“MyClinic”

First Sprint

- **Roles**: Product owner, (Scrum) Master, Quality controller, Team member
- **Project planning** (including table with task dependencies, Gantt Chart for Sprint 1 and Sprint2)
- Include **a burndown chart** for the Sprint
- Perform the following tasks for this Sprint:
  - **Identify 15 features** (5 basic + 7 chosen from existing systems + 3 new proposals)
  - **The basic features are**: register basic entities, i.e., check-in, patient, doctor, doctor’s appointment, exam with equipment (e.g., threadmill, electroencephalogram)
  - **Build the BPMN model** for the System in the organization
    - Structure the process specifying a main process
    - A subprocess for each feature
  - **Perform Requirements elicitation**:
    - Include the 5 basic features
    - Elicitation (**yes! You have to discover the requirements**) of the system requirements should be performed using KAOS
      - Identify goals and agents
      - Functional goals (related to 15 features max): propose 3 new features
      - Non-functional goals: identification of contributions and conflicts (6 or more NF goals),
      - Identify main obstacles and resolutions (1 obstacle/functionality)

        - Identify main Entities and Operations (Operations that represent use cases)
    - **Prototype (front-end and back end)**: Implement the basic features in your preferred programming language / IDE
    - **Proposal**
        - **For the next Sprint, Besides the 5 basic ones, choose 4 features** from the set of ***7 chosen from existing systems and 1 from the set of 3 new ones*.**
        - Choose **4 Non-Functional** goals
        - These features and NFRs must be negotiated with me.

Second Sprint

- **Corrections of the 1st Part**
- **Derive a SysML Requirements diagram for the features (5 basic + 4 chosen + 1 new one) and 4 NFRs**
- **Architectural design**
    - **Context diagram:** use a Block diagram and an internal block diagram linking actors to the system
    - **Use case view:** A Use Case diagram for all the features (5 basic + 4 chosen + 1 new)
    - **Logical view:** use a Block diagram to show the decomposition of the system for all the features (5 basic + 4 chosen + 1 new)
    - **Process View:** Sequence diagrams only for the 4 features chosen + 1 new
    - **Development / Deployment views:** Use block diagrams and internal block diagrams
    - Justify how the NFRs are satisfied and which architectural patterns are used.
- **Prototype**
    - Deliver the final protype to validate all the system features (5 basic + 4 chosen + 1 new)
- **Variability modelling**
    - Think the MyClinic as a Software Product Line (SPL) by building a **feature model** to represent the commonalities and variabilities for different configurations. Have as the basis the 15 initial feature from the 1st Sprint and add new features.
    - Configure 2 possible applications.

- **Gantt chart** updated and **a burndown chart** for the 2nd Sprint

Due dates for the practical work:

- **1st** Sprint: 21/4
- **2nd** Sprint: 2/6.
    - Discussions: 5-11 June
- Teams of **5**