For the given scenario prepare a **requirements specification**. Your specification should include:

1. Explicit and clearly defined **scope**.
   You have the freedom to decide whether you specify requirements for the system or for the system components or for the software or for the separate software component. In other words it must be clear and explicit what is the **product** and its application domain.  
   (5 points)

2. While preparing the specification, start and maintain the **glossary**, where all the important terms are continuously included and shortly (one sentence is enough) defined.  
   (10 points)

3. Define what are the major actors, their dependencies, and their rationale? To answer these questions, prepare the **strategic rationale model**.  
   (10 points)

4. Define the conceptual model of the considered product. What are the major concepts (of the system or of the software or both)? What are the relationships between them? To answer this question, prepare a **class diagram**.  
   (10 points)

5. From the created class diagram select one class and prepare one **object state diagram**.  
   (10 points)

6. What are the **major** functions (at least 5) of your product? To answer this question, define the **use case diagram**. How does your use case diagram link to the defined class diagram?  
   (10 points)

7. From the given BPMN diagram (see the scenario, Figure 1.3) define one **textual use case**. Fill in the use case template to answer this question.  
   (10 points)
8. Define at least 2 assumptions/expectations regarding the use of the identified product. To answer this question, use the requirements/expectation shell (or similar template).  
(5 points)

9. Define at least 5 specific (e.g., functional, data, similar) requirements for the identified product. To answer this question, use the requirements shell (or similar template).  
(10 points)

10. Define at least 4 non-functional requirements for the identified product.  
(5 points)

11. Is your overall requirements model well-formed? Discuss and illustrate (using your solutions) how to verify the following requirements models:
   - strategic rational model
   - class diagram;
   - object state diagram;
   - use case diagram;
   - use case template

(10 points)

12. Once your specification is completed, check its quality. Based on the quality evaluation results, explain (write text), what should be done to improve quality of your requirements specification.  
(15 points)

**Important concerns:**

- Although each diagram is worth 1000 words, it is useless without proper explanation (explain each prepared diagram, its major idea textually).
- Your requirements specification should be **understandable, organised, syntactically valid and complete, semantically complete and correct, consistent, annotated, traced and traceable, unambiguous**, etc.
- Each defined requirement must respect the criteria for “good requirements”.