

Social Media in the Process Automation Industry

Distributed Software Development

Acceptance Test Plan

Version 0.1



In co-operation with:





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Social Media in the Process Automation Industry

Product Name:
ABBConnect

Course:
Distributed Software Development

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1. SCOPE

1.1. System Overview

This project is about creating a web application and a Windows Phone application that would rely on some common features that characterize a social media approach. These applications are supposed to be used by ABB Company i.e., the customer. ABB is one of the largest engineering companies in the world and it covers several areas like robotics and power and automation technology as well. The corporation is headquartered in Switzerland and it has a branch in Västerås which is cooperating with Mälardalen University. The main goal set by the customer from ABB side i.e., Aneta Vulgarakis and Jonas Bronmark regards the improvement of information flow between factory employees. In fact, they want to investigate if the introduction of a social media application in the daily communication process could be beneficial. The goal of the product is for employees to be able to share knowledge quickly and simple.

1.2. Document Overview

The acceptance test report document contains : scope, referenced documents, test specifications and results. This document provides a detailed description of each test specification, the requirement it tests and the results of the tests. The test procedures explain the actions step-by-step, show the expected result and any special condition that is necessary for testing. Each requirement from the Requirement Document includes a unique identification (ID) and specified functionality. The test cases will be used by the team to check if the system meets the requirements.

1.3. Security Test and Evaluation

In our case, the security test includes problems with accessibility. One user cannot access the main web page unless he is logged in. Moreover, mobile user needs also to log in in order to access the application.

2. REFERENCED DOCUMENTS

The following documents are either referenced in or were used in preparation of this document:

2.1. Project Specific Document References

Requirements Specification version 0.1 for the project Social Media for the Process Automation Industry November 6, 2013

Design Document version 0.1 for the project Social Media for the Process Automation Industry November 6, 2013

3. TEST SPECIFICATIONS AND RESULTS

3.1. Features to be Tested

The principal features to be tested are categorized into the following areas:

- a) Accessibility
- b) Security
- c) External Interfaces

3.2. Features not to be tested

- a) Performance
- b) System Compatibility

3.3. Pass/Fail Criteria

Any discrepancies identified are classified as one of three types defined in Table 3-1:

Table 3-1 Severity Rankings for Discrepancies

Severity	Description
Critical	Discrepancies that halt further program execution. Example: run-time errors that cause the system to lock up in an unexplained or unexpected way.
Major	Discrepancies that cause the application not to perform as functionally required. Example: inability to view feeds.
Minor	Discrepancies that are not considered critical or major. Examples: misspellings on a screen.

3.4. Input Specifications

See the Operator Action column for the detailed input specifications in Section 3.6

3.5. Output Specifications

See the Expected Results column for the expected outputs of each operator action in Section 3.6.

3.6. Test Specifications and Procedures

WEB USER

Test Name: Test Case 1: Navigation through the web page (view all feeds).
Description: The web user should be able to navigate into the web page and he should be able to view every section he clicks on.
Prerequisites: N/A

Step	Operator Action	Expected Results	Observed Results	Pass/Fail
1.	Web user logs in with correct credentials.	The system shows the main web page which is used to navigate by the web user and view the posted feeds by both sensor and human users.	The system shows the main web page which is used to navigate by the web user and view the posted feeds by both sensor and human users.	Pass

1.1	The credentials are not correct	The system shows a message telling that the password or username is incorrect	The system shows a message telling that the password or username is incorrect	Pass
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Test Name: Test Case 2: Logout from the web page.

Description: The web user should be able to logout from the web page.

Step	Operator Action	Expected Results	Observed Results	Pass/Fail
1.	Web user clicks on the Sign Out item of the navigation menu	System logs out the web user. System redirects the web user to the log in page.	System logs out the web user. System redirects the web user to the log in page.	Pass

Test Name: Test Case 3: Feed Categorization.

Description: The web user should be able to categorize the feeds posted in the home page.

Prerequisites: The web user is logged in to the web page.

