**Introduction**

Our domain model starts from the center - the requirement entity, and is developed by the ways how requirements are gathered, processed, and managed. Our model has three layers of hierarchies. The first layer is from the requirement entity to sub-models for each chapter. You can trace from relationships to find specific sub-models for chapters. For example, you can go through “requirement is managed by requirement management practices” to find out the sub-model for chapter 27 specifically. Our second and third layers contain information about the chapter's contents.

**RDM Elements and Relationship Explanation**

Since our models are developed based on requirement processes and split into different chapters, we will explain from the first layer and then give a rough introduction about the second and third layers.

**First Layer Relationship**

* Requirement is gathered by Requirement Elicitation
  + This serves as a core idea for our group projects. This relationship explains the purpose of why we should prepare and conduct elicitation sessions for requirements. Requirements do not come from nowhere. Requirements are gathered through different elicitation sessions.
  + Reference: Group Template - Ch.7
* Requirements is validated by requirement validation
  + Requirements need to be verified and validated in the requirement process. This relationship emphasizes the importance of the verification and validation process.
  + Reference: Group Template - Ch 17
* Requirement starts from Business Requirement
  + The journey of a requirement begins with a business need or objective. Business requirements define the high-level goals that the product aims to achieve.
  + Reference: Group Template - Ch.5
* Business Requirement sets stage to Requirement Elicitation
  + Business Requirement is the initial motivation for requirement elicitations. Business requirements directly influence the approach and focus of requirement elicitation sessions.
  + Reference: Group Template - Ch.5, Group Template - Ch.7
* Requirement is managed by Requirement Management Practices
  + Requirement management practices are crucial for keeping the project on track and ensuring that the final system meets the defined needs.
  + Reference: Group Template - Ch.27
* Requirement Management Practice uses RE Tools
  + RE tools support requirement management practices by providing efficient tools to store, track and analyze requirements.
  + Reference: Group Template - Ch.27, Group Template - Ch.30
* Requirement is aggregated by Non functional Requirement
  + Non-functional requirements (NFRs) specify the criteria that judge the operation of a system, as opposed to the specific behaviors or functionalities. Aggregating requirements with NFRs ensures that the system not only meets its functional objectives but also adheres to performance, security, usability, and reliability standards.
  + Reference: Group Template - Ch.14
* Requirement is controlled by Change Control Process
  + As projects evolve, requirements can change. A structured change control process is essential for managing these changes without derailing the project.
  + Reference: Group Template - Ch.28
* Requirement is tracked by Status
  + Tracking the status of requirements is essential for monitoring progress and ensuring that all requirements are addressed appropriately.
  + Reference: Group Template - 27
* Requirement is documented by Requirement Document Practices
  + Documenting requirements is a critical step in ensuring that they are clearly understood and agreed upon by all stakeholders
  + Reference: Group Template - Ch.10
* Requirement is prioritized by Requirement priorities
  + I think requirement prioritization is very important when dealing with daily work in industry. Most of the time we might face time constraints; that’s it, we don’t have enough time to finish all the requirements. Hence, requirement prioritization is a way to keep things going.
  + Reference: Group Template - Ch.16

**First Layer Elements**

* Requirement
  + The center of the whole domain model.
* Requirement Elicitation
* Non-Functional Requirements
* Business Requirement
* Requirement Priorities
* RE Tools
* Requirement Documentation Practices
* Requirement Validation
* Requirement Change Control
* Requirements development

We also label the corresponding chapters on each first layer element on our domain model diagram. It’s easier to go from first layer elements to trace each chapter’s contents.