

Exercises 1

Risks, Attacks and Security Goals

Group 3

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Security Requirements

given: description of security requirements for a hospital information system

the individual security requirements

1. integrity of life-critical data
2. confidentiality of patient data / patient records
3. anonymity of patients and their records
4. low risks of new technologies

risks arising if they are not fulfilled

1. incorrect treatment of patients and because of that possible harm to patients
2. unauthorized access to patient data
3. serious consequences for medical practice and patients

how to implement these requirements using the security mechanisms of today's standard operating systems

1. electronic authentication and encryption tools
2. role-based access control
time limitation of permissions
3. proper anonymisation of patient data
4. having backup procedures