Step	Operator Action	Expected Results	Observed Results	Pass/Fail
1.	The web user clicks on the right side of "Feed Selection" button.	The system gives the web user three alternatives to click (critical, warning, All) that represent feed categories.	The system gives the web user three alternatives to click (critical, warning, All) that represent feed categories.	Pass
2.	The web user selects one of the alternatives.	The system displays the list of latest feeds according to the category option chosen by the user.	The system displays the list of latest feeds according to the category option chosen by the user.	Pass

Test Name: Test Case 4: Publish notes.

Description: The web user should be able to publish his own notes to the main page.

Prerequisites: The web user is logged in to the web page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	The web user clicks on the right side of "Publish" button.	The system gives the web user two alternatives to click (picture, note).	The system gives the web user two alternatives to click (picture, note).	Pass
2.	The web user clicks on the "Note" alternative.	The system displays a pop-up where the web user can select the note type (StickyNote, WorkPost or VacationPost) and enter the content of the text that he wants to publish as a note.	The system displays a pop-up where the web user can select the note type (StickyNote, WorkPost or VacationPost) and enter the content of the text that he wants to publish as a note.	Pass
3.	The web user chooses the note type (StickyNote, WorkPost or VacationPost) and fills the content of note that he wants to post. The web user clicks on the "Post new note" button.	The text that the web user entered is posted on the top of list of feeds.	The text that the web user entered is posted on the top of list of feeds.	Pass
3.1	The web user fills in the content but he does not want to publish the note anymore. The web user clicks on the "Close" button.	No note is posted on the web page.	No note is posted on the web page.	Pass
3.2	The web user does not fill in the content of the text i.e., he leaves it blank. The web user clicks on the "Post new note" button.	The system displays a message that says that some text must be inserted.	The system displays a message that says that some text must be inserted.	Pass

Test Name: Test Case 5: Post comments.
Description: The web user should be able to post comments related to existing feeds in the web page.
Prerequisites: The web user is logged in to the web page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	The web user positions on the comment text field below a post. The web user fills in the content of the comment. The web user clicks on the "Post" button.	The comment is posted below the post and its existing comments.	The comment is posted below the post and its existing comments.	Pass
1.1.	The web user starts with writing the comment but decides not to publish it. The web user clicks on the "Cancel" button.	The comment is not posted.	The comment is not posted.	Pass
1.2	The web user does not fill in the the text field for the comment. The web user clicks on the "Post" button.	No changes are made in the system.	No changes are made in the system.	Pass

Test Name: Test Case 6: Load more feeds.
Description: The web user should be able to load more feeds that have been posted earlier in the webpage.
Prerequisites: The web user is logged in to the web page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	The web user goes to the bottom of the web page. The web user clicks on the "Load more feeds" button.	More feeds are loaded and shown in the web page.	More feeds are loaded and shown in the web page.	Pass

Test Name: Test Case 7: Tag users in a post.
Description: The web user should be able to tag users in a post.
Prerequisites: The web user is logged in to the web page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	The web user clicks on the ComboBox to select the note type.	ComboBox lists the note types.	ComboBox lists the note types.	Pass
1.1.	The web user chooses the note type.	The note type appears in the ComboBox as the chosen one.	The note type appears in the ComboBox as the chosen one.	Pass
2.	The web user enters the text of the note.	Entered text appears in the text area.	Entered text appears in the text area.	Pass
3.	The web user clicks on the ComboBox "Tag users".	ComboBox lists all the users which can be tag.	List of users by it's username.	Pass
3.1	Web user clicks on the users which he wants to tag.	Tagged users appear in the selected area.	Tagged users appear in the selected area.	Pass
3.2.	Web user clicks on the "Post new note" button.	New note is posted on the web page.	New note is posted on the web page.	Pass

Test Name: Test Case 8: View Profile
Description: The web user should be able to see his user profile.
Prerequisites: The web user is logged in to the web page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Web user clicks on "Username" in the feed page.	Website redirects to the user profile page.	Website redirects to the user profile page.	Pass

MOBILE USER

Test Name: Test Case 9: Navigation through the mobile pages (view all feeds).
Description: The mobile user should be able to navigate into the mobile page and he should be able to view every section he clicks on (scrolls).
Prerequisites: N/A

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user logs in with correct credentials.	The system shows the main feed page which is used to navigate by the mobile user and view the posted feeds by both sensor and human users.	The system shows the main feed page which is used to navigate by the mobile user and view the posted feeds by both sensor and human users.	Pass
1.1	The credentials are not correct	The system shows a message telling that the password or username is incorrect	The system shows a message telling that the password or username is incorrect	Pass

Test Name: Test Case 10: View Feeds
Description: The mobile user should be able to view the feeds displayed in the site.
Prerequisites: The mobile user should access the "ABB Connect" Windows Phone application (The mobile user is logged in).

