UNIVERSITY OF TARTU

Institute of Computer Science

Computer Science Curriculum

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Web interface for accelerating IoT device provisioning and configuration at SmartVent

Bachelor's Thesis (9 ECTS)

Supervisor(s): Pelle Jakovits

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Veebiliides IoT seadme seadistamise kiirendamiseks SmartVendis

Lühikokkuvõte:

SmartVent IoT juhtseadmete ühendamine oli siiani täielikult manuaalne töö, sealhulgas käsitsi kirjutatud andmebaasi kirjed. See lähenemine oli ajakulukas ning oli suur oht vigade tekkimiseks. Lõputöö käigus loodi veebirakendus, mis automatiseerib osa IoT juhtseadme ühendamise protsessist luues automaatselt vajalikud andmebaasi kirjed ning koostab seadme konfiguratsiooni. Kasutajalt küsitakse protsessi käigus andmeid hoone ja selle tehnoseadmete kohta, mille külge juhtseade paigaldatakse. Antud tööriist tegi ühendamise palju kiiremaks, lihtsamaks ning on väiksem oht inimvigade tekkimiseks.

Web interface for accelerating IoT device provisioning and configuration at SmartVent

Abstract:

Setting up SmartVent IoT controllers was completely manual work, including hand-written database queries. This approach was very time-consuming and error-prone. During this thesis a web application was created, which automates a portion of the IoT controller setup by automatically creating the database queries and generating device configuration. The user is prompted to enter details about the building and it's technical systems to which the controller will be installed. This tool made setup process much quicker, simpler and has less potential for user errors.

Appendix

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