Use Cases

for

<Project>

Version 1.0 approved

Prepared by <author>

<organization>

<date created>

Revision History

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| --- | --- | --- | --- |
| **Name** | **Date** | **Reason For Changes** | **Version** |
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# Guidance for Use Case Template

Document each use case using the template shown in the Appendix. This section provides a description of each section in the use case template.

# Use Case Identification

## Use Case ID

Give each use case a unique integer sequence number identifier. Alternatively, use a hierarchical form: X.Y. Related use cases can be grouped in the hierarchy.

## Use Case Name

State a concise, results-oriented name for the use case. These reflect the tasks the user needs to be able to accomplish using the system. Include an action verb and a noun. Some examples:

1. View part number information.
2. Manually mark hypertext source and establish link to target.
3. Place an order for a CD with the updated software version.

## Use Case History

### Created By

Supply the name of the person who initially documented this use case.

### Date Created

Enter the date on which the use case was initially documented.

### Last Updated By

Supply the name of the person who performed the most recent update to the use case description.

### Date Last Updated

Enter the date on which the use case was most recently updated.

# Use Case Definition

## Actors

An actor is a person or other entity external to the software system being specified who interacts with the system and performs use cases to accomplish tasks. Different actors often correspond to different user classes, or roles, identified from the customer community that will use the product. Name the actor that will be initiating this use case and any other actors who will participate in completing the use case.

## Trigger

Identify the event that initiates the use case. This could be an external business event or system event that causes the use case to begin, or it could be the first step in the normal flow.

## Description

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.

## Preconditions

List any activities that must take place, or any conditions that must be true, before the use case can be started. Number each precondition. Examples:

1. User’s identity has been authenticated.
2. User’s computer has sufficient free memory available to launch task.

## Postconditions

Describe the state of the system at the conclusion of the use case execution. Number each postcondition. Examples:

1. Document contains only valid SGML tags.
2. Price of item in database has been updated with new value.

## Normal Flow

Provide a detailed description of the user actions and system responses that will take place during execution of the use case under normal, expected conditions. This dialog sequence will ultimately lead to accomplishing the goal stated in the use case name and description. This description may be written as an answer to the hypothetical question, “How do I <accomplish the task stated in the use case name>?” This is best done as a numbered list of actions performed by the actor, alternating with responses provided by the system. The normal flow is numbered “X.0”, where “X” is the Use Case ID.

## Alternative Flows

Document other, legitimate usage scenarios that can take place within this use case separately in this section. State the alternative flow, and describe any differences in the sequence of steps that take place. Number each alternative flow in the form “X.Y”, where “X” is the Use Case ID and Y is a sequence number for the alternative flow. For example, “5.3” would indicate the third alternative flow for use case number 5.

## Exceptions

Describe any anticipated error conditions that could occur during execution of the use case, and define how the system is to respond to those conditions. Also, describe how the system is to respond if the use case execution fails for some unanticipated reason. If the use case results in a durable state change in a database or the outside world, state whether the change is rolled back, completed correctly, partially completed with a known state, or left in an undetermined state as a result of the exception. Number each alternative flow in the form “X.Y.E.Z”, where “X” is the Use Case ID, Y indicates the normal (0) or alternative (>0) flow during which this exception could take place, “E” indicates an exception, and “Z” is a sequence number for the exceptions. For example “5.0.E.2” would indicate the second exception for the normal flow for use case number 5.

## Includes

List any other use cases that are included (“called”) by this use case. Common functionality that appears in multiple use cases can be split out into a separate use case that is included by the ones that need that common functionality.

## Priority

Indicate the relative priority of implementing the functionality required to allow this use case to be executed. The priority scheme used must be the same as that used in the software requirements specification.

## Frequency of Use

Estimate the number of times this use case will be performed by the actors per some appropriate unit of time.

## Business Rules

List any business rules that influence this use case.

## Special Requirements

Identify any additional requirements, such as nonfunctional requirements, for the use case that may need to be addressed during design or implementation. These may include performance requirements or other quality attributes.