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on "Feeds".	The system displays the latest feeds that have been recently posted based on the chosen filter. By default, all human and sensor feeds are displayed.	The system displays the latest feeds that have been recently posted based on the chosen filter. By default, all human and sensor feeds are displayed.	Pass

Test Name: Test Case 11: Publish notes.
Description: The mobile user should be able to publish notes in the site.
Prerequisites: The mobile user should access the "ABB Connect" Windows Phone application (The mobile user is logged in).

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on "Post".	The system displays the page where the mobile user have the possibility for inserting the picture or (and) text that will be published.	The system displays of latest feeds that have been recently posted.	Pass
2.	Mobile user enters the note text in the "Content" text field. Mobile User clicks on the "Publish" button.	The note is published and added in the list of published feeds. A pop-up is shown and it says that the note is published.	The note is published and added in the list of published feeds. A pop-up is shown and it says that the note is published.	Pass
2.1	Mobile user starts writing the note but does not want to publish it. Mobile user clicks the "Hardware" button in order to not post the note.	The note is not published on the site. A pop-up is shown and it says that the note is not published.	The note is not published on the site. A pop-up is shown and it says that the note is not published.	Pass

Test Name: Test Case 12: View Profile.
Description: The mobile user should be able to view his user profile.
Prerequisites: The mobile user should access the “ABB Connect” Windows Phone application (The mobile user is logged in).

Step	Operator Action	Expected Results	Observed Results	Pass/Fail
1.	Mobile user clicks on "Profile".	The system redirects to the user information that includes his name, email, phone number and location.	The system redirects to the user information that includes his name, email, phone number and location.	Pass
2.	Mobile user clicks on the phone number.	The systems displays a message by asking the user if he wants to call the number.	The systems displays a message by asking the user if he wants to call the number.	Pass
2.1	Mobile user decides to call the number and clicks "Yes".	The system establishes a phone call with the phone number that the mobile user clicked.	The system establishes a phone call with the phone number that the mobile user clicked.	Pass
2.2	Mobile user decides to not call the number and clicks "No".	The system does not establish a phone call with the phone number that the mobile user clicked.	The system does not establish a phone call with the phone number that the mobile user clicked.	Pass
3.	Mobile user clicks on the email.	The system redirects the mobile user to the page where he can send an email to the email address he clicked.	The system redirects the mobile user to the page where he can send an email to the email address he clicked.	Pass

Test Name: Test Case 13: Load more feeds.
Description: The mobile user should be able to load and view more feeds that have been posted earlier than the ones that are currently shown.
Prerequisites: 1. The mobile user should access the “ABB Connect” Windows Phone application (The mobile user is logged in).
2. The mobile user is located on the “Feed” page.

Step	Operator Action	Expected Results	Observed Results	Pass/Fail
1.	Mobile clicks on the "Load more feeds" button which is situated in the bottom of the list of published feeds.	The system loads and displays other feeds that have been published earlier.	The system loads and displays other feeds that have been published earlier.	Pass

Test Name: Test Case 14: View Comments.
Description: The mobile user should be able to view comments that are attached to a post.
Prerequisites: 1. The mobile user should access the "ABB Connect" Windows Phone application (The mobile user is logged in).
 2. The mobile user is located on the "Feed" page.

