



**FACULTY
OF INFORMATION
TECHNOLOGY
CTU IN PRAGUE**

ASSIGNMENT OF BACHELOR'S THESIS

Title: FIDO2 KeePass Plugin
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Study Programme: Informatics
Study Branch: Web and Software Engineering
Department: Department of Software Engineering
Validity: Until the end of summer semester 2020/21

Instructions

The goal of this thesis is to implement a plugin for the official KeePass version for Windows that allows unlocking a KeePass database using a FIDO2 device instead of the regular master password/key file method. If possible, the plugin should preserve database compatibility with other clients, i.e., it should be possible to unlock the database using the regular master password/key file method if the user configured it instead of the FIDO2 device.

1. Analyze the possibilities provided by the KeePass plugin system and review the implementations of existing key provider plugins.
2. Design a suitable approach to implementing a key provider plugin utilizing a FIDO2 device, focusing on security, ease of use and portability.
3. Implement, test and document the plugin.

References

Will be provided by the supervisor.

Ing. Michal Valenta, Ph.D.
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doc. RNDr. Ing. Marcel Jiřina, Ph.D.
Dean

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