

VILNIAUS UNIVERSITETAS  
MATEMATIKOS IR INFORMATIKOS FAKULTETAS

## **Requirements modeling**

### **Reikalavimų modeliavimas**

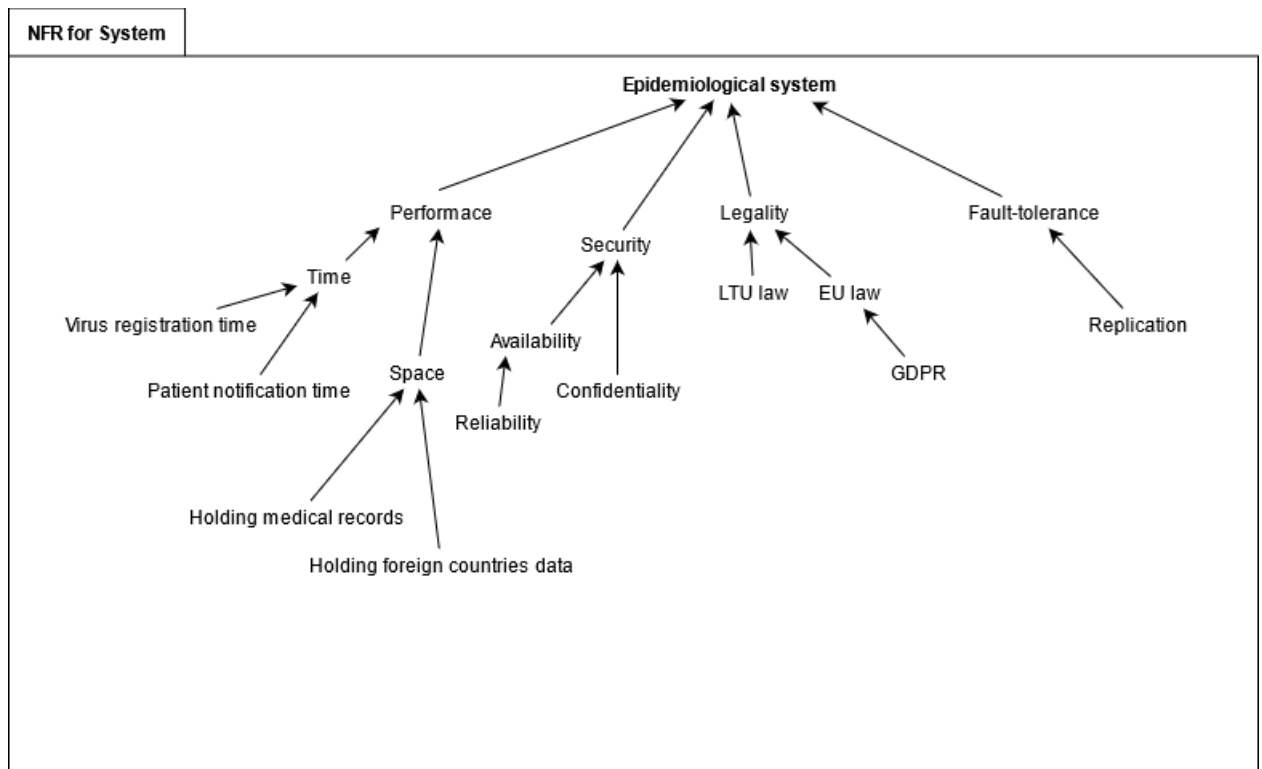
Programų sistemų inžinerijos modeliai ir metodai laboratorinis darbas 2

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# 1. NFR type catalogue



pav 1. NFR diagram

- **Virus registration time** - to ensure quick response time system must provide quick process of registering new cases.
- **Patient notification time** - it is important to prevent spread of virus by hastily notifying and isolating contagious patients.
- **Holding medical records** - to ensure that the spread of the epidemic is contained and monitored, all necessary medical records related to the epidemic must be accessed via the system.
- **Holding foreign countries data** - to check which countries are infected and are spreading the virus, the epidemiological system has to keep up-to-date epidemiological information about them.
- **Reliability** - Tracking the state of the epidemic must be ensured 24/7 to not miss any crucial data or trends.
- **Confidentiality** - epidemiological system must treat sensitive person information (e.g. received medical records) with respect to ensure systems credibility.
- **Legality** - due to the fact the the epidemiological system will deal with sensitive information, data handling must be in compliance with LT and EU data laws as well as GDPR.
- **Replication** - non sensitive data must have duplicate records stored.

## **2. Modelling of the non-functional requirements**

**2.1. Virus registration time**

**2.2. Patient notification time**

**2.3. Holding medical records**

**2.4. Holding foreign countries data**

**2.5. Reliability**

**2.6. Confidentiality**

**2.7. Legality**

**2.8. Replication**

### **3. Identifying and modelling of possible operationalizations for NFR**

#### **4. Detecting and modelling of implicit interdependencies among NFR**

## **5. Chosen operationalizations**

## **6. Strategic rationale model**



## **7. Conclusions about an actor dependency**

## Conclusions