## Assumptions

List any assumptions that were made in the analysis that led to accepting this use case into the product description and writing the use case description.

## Notes and Issues

List any additional comments about this use case or any remaining open issues or TBDs (To Be Determineds) that must be resolved. Identify who will resolve each issue, the due date, and what the resolution ultimately is.

Use Case List

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| --- | --- |
| Primary Actor | Use Cases |
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Use Case Template

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| --- | --- | --- | --- |
| Use Case ID: |  | | |
| Use Case Name: |  | | |
| Created By: |  | Last Updated By: |  |
| Date Created: |  | Date Last Updated: |  |

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| --- | --- |
| Actors: |  |
| Description: |  |
| Trigger: |  |
| Preconditions: |  |
| Postconditions: |  |
| Normal Flow: |  |
| Alternative Flows: |  |
| Exceptions: |  |
| Includes: |  |
| Priority: |  |
| Frequency of Use: |  |
| Business Rules: | Use ID here; define in Section 4 |
| Special Requirements: |  |
| Assumptions: |  |
| Notes and Issues: |  |

1. **We need to define Use Cases first**

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| --- | --- |
| Primary Actor | Use Cases ID |
| Project Manager | 1. Planning of the project 2. Modification of the project 3. Define App features 4. Divide into module 5. workload distribution 6. Arranging meeting 7. Approving the work 8. Releasing the App |
| Programmer | 1. Create the code 2. Modify the code 3. Finalizing the App |
| Distributor | 1. Finding market 2. Distributing App 3. External relation ( Customer care , info desk for partner) |
|  |  |

1. **Business Rules also important, how many of them should we Write? 10 or more?**

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| --- | --- | --- | --- | --- |
| ID | Rule Definition | Type of Rule | Static or Dynamic | Source |
| BR-1 | Project work, customer service, and other activities will be done at official time 10 am to 5pm according Finnish Standard time. Including daylight  saving time, GMT +2 or +3 |  |  |  |
| BR-2 | Version 1.0 should be released within first 3 months of the project. |  |  |  |
| BR-3 | Customers are allowed to pay vai paypal, visa, mastercard. |  |  |  |
| BR-4 | Any complain must be answered  within 2 working days. |  |  |  |
| BR-5 | Automatically download option will be enabled after successful payment |  |  |  |
| BR-6 | Incase any payment from customer is received but problem in downloading, customer would get download link by email |  |  |  |
| BR-7 | each user will be given 2 GB space in Server. |  |  |  |
| BR-8 | Users are allowed to access their account by the app or web browser |  |  |  |
| BR-9 | User’s info is very sensitive, must be stored with …….. encryption |  |  |  |
| BR-10 | Personal identification, financial information or organizational secret code require 128-bit encryption. |  |  |  |
| BR-11 | Working platforms are Android, iOS, Windows Phone. |  |  |  |
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| Use Case ID: | 1 |  |  |
| Use Case Name: | Planning of the project |  |  |
| Created By: | Syed Khandker | Last Updated By: | Syed Khandker |
| Date Created: | October 20, 2014 | Date Last Updated: | November 07, 2014 |

