Use Case Specifcation (UCS)

for

<Project>

on case

< ID> : <UseCase Title>

<version> approved

Prepared by <author>

<Organization>

1. History

1.1. Revision History

Date	Version	Author	Change description/reason
<Date Created>	<x.y>	<Created By>	Initial document
<Last Updated>	<x.y>	<Updated By>	

<Created By: name of the person who initially documented this use case.>

<Date Created: date yyyy.mm.dd on which the use case was initially documented.>

<Updated By: name of person, who performed the most recent update to the use case description.>

<Last Updated: date yyyy.mm.dd on which the use case was most recently updated.>

1.2. Review History

Date	Version	Reviewers	Comment
<Review Date>	<x.y>	<Reviewed By>	
<Review Last>	<x.y>	<Reviewed By>	

<Reviewed Date: name of person who performed the initial review of the use case documentation.>

<Reviewed Last: name of person who performed most recent review of use case documentation.>

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2. Introduction

2.1. Document purpose

<Explains in simple laymans terms what this use case is all about. Describes the physical task being accomplished and the business value achieved. All seen from actors point of view. This description should be understood from both business department representatives and techical staff.>

2.2. Target audience

<Explains in simple laymans terms, who this document addresses. Potential groups could be:

- business representatives (who put forward demands and approves compliance with business understanding)
- designers (creating technical documents for implementation)
- system testers (ensures delivery complies with demands)
- user testers (ensuring that business goals are achieved)
- supporters (assist users in understanding of application)
- architects (ensures compliance with system architecture strategies)
- projectleaders

>

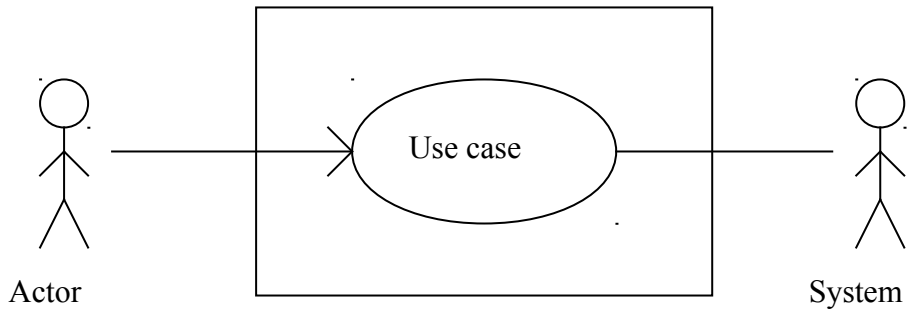
2.3. References

<Explains in simple laymans terms what this use case is all about>

Document	Version	Author	Link
Demand specification	x.x		
Non-functional demands	x.x		
Business termns explanation	x.x		
Data model documentation	x.x		

2.4. Overview

<Diagrams illustrating how actors relates to this use case. Outlines which actors are involved.>



2.5.

3. Use Case Description/Definition

3.1. Use Case <ID> : <Name> Description

<It is always necessary to apply a strategy for ordering use cases and accordingly give them a unique integer sequence number identifier. If ordering use cases in hierachical groups, a hierarchical form: X.Y. Z. … may be applied.

Apply a concise, catching, results-oriented name for the use case. Possibly an appropriate "one-liner" reflecting the tasks the user needs to be able to accomplish using the system. Include an action verb and a noun.

In the description part, provide a brief description of the reason for and outcome of this use case, or a high-level description of the sequence of actions and the outcome of executing the use case. Which parts of the demand specification are met – and how are they met?!

>

3.2. Actor list

<Actor is a person, system or other external body to the software system engaging in the story of the usecase - interacting and performing actions to accomplish use case tasks. For the use case, all actors and their type should be specified. Possible types are:

- Initiator Actor - defines the initiating actor who generates the starting stimulus - causing possible further action with other participating actors.
- Primary Actors The Actor(s) using the system to achieve a goal. The Use Case documents the interactions between the system and the actors to achieve the goal of the primary actor.
- Secondary Actors are required by the system for assistance to achieve the primary actors goal.