Step	Operator Action	Expected Results	Observed Results	Pass/Fail
1.	Mobile user clicks on the content (text) of a feed.	The system redirects the main feed that was clicked by the mobile user.	The system redirects the main feed that was clicked by the mobile user.	Pass
2.	Mobile user clicks on "Comments".	The system displays the comments that are attached to the feed.	The system displays the comments that are attached to the feed.	Pass

Test Name: Test Case 15: View Tags.
Description: The mobile user should be able to view tags that are attached to a post.
Prerequisites: 1. The mobile user should access the "ABB Connect" Windows Phone application (The mobile user is logged in).
 2. The mobile user is located on the "Feed" page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on the content (text) of a feed.	The system zooms the main feed that was clicked by the mobile user.	The system zooms the main feed that was clicked by the mobile user.	Pass
2.	Mobile user clicks on "Tags".	The system displays the main tags that are attached to the feed.	The system displays the main tags that are attached to the feed.	Pass
3.	Mobile user clicks on one of the names of the users that are tagged in the post.	The system redirects to the profile page of that user.	The system redirects to the profile page of that user.	Pass

Test Name: Test Case 16: View Filters.
Description: The mobile user should be able to view filters that are attached to a post.
Prerequisites: The mobile user should access the "ABB Connect" Windows Phone application (The mobile user is logged in).

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on "Filters".	The system displays two checkboxes: One for Human feeds and one for Sensor feeds. The system displays also all the saved feeds that the user has in a list format.	The system displays two checkboxes: One for Human feeds and one for Sensor feeds. The system displays also all the saved feeds that the user has in a list format.	Pass
2.	Mobile user unticks one checkbox. Mobile user clicks on "Feeds".	The system loads and shows the feeds of the type that is not unticked.	The system loads and shows the feeds of the type that is not unticked.	Pass

2.1	Mobile user clicks both checkboxes.	The system loads and shows both human and sensor feeds.	The system loads and shows both human and sensor feeds.	Pass
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Test Name: Test Case 17: Tag users in a post.
Description: The mobile user should be able to tag users in a post.
Prerequisites: 1. The mobile user should access the “ABB Connect” Windows Phone application (The mobile user is logged in).
 2. The mobile user clicks on “Post” and enters the content (text) in the textfield.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on the ”Tag” button.	The system redirects the mobile user to the ”Tag user(s) page.	The system redirects the mobile user to the ”Tag user(s) page.	Pass
2.	Mobile user clicks the names of the users that will be tagged in the post.	The system lists these selected users in the bottomside of the page, under ”Selected users:”. These users disappear from the list of users that can be tagged to the post.	The system lists these selected users in the bottomside of the page, under ”Selected users:”. These users disappear from the list of users that can be tagged to the post.	Pass
3.	Mobile user clicks on the ”Done” button in the bottom of the page.	The system adds the tags to the post.	The system adds the tags to the post.	Pass
3.1	Mobile user clicks on one/some of the names listed under ”Selected users:” in order to untag them.	The system removes the tags from the post. These users appear again in the list of users that can be tagged to the post.	The system removes the tags from the post. These users appear again in the list of users that can be tagged to the post.	Pass

Test Name: Test Case 18: View New Feeds.
Description: The mobile user should be able to view new feeds that have been recently published.
Prerequisites: 1. The mobile user should access the “ABB Connect” Windows Phone application (The mobile user is logged in).
 2. The mobile user is located on the “Feed” page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on the "Refresh" button in the right bottom side of the page.	The system loads the feeds that have been recently added by the mobile user or other users. They are shown on top of the list. A text that says how many feeds are added is shown.	The system loads the feeds that have been recently added by the mobile user or other users. They are shown on top of the list. A text that says how many feeds are added is shown.	Pass
1.1	No new feeds have been added recently. Mobile user clicks the "Refresh" button, anyway.	The system does not load any new feed i.e., the list of feeds is not updated.	The system does not load any new feed i.e., the list of feeds is not updated.	Pass
1.2	30 seconds have passed since the last update.	The system updates the feed list automatically.	The system updates the feed list automatically.	Pass

Test Name: Test Case 19: Add Comment(s) to Feeds.
Description: The mobile user should be able to add comments to feeds that are displayed in the feed list.
Prerequisites:

