BO·TT·EGA
IT minds

Training program:

Domain Driven Design - complex business modeling (part 1)

Info:

Name:	**Domain Driven Design - complex business modeling (part 1)**
Code:	**ddd-workshop-DDD**
Category:	DDD Workshop
Target audience:	developers architects analysts
Duration:	3 days
Format:	60% lecture / 40% workshop

Our program is based on 10 years of experience in using and teaching DDD.

DDD outline

Domain Driven Design is currently the only methodology that supports, in a comprehensive way, from technical perspective, the agile approach to software development.

Comprehensive approach of DDD includes: modeling of complex domains in cooperation with a Domain Expert, recommended architectures and designing using tested Building Blocks to the techniques for creating a testable code, which by design is open for the iterative process of extension and Knowledge Crunching.

Benefits resulting from the use of DDD

- Techniques and strategic patterns, the purpose of which is to solve typical organizational problems
  - effective techniques of conducting a modeling session with the participation of Domain Experts
  - focusing the effort on the Core Domain: investing the best people and DDD techniques only into the crucial modules
  - techniques of separating individual domains (Bounded Context) designated by the knowledge boundaries of Domain Experts, reduction of risk related to creating monoliths
  - techniques of integrating the modules open to changes and performance scaling strategies of cooperation between teams (including in the outsourcing model) that work on separate models
- Tactical techniques and patterns, the purpose of which is to solve typical technical and quality problems
  - language of patterns for creating a model - Building Blocks
  - architectures suitable for creating expansible systems
  - approaches supporting and facilitating automatic testing
- Smooth integration with Scrum thanks to the Modeling Whirlpool approach

Scope

Business problem modeling techniques

- techniques from the level of Tactical Patterns: Building Blocks DDD together with best practices and extended elements.

- techniques from the level of Strategic Patterns: Domain Distillation, Bounded Context,
- you will learn practical approaches and ways of conducting a modeling session

DDD implementation

Techniques of DDD implementation (application and system architecture, IoC and ORM, microservices) are talked over during the DDD-implementation training, which should be done second, after the training in terms of modeling.

Form

Incremental use of knowledge in practice

The training is conducted in a form that combines consecutively alternating lectures, workshops and discussions.

During lectures, the coach presents subsequent chapters of substantive knowledge, supplementing them with comments based on his own experience.

During workshops, we implement two modules of the ERP class system. Next tasks consist of an incremental addition of new functionalities in a way that illustrates theoretical issues, learned during the lecture preceding them.

During discussion, participants have an access to expert knowledge of the coach and have a possibility to verify their solutions with the ones developed by other participants of the training.

Three event Storming modeling sessions

In the first phase of workshops, participants solve problems presented to them, working on the model in groups – this phase has a purpose of acquiring proficiency in using the DDD techniques.

After getting to know the DDD techniques, comes the time to conduct a real Modeling Whirlpool session, where the members of each group play out the roles of: Domain Expert, Modeler, Coordinator – this phase has a purpose of consolidating the knowledge that is ready to apply in an everyday practice.

Reference project

Check our implementation of an example DDD+CqRS project: Sample Leaven.

It's all about the content.

- You will realize soft skills that a Modeler should possess
- Modeling techniques: linguistic and visual
- Presentation of alternative approaches together with talking over the consequences

BOTTEGA IT minds

Training program

1. Introduction to the Domain Driven Design – unification of analysis and designing

- 1.1. Applicability of the DDD
  - 1.1.1. Measuring complexity of the system
  - 1.1.2. System depth – what is system doing "under the hood"
  - 1.1.3. When not to use the DDD
  - 1.1.4. The DDD Lite approach - increasing the technical quality
- 1.2. Roles in the process – responsibilities and personality traits and skills
  - 1.2.1. Domain expert - source of knowledge, model validator
  - 1.2.2. Modeler (domain architect) – creator of the model
  - 1.2.3. Facilitator – coordinator of the process in the initial phase
- 1.3. Introduction to the Ubiquitous Language
  - 1.3.1. Common ground between Domain Experts and a development team

2. Process and techniques of modeling

- 2.1. Event Storming
  - 2.1.1. Notation
  - 2.1.2. Phases
  - 2.1.3. Tips and Tricks
- 2.2. Approach "from a process" vs approach "from a domain"
- 2.3. Agile Modeling Process "Model Exploration Whirlpool"
  - 2.3.1. Phases
  - 2.3.2. Artifacts
  - 2.3.3. Model validation
- 2.4. Linguistic techniques

BO·TT·EGA IT minds

BOTTEGA IT minds

BOTTEGA IT minds

BOTTEGA IT minds