EASY READING

Keeping the user at the digital original

Supporting cognitive accessibility at the original web content

Funka texthelp technische universität dortmund PIKSL LABOR DÜSSELDORF

ATHENA technologies JKU JOHANNES KEPLER UNIVERSITÄT LINZ W3C® DART Kommunikations- och dataresurscenter

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2,6% of the population have a cognitive disability (WHO: World Report on Disability, 2011)
and many more experience difficulties and barriers with web content they want to / must use.

The problem / paradox:
The more / better the service, the bigger the gap

- Other language
- Other learning
- Other culture
- Other peer group
- Other reality
- Other …

The goal / the wish: Keeping the user at the digital original!

- Support and service at the original
- Only when needed and wanted
- Learning effect and more independent
- Personalisation

- Applicable to all web content - everywhere

Personal Web-Buddy

→ Transferring, supporting, automating services to/at the digital original

The approach: Co-research/design/development

Research

Development

Testing

Easy Reading is software from users for users with cognitive disabilities.

IPAR-UCD: Inclusive Participatory Action Research for User Centred Design

Miesenberger, K.; Edler, C.; Dirks, S.; Bühler, Ch.; Heumader, P.: User Centered Design and User Participation in Inclusive R&D, in: Computers Helping People with Special Needs, 17th International Conference ICCHP Lecco, Italy, Proceedings, Springer, Heidlberg, 2020.

Involving Users in Research and Development

"As a peer researcher who has a disability of his own, I can best contribute my own experiences and perspectives."

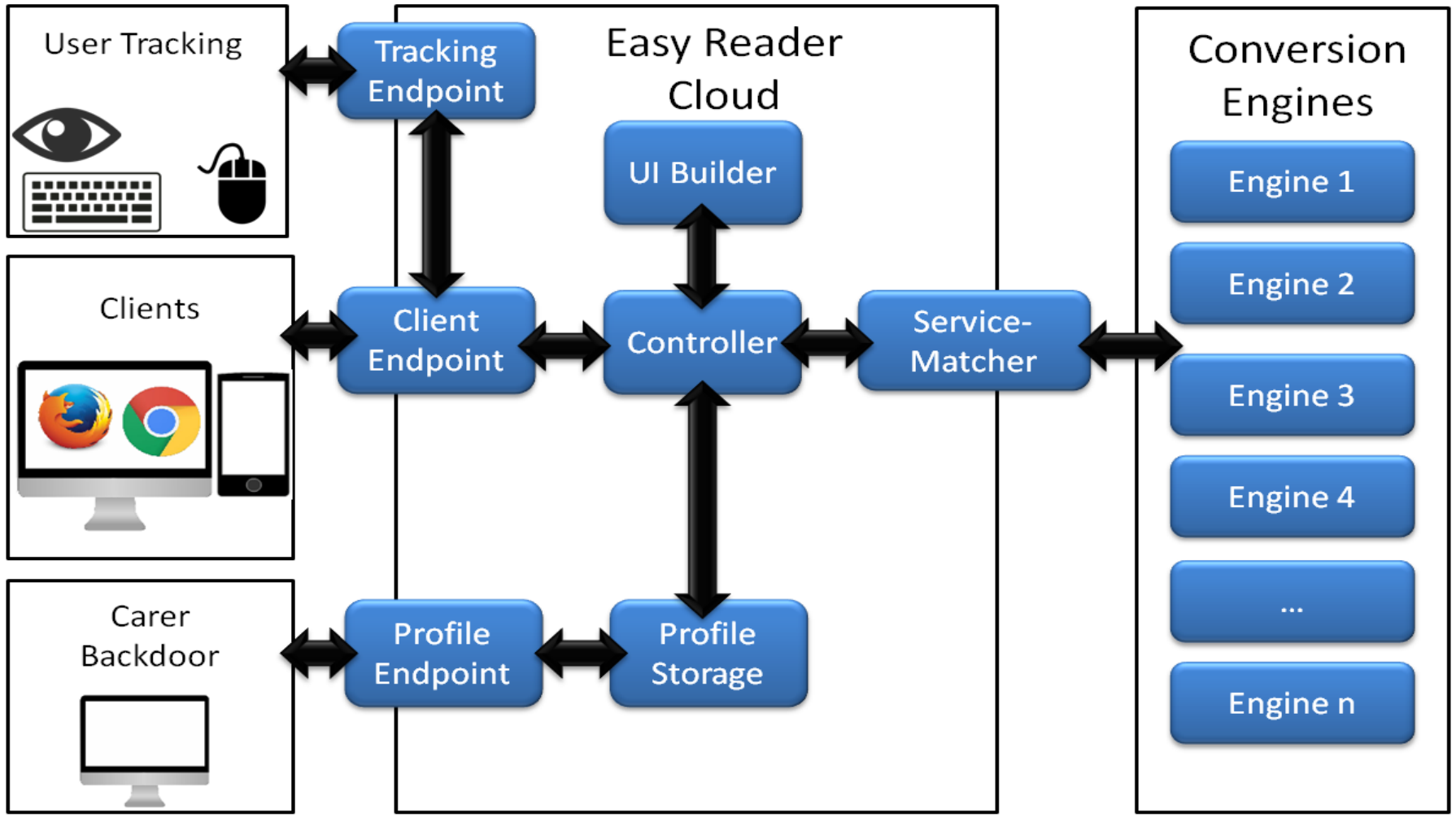
(Dominik, Peer Researcher)

