Comenius University Bratislava
Faculty of Mathematics, Physics and Informatics

THESIS ASSIGNMENT

Name and Surname:	Bc. Emanuel Tesař
Study programme:	Computer Science (Single degree study, master II. deg., full time form)
Field of Study:	Computer Science
Type of Thesis:	Diploma Thesis
Language of Thesis:	English
Secondary language:	Slovak

Title: Trusted Types integration into open source frameworks and libraries

Annotation: Trusted Types is a modern Web API which aims to reduce DOM XSS attack surface in web applications.
They give you the tools to write and maintain applications free of DOM XSS vulnerabilities by making
the dangerous web API secure by default. Currently, they are supported in Chrome, Edge and Opera.

Integrating Trusted Types in web applications and libraries requires code changes. The major problem
is when these changes need to be made in third party code which you don't have access to and you
can't easily modify. Trusted Types support in open source projects is gradually improving and our
plan is to analyze these integrations and implement one or more of the challenging ones.

Aim: Main goals of the thesis are the following:
- Review of Trusted Types integrations on various open source projects
- Design and verification of a Trusted Types library integrated into one or more projects
- Open sourcing the integration changes, ideally merging directly into the project sources
- Illustration of the newly created integrations on a real world project

Keywords: Trusted Types, Web APIs

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Head of department:	prof. Ing. Igor Farkaš, Dr.
Assigned:	06.09.2021

Approved: 13.10.2021 prof. RNDr. Rastislav Kráľovič, PhD.
Guarantor of Study Programme

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Student Supervisor