This week we discussed about:

1. W2D5: Transactions
   a. Spring and Transactions.
      i. Bean Managed Transactions and Container Managed Transactions.
      ii. Global and Local Transactions
      iii. Transaction Propagation: 7 options
      iv. Spring Transaction: Annotations
   b. Spring and Hibernate: How to configure it.
   c. Spring and Hibernate Transactions:
      i. How to configure and work with them.
      ii. TransacionalManager
   d. EntityManagerInViewFilter
2. W3D1: Spring MVC and Data
   a. Spring MVC: What it is. How to configure it.
      i. Front Controller pattern
      ii. Request mapping: paths, parameters and headers...
      iii. URI templates
      iv. Data input and output
      v. Session: storing / retrieving.
      vi. Session & Flash attributes
      vii. Exception handling
   b. Spring Data: What it is
      i. DAOs aka Repositories: How to work with them.
      ii. Custom methods.
3. W3D2: Security and Validation
   a. Spring Security:
      i. What it is. How to configure it
      ii. Login / logout. How to customize it
      iii. Taglib & CSRF. How to work with them in Spring Security
      iv. Authentication providers. How to configure it.
      v. Method Security
   b. Validation
      i. What it is. What it does.
      ii. Validation logic
      iii. Validation annotations
      iv. Programmatic validation
      v. Spring MVC integration: How to configure validation. Spring Form tags
4. W3D3: Spring Boot and REST
   a. Spring Boot: What it is (for). How to start and configure it.
   b. REST:
      i. Web service, HTTP methods, JSON, Spring MVC, ResponseEntity
      ii. Receiving / sending JSON, JSON annotations
      iii. Receiving / sending XML
      iv. Spring RestTemplate

5. W3D4: Messaging and Integration
    a. Messaging
        i. What it is.
        ii. What middleware is.
        iii. PTP or Pub/Sub
        iv. Spring JMS template
        v. Spring RabbitMQ: What RabbitMQ is. How it works. How to configure it.
        vi. RabbitMQ exchanges: exchange types and rules
    b. Spring Integration: What it is
    c. Pipes: What it is. What a channel is
    d. Endpoints: What types are.
        i. Transformer and Filter
        ii. Bridges and Routers
        iii. Splitter and Aggregator
        iv. Service Activators and Channel Adapters
    e. Adapters and Gateways
    f. Enterprise Service Bus and Micro Services
6. Single SCI point:
    a. Spring and its various modules (MVC, Boot, Data, Security, Messaging, Integration…) work together as an integrated framework to create robust, scalable, and coherent software systems. A conscious mind works similarly as an integrated system. Each "module" of consciousness such as attention, memory, emotions, intuition, and rationality, they functions in harmony to support a holistic experience of awareness and action like an unified field/universe.