



**FACULTY  
OF INFORMATION  
TECHNOLOGY  
CTU IN PRAGUE**

## ASSIGNMENT OF MASTER'S THESIS

**Title:** Contextual Shell History  
**Student:** Bc. Šimon Let  
**Supervisor:** Ing. Lukáš Bařínka  
**Study Programme:** Informatics  
**Study Branch:** System Programming  
**Department:** Department of Theoretical Computer Science  
**Validity:** Until the end of summer semester 2020/21

### Instructions

Analyze shell history features and existing shell history tools. Examine how users interact with shell and shell history.

Design a shell history solution based on known and documented problems. Leverage the context of commands entered by the user. Use principles of user-centered design.

Implement a shell history tool that is capable of recording shell history with command context, offers history entries to the user based on the current context and provides means to search the recorded history.

Suggest meaningful metrics (e.g. based on distance in history or number of characters needed to get searched command from history). Based on chosen metrics evaluate the usefulness of the recommended history entries. Perform user testing or testing based on real user data to find out the user experience of the solution.

### References

Will be provided by the supervisor.

doc. Ing. Jan Janoušek, Ph.D.  
Head of Department

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

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