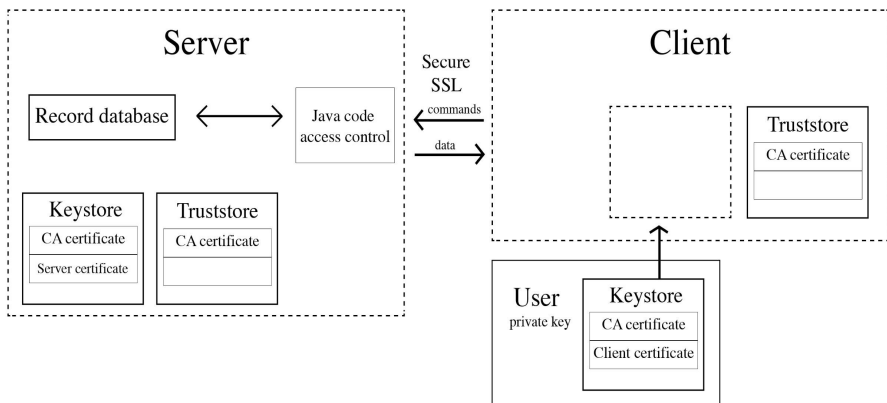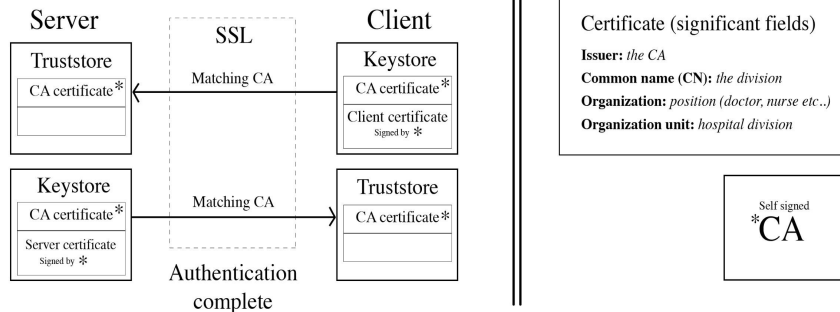# Project 2

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EIT060 Computer Security
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Agenda

- Login functionality
- Live demonstration
- Password handling

Login functionality

Authentication (with keystores)

Certificate (significant fields)

Issuer: *the CA*
Common name (CN): *the division*
Organization: *position (doctor, nurse etc..)*
Organization unit: *hospital division*

```java
X509Certificate cert = (X509Certificate) session.getPeerCertificateChain()[0];
String subject = cert.getSubjectDN().getName();
System.out.println("Subject = " + subject);

String name = subject.substring(3, subject.indexOf(","));
subject = subject.substring(subject.indexOf("OU=") + 3);
String hospitalDivision = subject.substring(0, subject.indexOf(","));
subject = subject.substring(subject.indexOf("O=") + 2);
String occupation = subject.substring(0, subject.indexOf(","));

String clientMsg = null;
while ((clientMsg = in.readLine()) != null) {
  System.out.println("CLIENTMESSAGE IS: " + clientMsg);
  User user = null;
  switch (occupation.toLowerCase()) {
  case "doctor":
    user = new Doctor(database, name, hospitalDivision, log, firstTimeCreateLog);
    break;

  case "nurse":
    user = new Nurse(database, name, hospitalDivision, log, firstTimeCreateLog);
    break;

  case "patient":
    user = new Patient(database, name, log, firstTimeCreateLog);
    break;

  case "government":
    user = new Government(database, name, log, firstTimeCreateLog);
    break;
  }
```
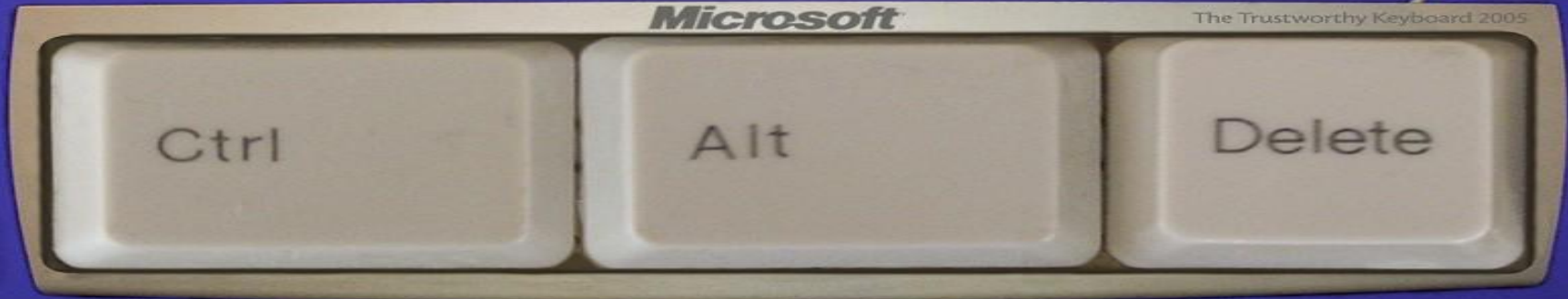
Live Demonstration

Password handling

- Keystore protection
- Brute force

Frågor?