A personalised prediction and intervention model for early detection and reduction of risk factors causing dementia, based in AI and distributed Machine Learning

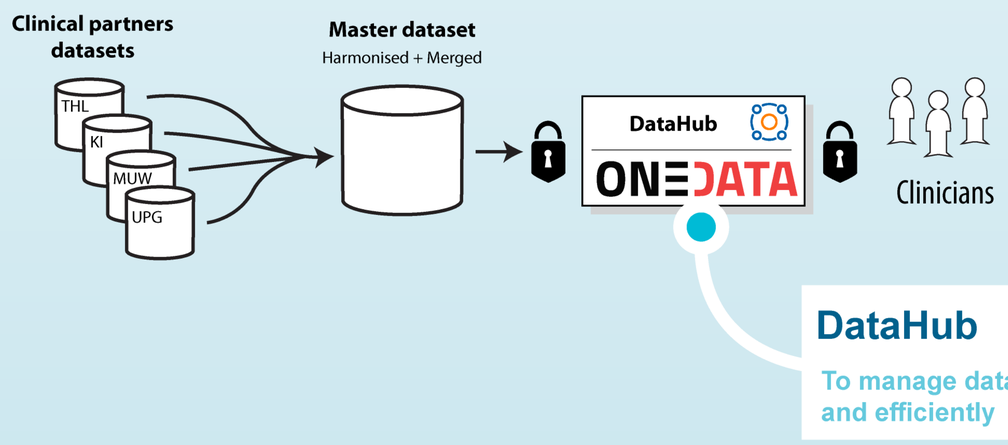
https://www.lethe-project.eu/

Using EGI FedCloud as a Platform for Risk Factor Prediction Models

Ignacio Lamata Martinez (ignacio.lamata@egi.eu), Ville Tenhunen (ville.tenhunen@egi.eu),
Catalin Condurache (catalin.condurache@egi.eu)
(EGI Foundation)

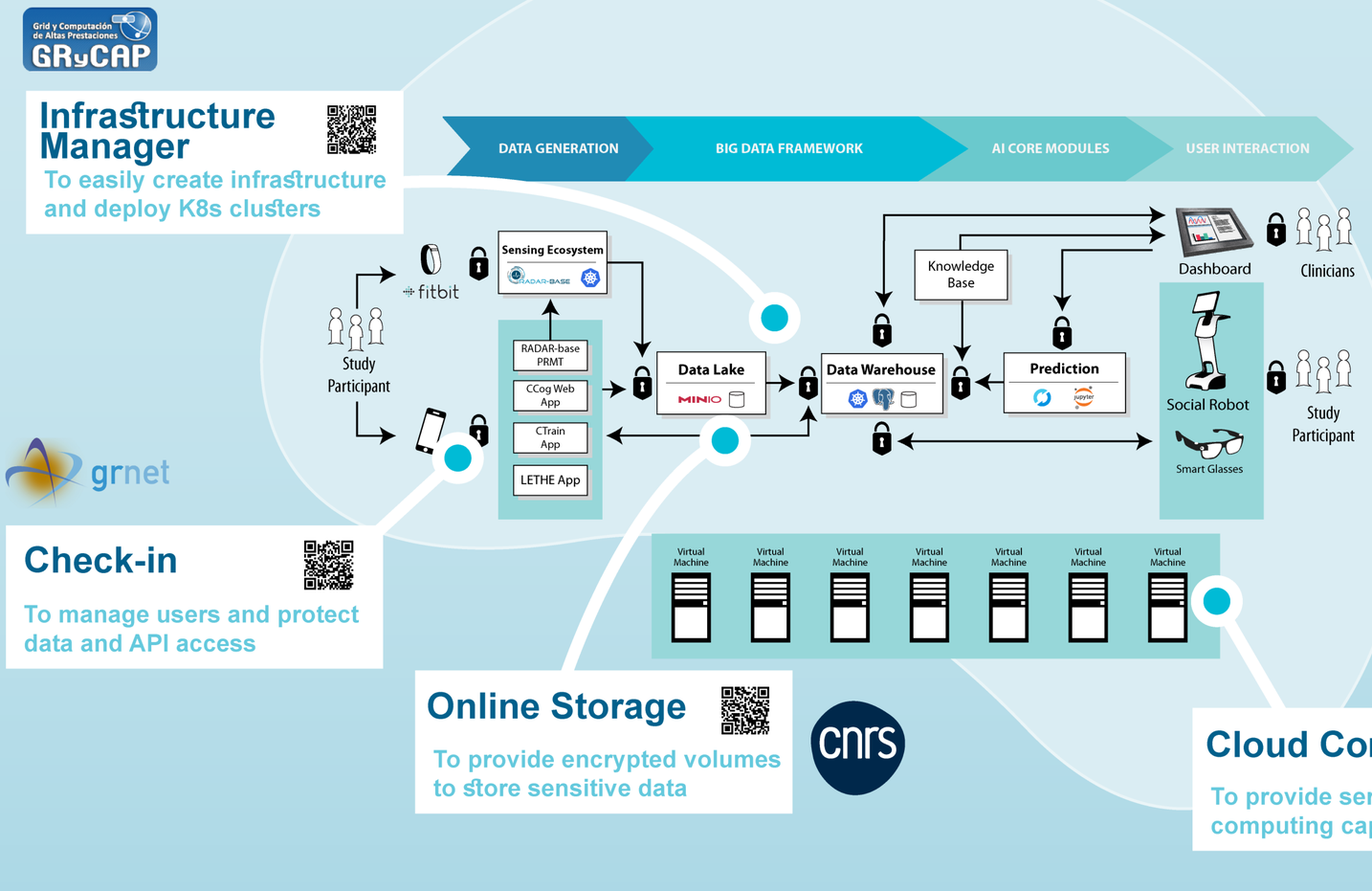
PHASE I

A retrospective knowledge base used to generate an initial prediction model based on four different data sets provided by the clinical partners of the LETHE consortium



PHASE II

Prospective data collected from variable apps, tools and wearables. Data from these different sources have to be harmonised or the AI Modules. These create reports, visualisations and information that are used by clinicians for risk factor identification



Infrastructure Manager
To easily create infrastructure and deploy K8s clusters

Check-in
To manage users and protect data and API access

Online Storage
To provide encrypted volumes to store sensitive data

Cloud Compute
To provide servers and computing capacity

Conclusions

The LETHE project uses the EGI FedCloud and other EOSC services as an infrastructure solution. The EGI FedCloud provides both a comprehensive sensitive data management solution for data processing and computing services, and a platform to run bespoke project applications

The LETHE project has received funding from the European Union's Horizon 2020 research and innovation programme under GA n. 101017405