

School of Software Engineering

MOTTO

Make an impact on the overall quality of GN software-based services, as well as the way development teams work on a daily basis.

School of Software Engineering 2025 (SSE25)

"Generative AI Buzz-Free Programming with LLMs"



TOPICS:

- Core Foundations of LLM Integration
- Prompt Engineering Essentials
- Context Management and State Handling
- Leveraging Classical Programming Approaches
- Avoiding Overhead: Minimizing Agents and Abstractions
- Real-World Implementations with SpringAI and LangChain
- Evaluation and Testing of LLM-Based Systems
- Observability, Deployment, and Scaling

ATTENDED BY:

20

INDIVIDUALS

7

NRENs

"Designing next generation architecture"



TOPICS:

- Applying the heuristic of decomposition for effective modularization
- Discussing issues with Kuba Nabrdalik
- Analysing and solving problems related to system distribution
- Tactical modelling for coherence, logical structure of processes and clear presentation logic
- Techniques for efficient system design
- Detailed modelling of a module
- Conducting contract tests
- Event handling
- Queue management
- Implementation of RESTful API

ATTENDED BY:

19

INDIVIDUALS

4

NRENs

From the participants:

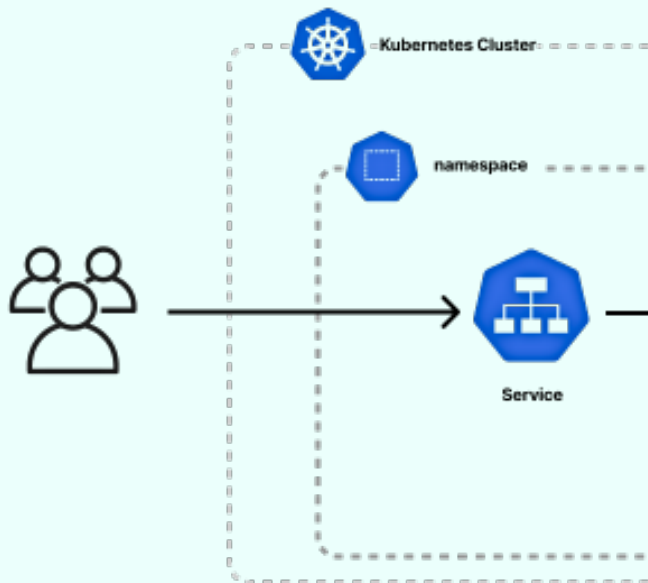
"It was a good experience to fine tune the thought process in abstract thinking in terms of architecture"

"The course helps in decision making when it comes to architectural designs."

"I will be able to design the software in a better way."

"I'll make better architectural decision in the beginning of software implementation. Thanks to that I will do less changes in code during programming phase."

"Deploying scalable applications in Kubernetes based environments"



TOPICS:

- Understanding the principles and advantages of Docker Containers
- Running Containers from existing Images and accessing Container Services
- Building Images with applications and making Images available in the Registry
- Linking Multiple Containers and utilizing External Volumes
- Exploring basic Kubernetes Architecture and key objects: Pods, Services, ReplicaSets, Namespaces, ConfigMaps, Secrets, Ingress, Deployments
- Running Containers from Custom Images in a Kubernetes Cluster
- Utilizing the Rolling Update function for application updates
- View logs to diagnose performance using a central console
- Using Helm for application management on Kubernetes Clusters

ATTENDED BY:

20

INDIVIDUALS

6

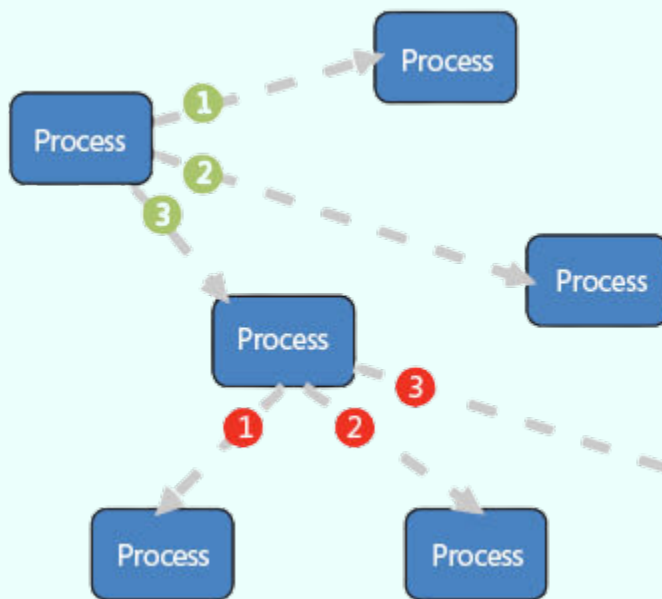
NRENs

From the participants:

"I plan to apply the knowledge and skills I gained from the course in various aspects of my work. This course has provided me with valuable insights, and I intend to explore how these insights can be beneficial in my professional activities."

"This was great; I just wish the rest of my team could attend."