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| Actors: | Project Manager |
| Description: | A project manager is the key person for planning the whole project, how it is going to be implemented within how many days, needed manpower,  how the workload would be divided among the employees. After finishing the project by subordinates he approves the work. A good plan reduce unnecessary modification, save money and time. |
| Trigger: | Business plan of the product warranty app |
| Preconditions: | 1.  Approval of the business plan by investors.  2.   Analysis of the market demand. |
| Postconditions: | 1.  Accepted “Business plan” by directors.  2.  Target settled up.  3.   Have the working team. |
| Normal Flow: | **1.0 Plan for the Product Warranty App**   1. Briefing the investor about the idea. 2. Requirements ( infrastructure, manpower, financial support) assessment. 3. App feature assessment 4. Tentative time schedule set up 5. Get money from investor 6. Office set up 7. Announcement for employment 8. Recruiting employees 9. Start of the work |
| Alternative Flows: | **1.1 Planning for possible other app or IT service with same investment** ( after step 8)   1. Project manager briefs the investors about the opportunity for expanding business. 2. If approve return to step 2   **1.2  Search for foreign partner for globalizing the app**( after step 1)   1. Analysis possible market demand outside of Finland, pros & cons of foreign partner, business process, government rules and taxation abroad. 2. Discussion these in the meeting. 3. If approve return to step 2 |
| Exceptions: | **1.0.E.1 Lack of initial support**   1. Search for local partner 2. Wait to any positive change of the situation 3. Look for investor 4. Taking university student as low paid trainee 5. Return to step 1 or 8 (according situation) |
| Includes: | None |
| Priority: | High |
| Frequency of Use: | Once or twice per project |
| Business Rules: | BR-2,  BR-9, BR -10. |
| Special Requirements: | 1. Project can be abandoned or delayed or modified  at planning period if it seems lack of opportunities or manpower or initial financial support. |
| Assumptions: | Assume that, 70% of the planned idea can be implemented without any difficulties. |
| Notes and Issues: | 1. The requirements for the project ( e.g. Money, Manpower, infrastructure)  need to be analysed and fulfilled to start the project. 2. Within maximum 3 month time frame the first version of the app would be released 3. At the halfway ( after 1.5 months) another meeting will be called to follow up the project and for any necessary modification. |

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| Use Case ID: | 3. |  |  |
| Use Case Name: | Define app features |  |  |
| Created By: | Syed Khandker | Last Updated By: | Syed Khandker |
| Date Created: | October 20, 2014 | Date Last Updated: | November 07, 2014 |

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| Actors: | Project Manager |
| Description: | To define the features of the app. Evolution of those from version to version. Initial version would consist of Item number, product name, Description of product, Buying date, Date of Expiry / void warranty, photo of the receipt, address of the shop. |
| Trigger: | Internal plan of the project. |
| Preconditions: | 1.  Completed project plan  2.  Technically possibility within organization's resource  3.   Supported by Android, iOS, Windows Phone |
| Postconditions: | 1.       Product now got the coding platform and supporting platform  2.       Defined input and output  3.       List of features |
| Normal Flow: | **1.0 Setting up the features of the app**   1. Selecting platform 2. Device requirement assessment 3. Define needed input and possible output 4. Labelling the field e.g. Item number, product name, Description of product 5. Finalizing the support feature for the particular release |
| Alternative Flows: | **1.1 Option for user to add fields** ( after step 5)   1. If app support customizing the app service list by end user 2. If approve return to step 3   **1.2  Update features by deploying new version**( after step 1)   1. Necessity of new version discussion 2. Making list of component to update 3. Update plan approval 4. Deploying new version 5. Inform user to update the app 6. If user think to update 7. Return to step 2 |
| Exceptions: | **3.0.E.1 Device does not support app**   1. If device does not support Android, iOS, Windows Phone then not possible to run the app. 2. Adding device model in future target list.   **3.0.E.2 Device does not support photo feature.**   1. Camera resolution is under 2 megapixel will be supported photo option. 2. User does not allow to use device services, e.g. camera, GPS location 3. Request user to give access 4. Otherwise disable the features |
| Includes: | None |
| Priority: | High |
| Frequency of Use: | Once per release. |
| Business Rules: | BR-1, BR-2, BR-5, BR-7 |
| Special Requirements: | 1. In case of serious bug regarding features, user must update the app by given time frame. 2. App may ask user permission to use camera, GPS location, microphone, clock etc. |
| Assumptions: | 1.  User would allow the app to use certain service of the device.  2.  Automatic update feature would be enabled by user. |
| Notes and Issues: | 1.     App would follow the time of the device.  2.     If server synchronization feature is added later on, at synchronization period app would update device time according server time.  3.     User can not delete any features but can hide. |