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DOCUMENT PROCESSING

Domain Analysis

Software Architecture (H09B5a and H07Z9a) – Part 1

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1 Domain analysis

1.1 Domain models

This section shows the domain model(s).

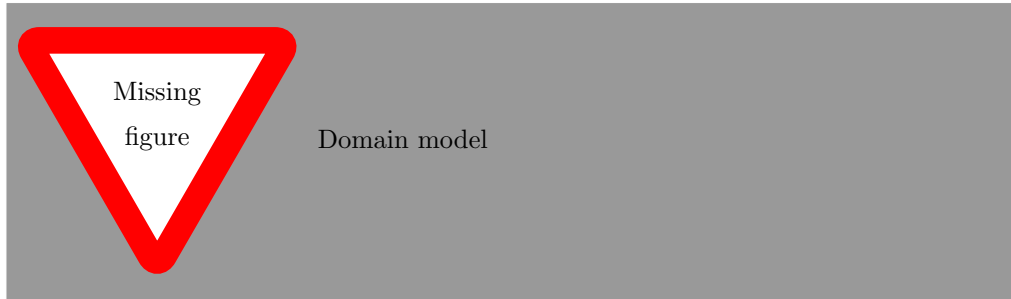


Figure 1: The domain model for the system.

1.2 Domain constraints

In this section we provide additional domain constraints.

- This is a first constraint.
- This is a second constraint.

1.3 Glossary

In this section, we provide a glossary of the most important terminology used in this analysis.

- **Term1:** definition
- **Term2:** definition

2 Functional requirements

Use case model

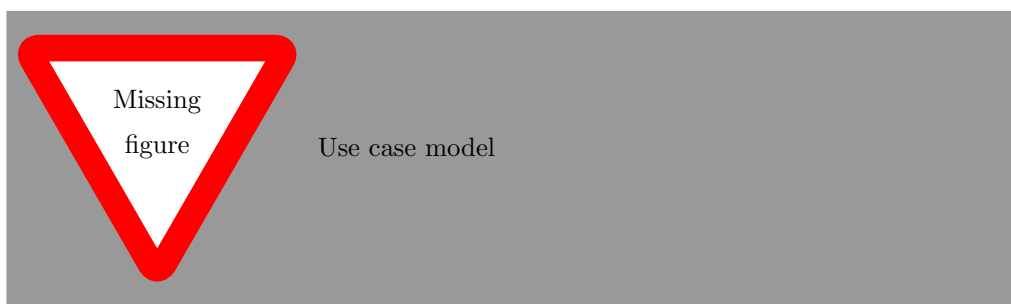


Figure 2: Use case diagram for the system.

2.1 UC1: Name of use case 1

- **Name:** Name of use case 1
- **Primary actor:** primary actor
- **Interested parties:**

- *Name of interested party*: reason why party is interested
- **Preconditions:**
 - First precondition.
 - Second precondition.
- **Postconditions:**
 - First postcondition.
 - Second postcondition.
- **Main scenario:**
 1. Step 1
 2. Step 2
 3. Step 3
 4. ...
- **Alternative scenarios:**
 - 3b. Alternative at step 3
- **Remarks:**
 - First remark

2.2 UC6: De-activate personal document store

- **Summary:** A Registered recipient de-activates his or her personal document store account.
- **Primary actor:** Registered recipient
- **Secondary actors:** The System
- **Interested parties:**
 - *Registered recipient*: wants to de-activate his or her personal document store
 - *eDocs*: wants to keep as many Registered recipients as possible.
- **Preconditions:** None
- **Postconditions:**
 - The Registered recipient is now an Unregistered recipient and can no longer log in to the system.
 - The Registered recipient is now logged out and can no longer make use of his/her personal document store.
 - The System has removed the account of the Registered Recipient. It keeps the documents of the Registered recipient archived.
 - The Registered recipient now receives his or her documents via another channel than his or her personal document store.
- **Main scenario:**
 1. The Registered recipient indicates that he or she wants to de-activate his or her personal document store.
 2. The System removes the account of the registered recipient.
 3. The System indicates success to the Registered recipient and logs him or her out.
- **Alternative scenarios:**
 1. ...
- **Remarks:**
 - None

