**Java, J2ee, Spring and Certificates**

1. **Java Security**
   1. Application security
   2. Security functions of applications
      1. Authentication
      2. Authorization
      3. Registration
      4. Maintenance
      5. Deletion
   3. container authentication
2. **Enterprise Security with J2EE** 
   1. Authentication (HTTP+HTML form-based authentication)
   2. HTTP basic authentication
   3. JAAS authentication
   4. Benefits of J2EE (container) security
3. **Enterprise Security with Spring**
   1. Spring Security OAuth
   2. Spring Security OAuth2
   3. Spring Security SAML
4. **Lightweight Directory Access Protocol**
5. **Single sign-on (SSO)**
6. **Private Key, Public Key, Certificates Generation**
7. **RSA, SHA Algorithms**
8. **Digital Signature**