

ReadLet Case Study

ReadLet is a PRIN 3-year project (2017W8HFRX), funded by the Italian Ministry of University and Research, and based on a partnership between the Consiglio Nazionale delle Ricerche (CNR) and the Scuola Superiore di Studi Avanzati (SISSA) in Trieste.

- http://www.comphyslab.it/?page_id=16
- <https://www.readlet.it/apps/readlet/index.php?lang=en>
- <https://www.readlet.it/>



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The ReadLet case Study

The ReadLet project focuses on:

- Recording reading sessions made by students between 8 and 11 years old;
- Producing aggregates for different dimensional analysis;
- Monitoring reading progress of single students;
- Helping Language Specific Disorder (LSD) specialists by indicating students potentially at risks.

ReadLet:

- Collects personal and technical information;
- Hires and trains dedicated personnel.

ReadLet produces:

- A language model;
- A multimedia resource: the audio recording synchronized with the annotated text along with the time spent at different linguistic levels (syllables, words, chunks, sentences, ...)

The ReadLet case Study

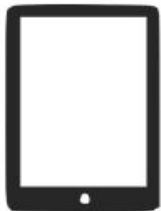
Current status of the ReadLet application(s):

- Informed Consent;
- Pseudonymization;
- **Data Protection;**
- Data deletion upon request;
- Data protection;
- User profiling.

Let's focus on Data Protection

Web App

- Secure protocol (HTTPS)
- User authentication with password
- User-level privileges
- Malicious exploit prevention (CSRF token validation)
- Data pseudonymisation (AES encryption)



Web Services

- Secure protocol (HTTPS)
- User authentication with password
- User-level privileges
- Apikey-level privileges
- Malicious exploit prevention (CSRF token validation)
- Data anonymisation



SENDING DATA TO THE SERVER

plain data



TABLET (web-app)

encrypted data
Secure protocol (HTTPS)

plain data



SERVER (API)

encrypted data
Pseudonymisation (AES encryption)

pseudonymised data



SERVER (DB)

RETRIEVING DATA FROM THE SERVER

Plain or pseudonymised or
anonymised data



encrypted data
Secure protocol (HTTPS)

Plain or pseudonymised or
anonymised data
(depending on the user privileges)



encrypted data
Pseudonymisation (AES decryption)

pseudonymised data