Your personal web-buddy

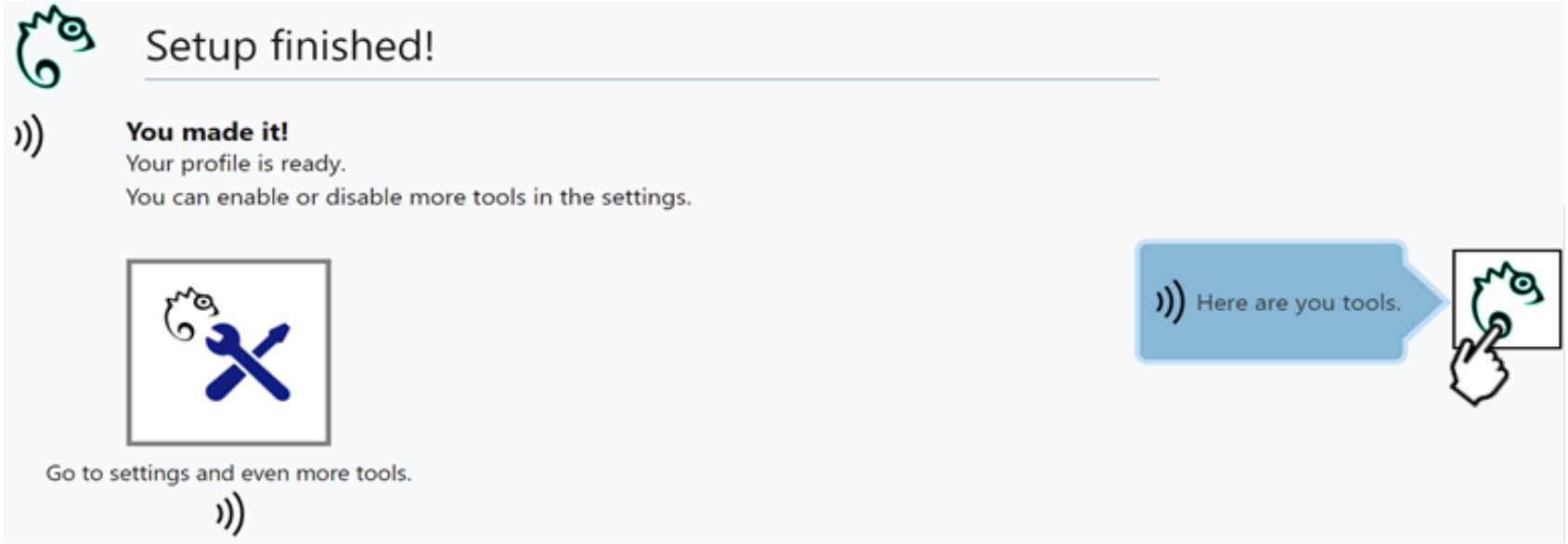
What it is now:

- Framework for improving cognitive accessibility of webpages **AT THE ORIGINAL**
- Implemented as a cloud solution
- Clients:
  - Browser extension
  - Apps
  - Directly embedded in website
- Users get help in real-time **at the original**
- Help is rendered within the **original** web page
- Allows care/support to provide **personalized** support at the original

