
Use Cases

for

Product Warranty App

Version 1.0

Prepared by

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November 08th, 2014

Revision History

Name	Date	Reason For Changes	Version
Syed Khandker	09/11/14	Initial draft	1.0 draft 1

The various user classes identified the following use cases and primary actors for the product warranty app:

Primary Actor	Use Cases ID
Project Manager	<ol style="list-style-type: none">1. Plan the project2. Modification of the project3. Define App features4. Divide into module5. workload distribution6. Arranging meeting7. Approving the work8. Releasing the App
User	<ol style="list-style-type: none">9. Save product information10. Browse information11. Get notification12. Remove expired data

Use Case ID:	9		
Use Case Name:	Save Product Information		
Created By:	Syed Khandker	Last Updated By:	Syed Khandker
Date Created:	October 20, 2014	Date Last Updated:	November 07, 2014

Actors:	User
Description:	Saving the information regarding product e.g. Item number, product name, Description of product, Buying date, Date of Expiry / void warranty, photo of the receipt, address of the shop.
Trigger:	Programming code
Preconditions:	<ol style="list-style-type: none"> 1. Installed app in supported device (or) 2. Logged into user account through browser.
Postconditions:	1. Product information is saved
Normal Flow:	1.0 Saving data <ol style="list-style-type: none"> 1. Log in 2. Create new record 3. Fill the mandatory field. 4. Capture the photo by mobile or upload by browser (optional) 5. Save 6. Exit
Alternative Flows:	1.1 Saving multiple record <ol style="list-style-type: none"> 1. User wants to create another record 2. Return to step 2

Exceptions:	<p>3.0.E.1 Product expiry date past then current date (at step 2)</p> <ol style="list-style-type: none">1. system warn user that product expiry date is already past2. User recheck the record3. If expiry date older than current date than system accept the record4. Otherwise system keep warning to edit or cancel <p>3.0.E.2 Unknown Language input (at step 3)</p> <ol style="list-style-type: none">1. System inform unsupported language input2. User remove the input3. User input supported language4. System accept <p>3.0.E.3 Disk full, can not be saved (at step 2)</p> <ol style="list-style-type: none">1. System warn user about low disk space2. System doesn't allow new record3. System terminate use case. <p>3.0.E.4 Photo can not be taken / uploaded (at step 4)</p> <ol style="list-style-type: none">1. System warns unsupported file format / oversize or undersize / low resolution camera.2. user recheck the photo properties3. If photo met the upload criteria the upload accepted4. Otherwise keep warning to remove photo <p>3.0.E.5 Record can not be created or saved (at step 2 or 5)</p> <ol style="list-style-type: none">1. System face internal error
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	<ol style="list-style-type: none"> 2. System warns user to try after sometime 3. System terminate use case
Includes:	None
Priority:	High
Frequency of Use:	Depends on user
Business Rules:	BR-1, BR-8, BR-7
Special Requirements:	<ol style="list-style-type: none"> 1. User will be able cancel any record any time. 2. User can view the total record log by selecting dd.mm.yyyy
Assumptions:	<ol style="list-style-type: none"> 1. 2 GB disk space will be last at least 1 year
Notes and Issues:	<ol style="list-style-type: none"> 1. Add record request from two device (e.g. Mobile and browser) at exact same time will create exception and tell user to submit after few seconds. 2. Any request from endpoint user to server will be saved according Finnish Standard Time (GMT +2 / GMT +3), even though user is from another country. 3. All Unicode supported character will be allowed as input language. 4. File size minimum 500 KB maximum 8MB. 5. Image allowed format JPG, TIF, PNG, GIF, BMP

Use Case ID:	10		
Use Case Name:	Browse information		
Created By:	Timo Tammi	Last Updated By:	Timo Tammi
Date Created:	November 2, 2014	Date Last Updated:	November 07, 2014

Actors:	User
Description:	Browsing and searching the warranty information.
Trigger:	Programming code
Preconditions:	<ol style="list-style-type: none"> 1. Installed app in supported device (or) 2. Logged into user account through browser.
Postconditions:	<ol style="list-style-type: none"> 1. Product information details is shown. It includes product name, warranty expiration date and picture of receipt
Normal Flow:	1.0 Browsing information <ol style="list-style-type: none"> 1. List of all warranty information items is shown. 2. User selects one of the items. 3. Product information is shown.
Alternative Flows:	1.1 Browsing information with the search text <ol style="list-style-type: none"> 1. User writes search text. 2. During the writing, list of possible matches is shown 3. User selects one of the items. 4. Product information is shown.
Exceptions:	3.0.E.1 No warranty information found (at phases 1.1.2) <ol style="list-style-type: none"> 1. Text “no result” is shown to user 3.0.E.2 No warranty information is shown (at phases 1.0.3 or 1.1.4) <ol style="list-style-type: none"> 1. System face internal error

	2. System warns user to try after sometime
Includes:	None
Priority:	High
Frequency of Use:	Depends on user
Business Rules:	BR-1, BR-8, BR-9
Special Requirements:	
Assumptions:	
Notes and Issues:	1. Length of the search text can be as long as the warranty information name.

1. Business Rules for Product Warranty App

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	Constraint	Dynamic	Project Manager
BR-2	Version 1.0 should be released within first 3 months of the project.	Constraint	Dynamic	Project Manager
BR-3	Customers are allowed to pay via paypal, visa, mastercard.	Constraint	Static	Accounting
BR-4	Any complaint must be answered within 2 working days.	Constraint	Dynamic	Project Manager
BR-5	Automatically download option will be enabled after successful payment	Fact	Dynamic	Project Manager
BR-6	In case any payment from customer is received but problem in downloading, customer would get download link by email	Fact	Dynamic	Project Manager
BR-7	each user will be given 10 GB space in Server.	Constraint	Static	Technical implementation
BR-8	Users are allowed to access their account by the app or web browser	Fact	Static	Project Manager
BR-9	User's info is very sensitive, must be stored with 128 bit encryption	Constraint	Static	Security policy
BR-10	Personal identification, financial information or organizational secret code require 128-bit	Constraint	Static	Security policy

	encryption.			
BR-11	Working platforms are Android, iOS, Windows Phone.	Constraint	Static	Project Manager
BR-12	Warranty receipt must be saved in a known file format. These include jpeg, tif, gif, png, bmp.	Constraint	Static	Technical implementation
BR-13	Maximum file size for warranty receipt image is 8 MB.	Constraint	Static	Technical implementation
BR-14	If a user has no currently valid warranties and does not use the app for 3 years, their data will be removed from the database in order to preserve space.	Fact	Dynamic	Project Manager
BR-15	When browsing warranty information, the user can only see the warranties they have added themselves (not others).	Constraint	Dynamic	Project Manager, Security policy