1. The mobile user should access the "ABB Connect" Windows Phone application (The mobile user is logged in).
2. The mobile user is located on the "Feed" page.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on the feed that he wants to comment.	The system zooms the selected feed.	The system zooms the selected feed.	Pass
2.	Mobile user clicks on "Comments".	The system redirects the user to the "Comment" page.	The system redirects the user to the "Comment" page.	Pass
3.	Mobile enters the comment text in the textfield and then clicks on the "Publish" button.	The system adds the comment to the feed and displays a message "Comment published". The comment is also visible on top of the other comments.	The system adds the comment to the feed and displays a message "Comment published". The comment is also visible on top of the other comments.	Pass

Test Name: Test Case 20: Search Users.
Description: The mobile user should be able to search for users.
Prerequisites: The mobile user should access the “ABB Connect” Windows Phone application (The mobile user is logged in).

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on the "Search" button.	The system displays the textfield so the mobile user can input the name of the user that he wants to search.	The system displays the textfield so the mobile user can input the name of the user that he wants to search.	Pass
2.	Mobile users starts inputing characters in the texfield for getting the user he wants.	The system lists the name(s) of user(s) that correspond to the characters entered, based on first name, last name and username.	The system lists the name(s) of user(s) that correspond to the characters entered, based on first name, last name and username.	Pass
3.	Mobile user clicks on the name of one user.	The user gets redirected to the user profile page.	The user gets redirected to the user profile page.	Pass

Test Name: Test Case 21: View Activity Feed related to a user.
Description: The mobile user should be able to view the feeds related to a user that are listed by the system.
Prerequisites: 1. The mobile user should access the “ABB Connect” Windows Phone application (The mobile user is logged in).
 2. The mobile user shall be located on the “Profile” page of the wanted user.

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks the "Activity".	The systems shows the feeds the user has commented on and the feeds he has been tagged in .	The systems shows the feeds the user has commented on and the feeds he has been tagged in .	Pass

Test Name: Test Case 22: Log out from the Windows Phone application.

Description: The mobile user should be able to log out from the Windows Phone application.

Prerequisites: The mobile user should access the “ABB Connect” Windows Phone application (The mobile user is logged in).

Step	Operator Action	Expected Results	Observed Results	Pass/ Fail
1.	Mobile user clicks on the ”three dots” at the bottom right of the page	System extends the pop-up at the bottom of the page.	System extends the pop-up at the bottom of the page.	Pass
2.	Mobile user clicks ”Logout” at the bottom left side of the pop-up.	The system displays the message “You will logout if you click here” which is associated by an “Ok” button.	The system displays the message “You will logout if you click here” which is associated by an “Ok” button.	Pass
3.	Mobile user clicks the ”Ok” button.	Mobile user is logged out from the application. The system redirects the mobile user to the login page.	Mobile user is logged out from the application. The system redirects the mobile user to the login page.	Pass
3.1	Mobile user does not click the ”Ok” button. Instead, he clicks the ”Cancel” button.	Mobile user is not logged out from the application.	Mobile user is not logged out from the application.	Pass

3.7. Test Allocation of Requirements

FR ID	BR ID	Requirement Description	Test Case where verified
FR.07		Every human user shall be able to log in to both applications by providing username and password.	1 and 7
FR.01	BR.04	Every user shall be able to post notes to the system.	4 and 9
FR.04	BR.07 BR.14	The system shall provide static and dynamic ways of filtering feeds.	3 and 14
FR.12	BR.17	A human user should be able to comment to a note.	5 and 17
FR.03		The system should characterize every post/action with the time and date it was published.	4 and 9
FR.06	BR.12	The system shall include user information in every post/action.	4 and 9
FR.10		The system shall provide a way of connecting a human user with a post.	15
FR.05	BR.05 BR.07	A human user shall be able observe the AF of a sensor/human.	19
FR.08		Each user shall have his own AF.	19
FR.11	BR.05	A human user shall be able to view the general information about another user or a sensor.	10
FR.13	BR.18	A human user should be able to save a filter for the feeds.	3 and 14
FR.14	BR.12	The system shall include location information in every post.	4 and 9
FR.16		Posts published outside of working hours of a user shall be distinguished with less importance.	3 and 14

The table above allocates the most important requirements stated in the “Requirements Definition” document to the test cases presented in the previous section. FR implies functional requirements while BR goes for business requirements.