The architecture



1) Install and setup (personalization)



www.easyreading.eu

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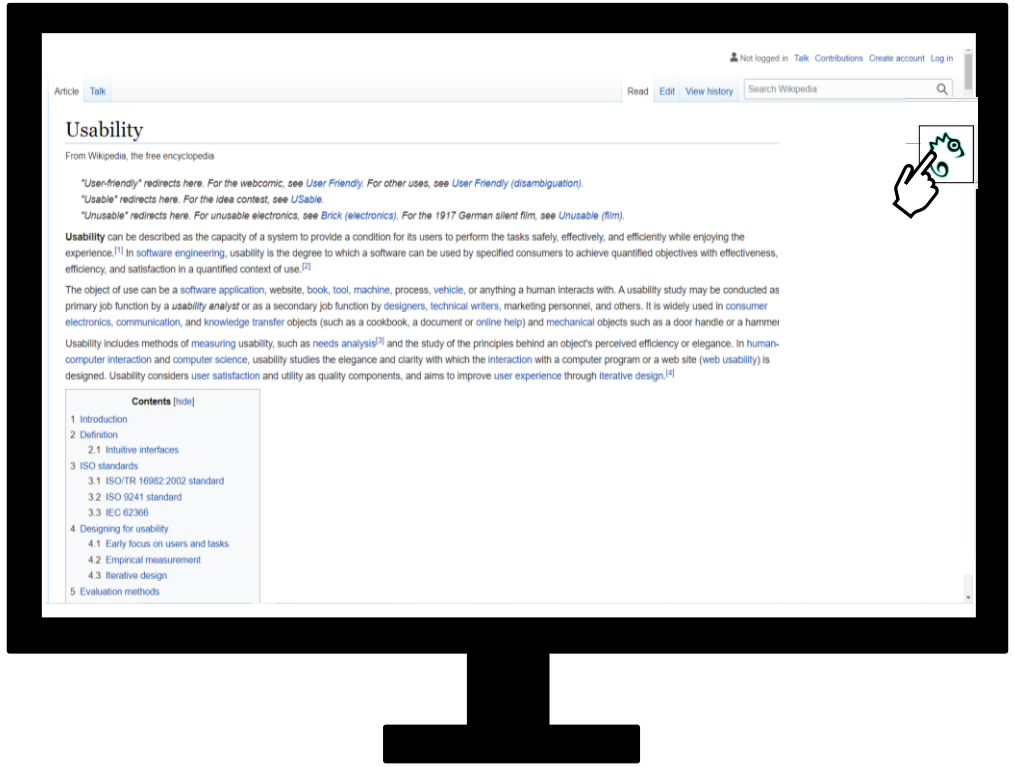
H2020 Easy Reading

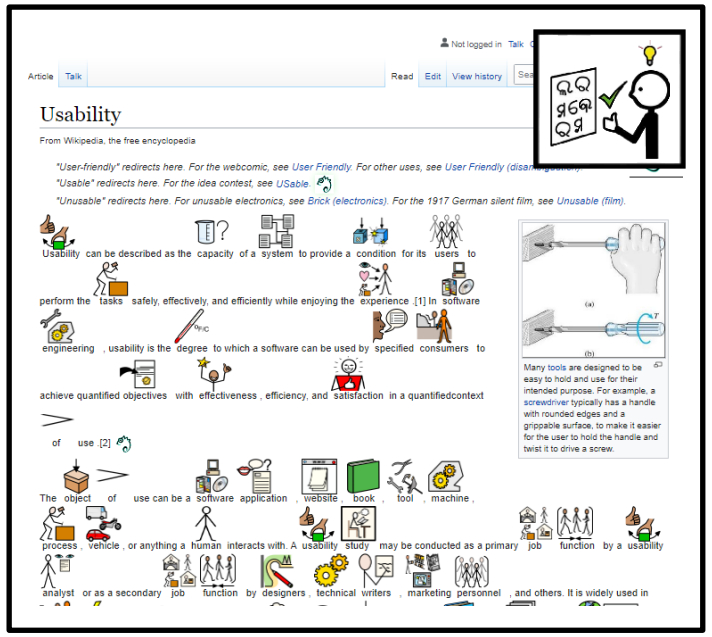
2) Easy to use and stable interface

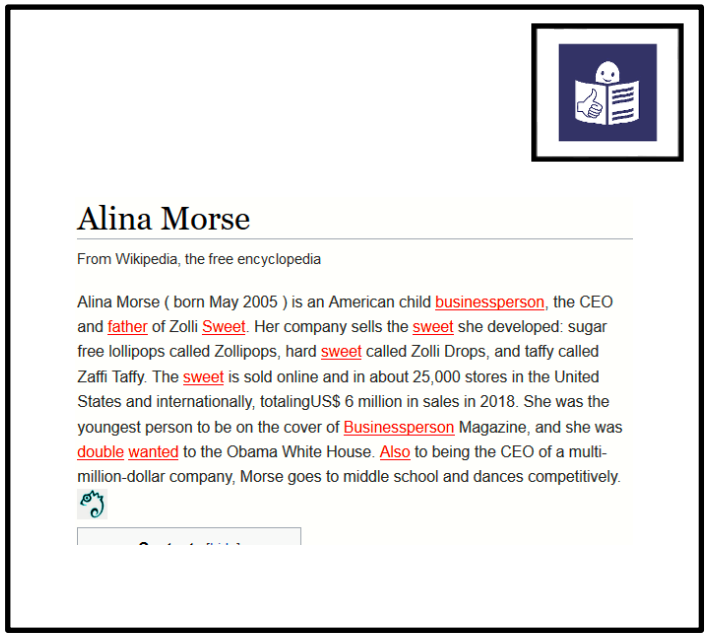
Keeping (all) Users at the Digital Original



