Master's Thesis Preparation

Empowering Users' Privacy Rights in the Internet of Things

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Introduction

Internet of things (IoT) devices are everywhere, since the birth of ubiquitous computing that human every day life is envisioned containing millions of devices that control every aspect of our lives. Today we have smart cars, smart houses, smart cities, wearables among other things that use various types of devices and various types of networks to communicate. These devices create new ways of collecting and process personal data from users and non-users. Most end users are not even aware or have little control over the information that is being collected by these systems. This work takes an holistic approach to this problem by first doing a literature review, then by doing a survey to gather information about the general knowledge of Portugal's population in this very topic and then, based on the information gathered, it is proposed a system that gives users information about the devices that are nearby and how to protect the data that

Privacy Paradox

The beamer classes for LaTeX are used to create presentations that are to be shown with a beamer. The text typesetting system creates PDF files that can be shown by a large number of programmes.

The present theme was adapted from HSRM theme by Benjamin Weiss and it makes the creation of slides (assuming basic knowledge of LaTeX) child's play.

Differential Privacy

In order to successfully create presentations with this theme, the following requirements must be met by the system:

- LuaLaTeX must be used to typeset the slides.
- Besides some standard packages, the packages beamer, pgf and xcolor must be installed.
- The fonts Flama-Light, Flama-Book and Flama-Medium should be installed. Alternative: Arial
  http://www.felicianotypefoundry.com/

User Awareness

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Legislation

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Privacy through security

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Architecture / Framework Proposals

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Blockchain

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Privacy Assistants

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Privacy Challenges

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Conclusion

In this thesis I explored people's perception of privacy of IoT systems and made an application that aims to create more awareness in users about their environment and the IoT devices that inhabit it.

References

Questions and Comments

Thank you for your attention. Any questions?