2.3 UC7: Provide document template

- **Summary:** An eDocs administrator
- **Primary actor:** eDocs administrator
- **Interested parties:**
 - *eDocs administrator:* wants to provide a document template that a customer organization can fill in.
 - *Customer organization:* wants to have a template for its documents
 - *eDocs:* wants to generate documents based on a template that the Customer organization has filled in.
- **Preconditions:**
 - The Customer organization has registered itself with eDocs.
- **Postconditions:**
 - The System now contains a template which the Customer organization can fill in.
- **Main scenario:**
 1. The eDocs administrator provides a document template to the System.
- **Alternative scenarios:**
 1. None
- **Remarks:**
 - None

2.4 UC8: Update document template

- **Summary:** The Customer organization updates a document template.
- **Primary actor:** Customer organization
- **Secondary actors:** eDocs administrator
- **Interested parties:**
 - *Customer organization:* wants its documents to have a layout corresponding to the initial template it fills in.
 - *eDocs:* wants to generate documents with a layout corresponding to the wishes of its clients.
- **Preconditions:**
 - The Customer organization is logged in.
- **Postconditions:**
 - The System from now on generates documents using the new filled in document template.
 - The System stores the provided document template.
- **Main scenario:**
 1. The Customer organization indicates it wants to download the current document template.
 2. The System looks up the correct document template and provides it to the Customer organization.
 3. The Customer organization changes the current document template.
 4. The Customer organization indicates it wants to upload the filled in template.

5. The System downloads the updated document. It notifies an eDocs administrator that a new filled in document is waiting to be verified for correctness.
6. An eDocs administrator verifies the correctness of the document template.
7. The System stores it. The updated document replaces the old document template for that Customer organization and that document type.

- **Alternative scenarios:**

- 6a. If the provided document template is not correctly filled in, the administrator notifies the Customer organization. Restart from step 3.

- **Remarks:**

- If the Customer organization has not filled in a document template before, the document template presented to the Customer organization is the document template that the eDocs administrator provided for the Customer Organization to use.

3 Non-functional requirements

In this section, we model the non-functional requirements for the system in the form of *quality attribute scenarios*. We provide for each type (availability, performance and modifiability) one requirement.

3.1 Availability

3.1.1 *Av1*: Name of the quality attribute scenario

Shortly describe the context of the scenario.

- **Source:** source
- **Stimulus:**
 - Description of a first stimulus.
 - Description of a second stimulus.
- **Artifact:** the stimulated artifact
- **Environment:** the condition under which the stimulus occurs
- **Response:**
 - Describe how the system should respond to the stimulus.
- **Response measure:**
 - Describe how the satisfaction of a response is measured.

3.2 Performance

3.2.1 *P1*: Name of the quality attribute scenario

Shortly describe the context of the scenario.

- **Source:** source
- **Stimulus:**
 - Description of a first stimulus.
 - Description of a second stimulus.
- **Artifact:** the stimulated artifact
- **Environment:** the condition under which the stimulus occurs

- **Response:**
 - Describe how the system should respond to the stimulus.
- **Response measure:**
 - Describe how the satisfaction of a response is measured.

3.3 Modifiability

3.3.1 *M1*: Name of the quality attribute scenario

Shortly describe the context of the scenario.

- **Source:** source
- **Stimulus:**
 - Description of a first stimulus.
 - Description of a second stimulus.
- **Artifact:** the stimulated artifact
- **Environment:** the condition under which the stimulus occurs
- **Response:**
 - Describe how the system should respond to the stimulus.
- **Response measure:**
 - Describe how the satisfaction of a response is measured.