Keeping the user at the digital original

3) Personal access to content: “My buddy”





Layout & Structure

Explanation/ Annotation

Translation

Keeping the user at the digital original

4) Backend for service provision and personalisation

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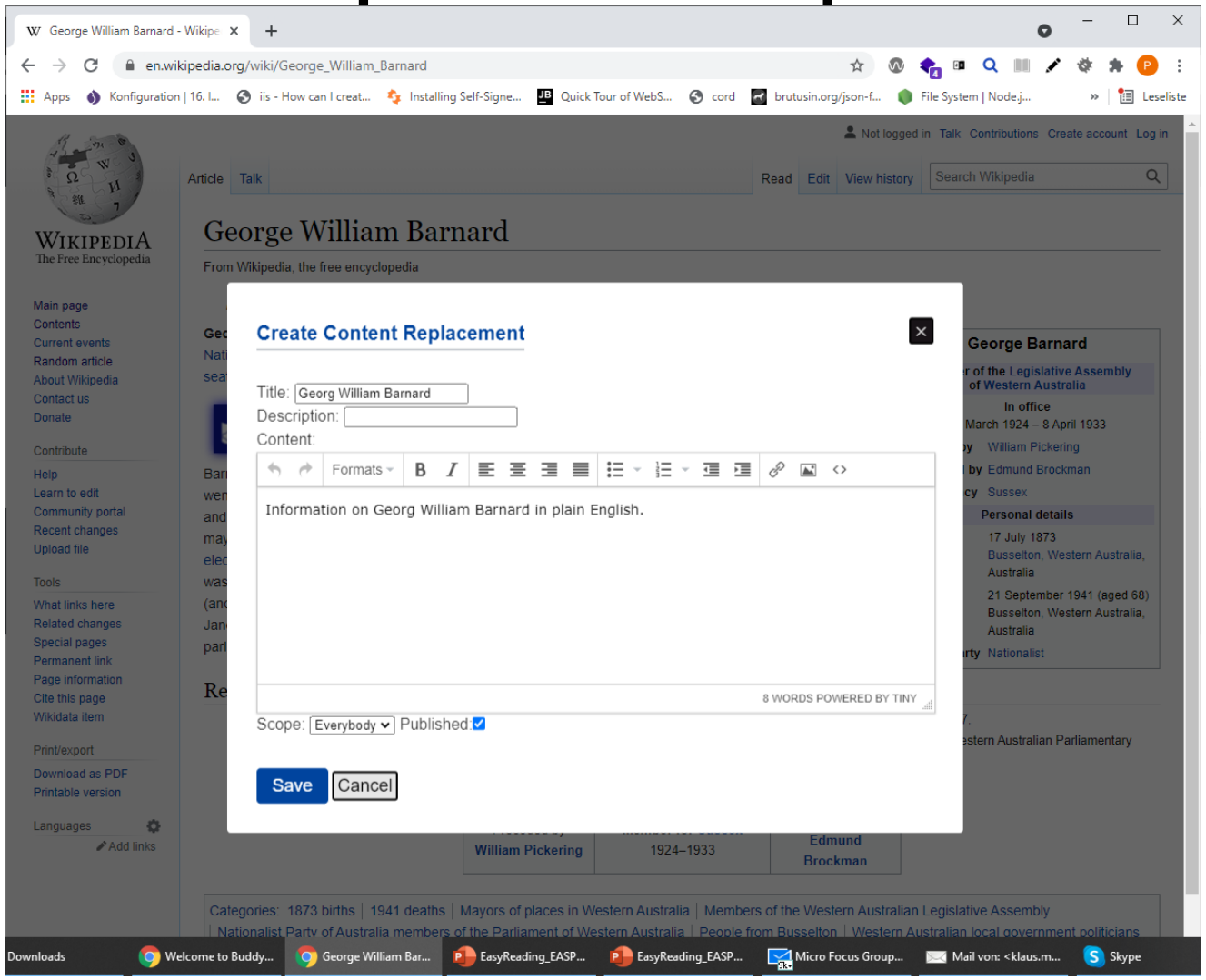
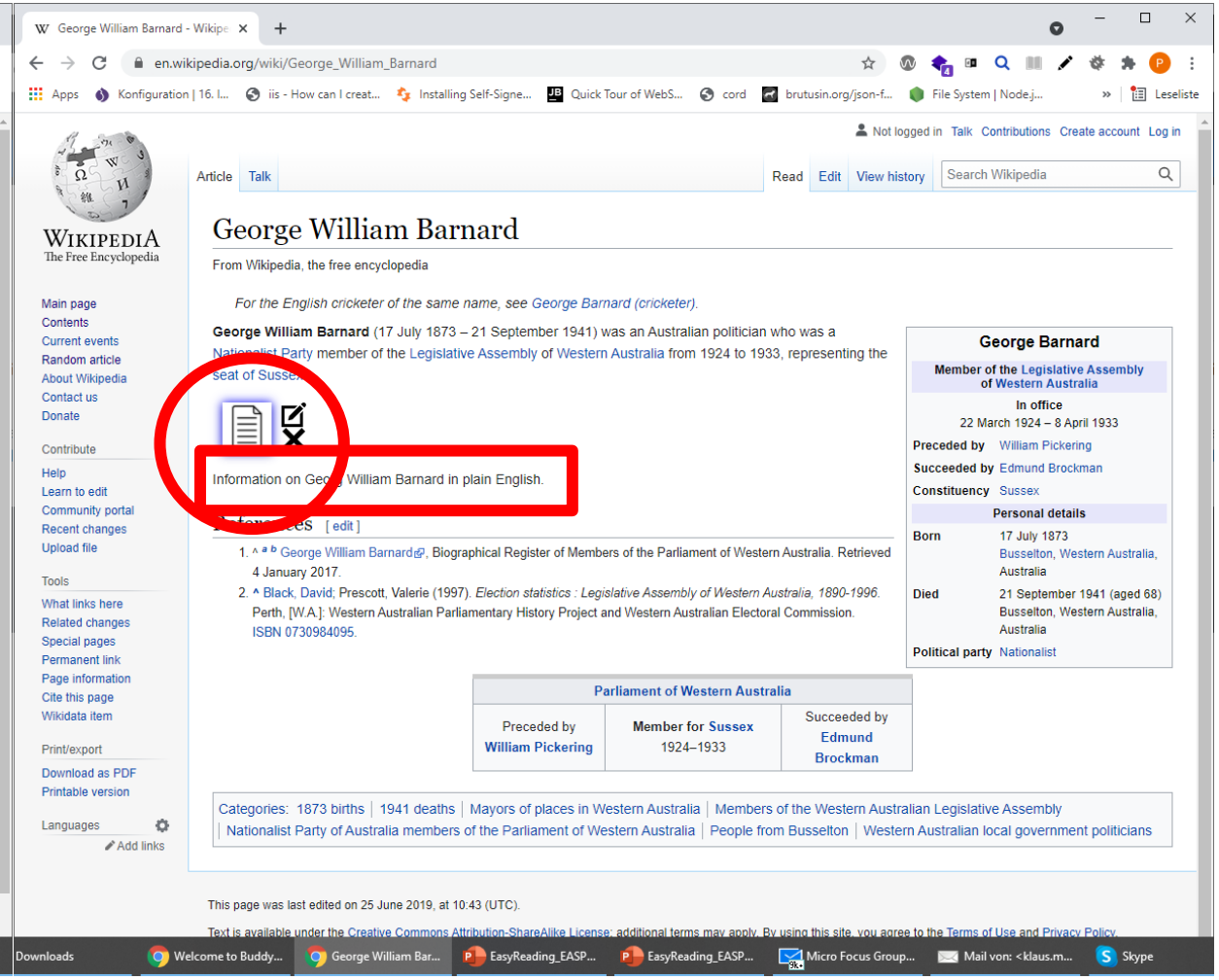


Keeping the user at the digital original

4) Backend for service provision and personalisation



Empowering Users with Cognitive Disabilities

My Personal Web-Buddy

What kind of help do I need?

Where do I need help?

How do I want to access the help?

At the Original Content!

Contact

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Lets get started

Demo:

1. Easy Reading as a browser extension
2. Easy Reading embedded in a web-page
3. Backend functionalities

Hands on:

4. Installation and configuration of the extension
5. Creation and management of content replacements