

Biomedical Security

Assignment 4

9-5 2021

- Due by 24-5 2021, 23.59h.
- Send your answers in a pdf by e-mail to erwin@liacs.nl
- Use as filename: <your student number>_<your name>_iBS_Assignment_04.pdf

During class we discussed several Data Breaches at Dutch GGD Systems and other Hospital and Health Systems. It was noted that the 'Human Factor' is of the utmost importance when information security management is designed, implemented and executed.

Nevertheless, a more transparent and improved security protocol for the registration of COVID-19 vaccine- or test-appointments could have decreased the risk of major data leakages.

In this assignment you are asked to design and define such a protocol for the registration and further handling of COVID-19 vaccine appointments. For the 'end-user' the steps are as follows:

1. On a central government website the user makes an appointment through a web interface.
2. The user obtains one or more QR-Codes and prints them.
3. The user goes to a GGD location with the QR-Codes and Passport to obtain the vaccine.
4. The GGD should register that the user obtained a vaccine.
5. The user obtains one or more QR-Codes that can be used for the second appointment.

Requirement: GGD should only register in their systems that the user is vaccinated. The GGD should not register personal data such as address, BSN, telephone number. Only the Central Government site should be trusted. That site only serves authentication and message transfers to users requested by the GGD without communicating any personal user data such as address, BSN, etc.

Define and describe your protocol in a format such as used on Slide 19 of the lecture of May 6th.