PriOSS: a Privacy One-Stop Shop

Project Group WiSe 2022/23

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Motivation

• Digital services rely on personal information to provide value

• Privacy needs to be respected!
  • preserve our freedom of choice
  • and personal control over our data flows

• Paradox:
  • people want privacy, but
  • they do little to protect themselves
Digital Privacy is Unusable

It’s not always easy to:

• understand privacy
• control disclosure, exercise rights

https://cookieconsentspeed.run/
How can we better support people in understanding and controlling their digital privacy?
General Idea

• Privacy One-Stop Shop

• Resources to:
  • Raise privacy awareness
  • Empower users
Concrete Goal

Develop Transparency Enhancing Apps

• support users understanding:
  • What, why, how data is collected and used
  • With whom is shared
  • Potential inferences! Risks and consequences
    → interactive visualizations

• supports users to take privacy protections:
  • Opt-out, delete data, withdraw consent
    → controls and privacy advise

Example

• “Off-Facebook Activity” transparency tool
dashboard for users to see which third party apps and websites have shared their information with Facebook

https://www.facebook.com/off_facebook_activity
Example

• Off-Facebook Activity transparency tool
  • Source data provided in JSON
  • Can be leveraged to implement more usable and useful transparency

```
"off_facebook_activity_v2": [

  { "name": "TikTok", "events": [
    { "id": 597615686992125, "type": "CUSTOM", "timestamp": 1649050260 },
    { "id": 597615686992125, "type": "CUSTOM", "timestamp": 1648988880 }
  ]
]
```

https://pusp.cs.uni-paderborn.de/
More Examples

• Other Transparency Tools:
  - TransparencyVis (visualize data exports)
    - https://transparency-vis.vx.igd.fraunhofer.de/
  - FDVT (Facebook Data Valuation Tool)
  - Magic Sauce (psychological profile prediction)
    - https://applymagicsauce.com/demo
Tasks

01 Literature Research

02 User Research

03 Prototype Design & Development

04 User Testing

05 Prototype Refinement

06 Documentation

- General portal layout concept
- set of transparency enhancing web applications
Team – Required Profiles

Developers
• Solid Programming experience
• Backend or Frontend

UX/HCI Researchers
• Knowledge on human-centered design
• Experience with user research
Other Information

PG Language
English

Website:
https://en.cs.uni-paderborn.de/its/teaching

Contact for questions
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General

https://cs.uni-paderborn.de/en/studies/study-elements/project-groups