Thanks

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## Declaration

I submit the work assessment and defense of bachelor's thesis,

Made at the bachelor's study at CTU in Prague Faculty of Civil Engineering,

I hereby declare that I worked on this bachelor thesis alone.

My work in my bachelor is under supervision of Ing. Malila Noori and the information I drew from literature.

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## Abstract

Bachelor Thesis is proposed as the project of residential house in Prague. The design and engineering solution of the building envelope and building structure are solved in accordance with applicable Czech standards.

## Annotation

Thesis is focused on the structural and technical solution of the residential building. The project is worked for the building permit level of detail. The Thesis is composed of five parts. Civil engineering, part describing technical solutions of the overall building, its compositions, its usable spaces, its usability for people and their needs. Structural part, focusing on the structural behavior of the building and proper use of load bearing materials. Foundation part, dealing with soil interaction with the building and proper design of concrete foundation for supporting the building. Fire safety part, in which, proper design secures in the case of fire event, all the residents will be able to escape building in time. And in case of fire intervention, nothing would prevent successful saving action. And finally building services part, composed of proper design of drainage, water supply and ventilation of the building.