

- We want full create/update/delete functionality for services
- The results from the poller are not automatically shown to the user (you have to reload the page to see results)
- We want to have informative and nice looking animations on add/remove services
- Simultaneous writes sometimes causes strange behavior
- Protect the poller from misbehaving services (for example answering really slowly)
- URL Validation ("sdgf" is probably not a valid service)
- Multi user support. Users should not see the services added by another user

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Constraints

This task is open ended on purpose with no provided boilerplate. It's up to you to implement the solution using frameworks that you deem suitable for this task. We ask you to use Java as the base language for the backend solution but apart from that you're free to use whatever suits you best in performing the task. Be prepared to be able to explain the reasoning behind why you choose a particular solution.

If you want to keep with our tech stack, it's based on vertx, rxjava, react and mysql and builds with gradle.

The assignment will be evaluated on these following areas:

- Code structure
- Testability
- Scalability
- Clean code
- Usage of data structures
- Api design

We don't want you to spend too much of your time on this assignment. We expect you to spend approximately **four hours** working on it and make sure to finish the issues you start.

Submission

Put the code together with instructions on how to run it in a git repo on GitHub and send us the link to techcase@kry.se when you are done.

Good luck!

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