"Design of modular, distributed and event driven systems: a practical approach"



TOPICS:

- Consciously and professionally decide what to optimize architecture for, and which technical and organizational constraints have to be taken into account
- Create professional architecture diagrams in C4 model, verify validity of their design, present it to the stakeholders
- Decide which approach to architecture will be better in particular case: modular monolithic, synchronous microservices or distributed event driven system
- Optimize the architecture for SLA and performance of critical path, without creating error-prone combinations
- Optimize the system for maintainability and extensibility, so that more business value can be delivered by the implementing team

ATTENDED BY:

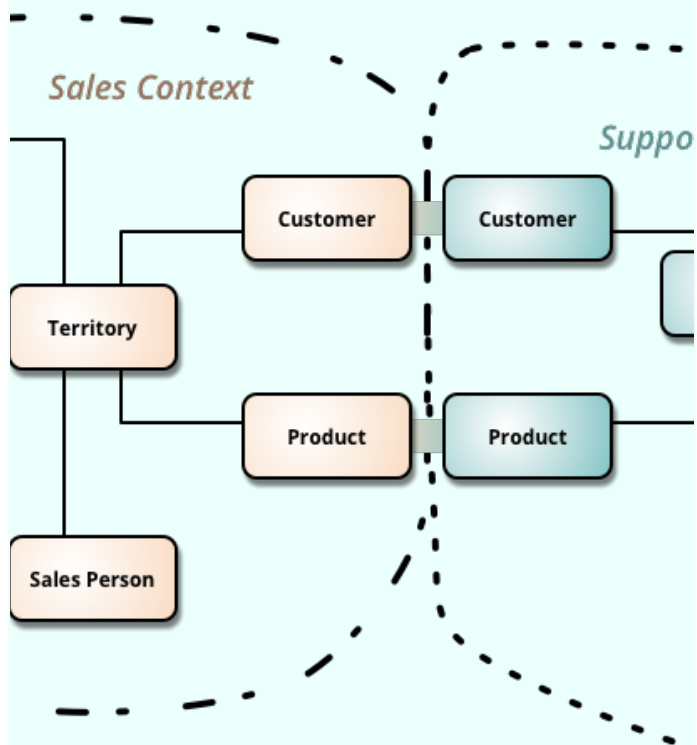
12

INDIVIDUALS

3

NRENs

"Software architecture driven by domain"



TOPICS:

- DDD approach
- Strategic and Tactical design
- Dividing large and complex business problems into multiple chunks with clear boundaries

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20

INDIVIDUALS

8

NRENs

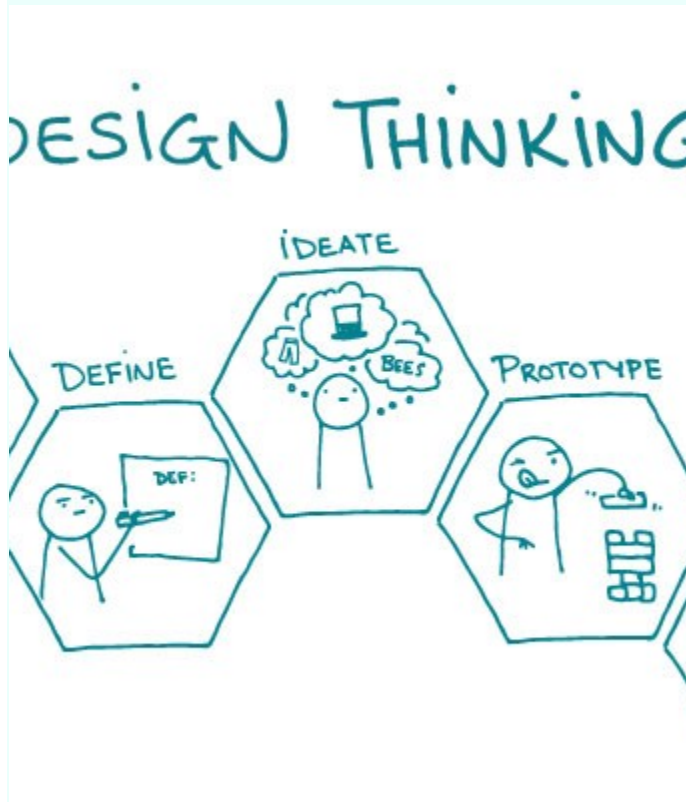
From the participants:

"Trainers demonstrated appropriate knowledge and communicated information clearly"

"There is rarely an opportunity to design a complex system from the beginning as shown in this training"

"I would recommend this course to others"

"Design Thinking in Software Engineering"



TOPICS:

- User centered design
- How to design better products
- The discovery, ideation, design, prototyping and validating phases

ATTENDED BY:

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INDIVIDUALS

6

NRENs

From the participants:

"New approach to software design and development"

"A better quality of newly created information systems and tools."

"Presentation contained some real data and lots of various tools to use in order to design a prototype. That's a big plus for me. Thank you!"

"Event Storming and Domain Driven Design"



TOPICS:

- What is Event Storming and Domain Driven Design
- How to effectively learn a business domain
- How to conduct an ES-session
- How to approach business domain modelling in your software

ATTENDED BY:

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INDIVIDUALS

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NRENs

From the participants:

"Despite COVID-19, the training was really good!"

"Good online workshops where sub-groups are formed on demand."

"Improved process understanding and successful implementations with stakeholder expectations met"