

Purpose of this task is create simple system which can send commands to virtual devices and handle async response (by linking expected response). Please be aware of system stability and cover all implementation with tests. To run tests please use testcontainers (to bootstrap PostgreSQL DB).

All code should be published to GitHub and link provided.

Create spring boot application that does:

1. Serves two endpoints:
 - a. POST /api/command/{command}
 - i. creates command (persists in DB) with state NEW
 - b. POST /api/response/{response}
 - i. check if there were any command (not in LINKED state) which is waiting for this response
 - c. GET /api/command - show the list of all commands
 - d. GET /api/response - show the list of all responses
2. Command and Response - HEX Strings 40 bytes length
3. Response belongs to Command if first 4 bytes and last 5 bytes the same
4. When the system received a response and finds a command by rule 3 then this command should change state to LINKED
5. If the system did not receive any response during 30 seconds (this timeout should be configurable in yml file) then the command changes state to FAILED