3.3. Trigger

<Trigger event specifies the action which initiates the use case - taking use case from start to the goal (success scenarios). Trigger could either be an external event starting the use case or it the first step in the primary flow.>

3.4. Assumption list

<Describes simplifying assumptions, which is a requirement for the understanding of the use case – but may not be logical under all circumstances. Assumptions could also include circumstances which are invariants throughout the process. The difference from precondition is that a precondition is something concrete – which may be tested – while an assumption is possibly more abstract.>

3.5. Precondition list

<List general activities or conditions, which are a required for valid execution of the use case. Preconditions should be numbered and listed.>

3.6. Postcondition list

<Describes general characteristics for the state of the system after use case execution. This may include a description of the accomplished success scenario/criteria. Concrete defined goals will allow more straightforward planning of practical tests and enable more effective evaluation, if intended scenario/criteria is actually reached. Number each postcondition.>

3.7. Primary Flow (Normal Flow)

<There are following types of flows:

- primary flow (normal flow)
- alternative flow
- error flow

Primary Flow is a demonstration of the most important use case story. It provides a description of the actor actions and system responses (sequence of steps), which will occur during execution of the use case under most common, expected conditions. The achieved success scenario/criteria should meet business requirements as required for the use case.

Primary flow is presented as a numbered list of actions performed by the involved actors and corresponding system response.

All flows are normally provided with an index number and organized in a list. Characteristic for the primary flow is that it is usually numbered as the first index 0 (or 1) in the list of all possible flow scenarios.

Flow Scenario #1 (Primary flow)		
Step	Actor input	System response
1		
2		
3		
4		
5		

>

3.8. Primary Flow Postconditions

<May describes postcondition success criterias, which are specific for a primary flow. Remember to be concrete in order to facilitate practical and reproducable tests.>

3.9. Alternative Flows

<Alternative flows are other flows, where are also valid for the current use case. However, they often demonstrate the business case objective differently or slightly less clearly than the primary flow.

Alternative flows are specified as a numbered list of actions as previously described.

Alternative flows could be flows, which takes the same offset as the primary flow – but can proceed in a different direction from a specific point. When specifying an alternative flow, the steps shared with the primary flow are not listed. Only the difference in sequence of steps are listed. The flow uses the same numbering notation from primary flow to specify clearly, where the flow breaks away from previously. If the alternative flow fx. specifies steps 3 & 4 it is implicitly assumed that these steps are preceeded and followed by corresponding prior steps 1,2 and 5 from the primary flow. If more steps are needed, it is possible to introduce other numbering 3a, 3b,… 4a, 4b,.. >

Flow Scenario #2 (Alternative flow)		
Step	Actor input	System response
3		
4		

3.10. Error Flows

Error flows specifies specific error situations, which may be anticipated during the use case story. The error flows will explaing, how the actors and systems involved should handle (overcome) problems - or how to engage other external body to resolve the situation.

Error flows are specified specified as a numbered list of actions as previously described.

Flow Scenario #3 (Error flow)		
Step	Actor input	System response
3		
4		

>

3.11. Exceptions list

<An exception is a possible error condition, which might occur while executing the use case steps. It represent a shorter notation than providing a specific error flow. When specifying an exception, it should also be noted how the system should respond to the situation (fx. halt execution completely, perform a transaction rollback, partial completion, sending request for interaction to an actor, etc.). >

3.12. Includes list

<For an use case it should always be listed which other use cases, which might be included ("called") from this use case. By including (re-using) use cases into each other, repetition of identical functionality is avoided.>

3.13. Extends list

<For an use case it should be listed which other use cases, might be extended ("extending use case continues behavior from another").>

3.14. Frequency of Use

<For performance considerations it is necessary to specify how often this use case is intended to be performed in a larger context. When executed rarely, implementation may not need to take special consideration to performance. When performed very frequently within a unit of

time, then performance optimizations may become a key issue. Specifying frequencey of use may avoid that the implementation is later put in a context, which is was not originally designed for.>

3.15. Business Rules list

<Business rules, which might influence this use case. May specify validations rules required for input entered. If some input is missing, it can be specified how to overcome the situation by obtaning the information indirectly from other fields.>

3.16. Additional Requirements list

<May list special requirements from other documents, which are relevant for the current use case. Normally non-functional or other general requirement should be placed in another document, which is general for all use cases. Fx. is search should be performed case-sensitive or not – which can have a larger and general impact for all search uses cases: "Search Customer", "Search Address",.. Requirement about how quickly dependant systems are updated, if this may be done in parallel, etc. are also relevalt information for subsequent design and implementation.>

3.17. Notes and Outstanding Issues

<Information not suitable elsewhere. May include notes of caution or specification of issues, which are not resolved at the time, the use case was written (TBD: To Be Determined). It may be attempted to identify, who is most suitable to resolve issue, and the time frame involved.>

3.18. Improvements

<List any additional improvements for this use case.>