PassSec+ - An add-on that protects your passwords, payment data and privacy
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Motivation
- Entering sensitive data on websites is a risk for security and privacy
- To mitigate the risk users are supposed to e.g. check …
  - … the website URL and in particular the (top-level) domain
  - … whether HTTPS is used
- Web Browser provides …
  - … only passive indicators and these are not located where users’ focus is when entering sensitive data
- … no information where the sensitive data is sent to

Solution PassSec+
- Active security interventions when users are about to enter sensitive data into input fields not classified as low risk ([Fig. 1] and [Fig. 2])
- Info about the risk for each input field
- Recommendation what to check for and how to continue
- Users need to check website only once

Future work
- User studies to evaluate the usability of PassSec+ and in particular its effectiveness
  - Eye tracking for observing behavior with and without PassSec+
  - Field study similar to [1]
- Improve PassSec+ against tampering and spoofing of indicators by the website