3rd Semester Project - Acceptance test

Group 2

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Participants:

Student number	Name	Initials	Studies
201409553	Alex Imhof	AI	E
201205675	Hans Brock Andersen	HBA	E
201407822	Nikolaj Pedersen	NP	E
201409552	Andreas Lüdemann	AL	IKT
20115758	Ole Clausen	OC	IKT
201407641	Christoffer Søby Høj	CSH	IKT
201409551	Daniella Tola	DT	E

Supervisor: Michael Alrøe

Ver.	Date	Initials	Description
0.01	13.03.16	All members	First version

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General Test Setup

All the subsystems in the FLEX-VAULT are connected, as they should, to each other. The system is turned on, and the single board computers are all programmed with a test program.

When the Use Cases are referring to a specific GUI page, see figure **??**.

Test Setup Use Case 1 - Log In to System

The general test setup is used.

Use Case 1: Log In to System	Test:	Expected Result:	Result:	Comments:
1) User or Admin selects the ID field	Visual test	System displays on-screen keyboard		
2.1) User enters their ID in the ID field, and enters their password in the password field. User selects *Login*.	Visual test	System displays the `User Box Access` GUI page.		
2.2) Admin enters their ID in the ID field, and enters their password in the password field. Admin selects *Login*.	Visual test	System displays the `Admin Main Menu` GUI page.		
3) Exception 1: ID and password do not match	Visual test	System displays the `Login Failed` GUI dialog.		
4) User or Admin selects *OK*.	Visual test	Dialog closes, and system displays the `Login` GUI page.		

Test Setup Use Case 2 - Log Out of System

The general test setup is used. Admin is logged in to the system, and the system displays the `Admin Main Menu` GUI page. Or User is logged in to the system, and the system displays the `User Box Access` GUI page.

Use Case 2: Log Out of System	Test:	Expected Result:	Result:	Comments:
1) User or Admin selects *Log out*.	Visual test	System displays the `Login` GUI page.		

Test Setup Use Case 3: User Access SDB

The General test setup is used and a User who has privileges to at least one SDB is logged in.

Use Case 3: User Access SDB	Test:	Expected Result:	Result:	Comments:
1) User selects the desired SDB.	Visual test	The desired SDB is highlighted in the GUI page.		
2) User selects *Retrieve*	Visual test	The system displays the `Box Retrieval` GUI page.		
3) User waits until SDB is retrieved and opens hatch and places an item that is within the weight limit.	Visual test	System enables the return button when SDB is fully retrieved.		
4) User closes hatch and selects Return.	Visual test	System returns SDB and displays User Box Access GUI page.		

Test Setup Use Case 3: User Access SDB[Exception 1: Content is too heavy]

The General test setup is used and User is logged in.

Use Case 3: User Access SDB[Exception 1: Content is too Heavy]	Test:	Expected Result:	Result:	Comments:
1) User selects the desired SDB.	Visual test	The desired SDB is highlighted in the GUI page.		
2) User selects *Retrieve*.	Visual test	The system displays the `Box Retrieval` GUI page.		
3) User waits until SDB is retrieved and opens hatch and places an item that is too heavy.	Visual test	System enables the return button when SDB is fully retrieved.		
4) User closes hatch and selects Return.	Visual test	*Weight Warning* GUI dialog is displayed and closes after 4 seconds		
5) User takes item from SDB and places one that is within weight limit.	Visual test	*User Box Access GUI* page is displayed.		
6) User closes hatch and selects Return.	Visual test	System returns SDB and displays User Box Access GUI page.		

Test Setup Use Case 4: Admin Access SDB

The General test setup is used and Admin is logged in.

Use Case 4: Admin Access SDB	Test:	Expected Result:	Result:	Comments:
1) Admin selects *Safe Deposit Boxes.*	Visual test	The system displays the `Admin Box Access` GUI page.		
2) Admin selects the desired SDB.	Visual test	The desired SDB is highlighted in the GUI page.		
3) Admin selects *Retrieve.*	Visual test	The system displays the `Box Retrieval` GUI page.		
4) Admin waits until SDB is retrieved and opens hatch and places an item that is within the weight limit.	Visual test	System enables the return button when SDB is fully retrieved.		
5) Admin closes hatch and selects Return.	Visual test	System returns SDB and displays User Box Access GUI page.		

Test Setup Use Case 4: Admin Access SDB[Exception 1: Content is too heavy]

The General test setup is used and Admin is logged in.

Use Case 4: Admin Access SDB[Exception 1: Content is too Heavy]	Test:	Expected Result:	Result:	Comments:
1) Admin selects *Safe Deposit Boxes.*	Visual test	The system displays the `Admin Box Access` GUI page.		
2) Admin selects the desired SDB.	Visual test	The desired SDB is highlighted in the GUI page.		
3) Admin selects *Retrieve.*	Visual test	The system displays the `Box Retrieval` GUI page.		
4) Admin waits until SDB is retrieved and opens hatch and places an item that is too heavy.	Visual test	System enables the return button when SDB is fully retrieved.		
5) Admin closes hatch and selects Return.	Visual test	System displays *Weight Warning* GUI dialog.		
6) Admin takes item from SDB and places one that is within weight limit.	Visual test	The *Weight Warning* GUI dialog closes and system displays the *Admin Box Access* GUI page.		
7) Admin closes hatch and selects Return.	Visual test	System returns SDB and displays *Admin Box Access* GUI page.		

Test Setup Use Case 5: Create/Delete User

Use Case 5: Create/Delete User	Test:	Expected Result:	Result:	Comments:
1) Admin selects the *Users* button on the `Admin Main Menu` GUI page.	Visual test	The system displays the `User Configuration` GUI page.		
2) Admin selects *Create*.	Visual test	`User Creation` GUI page opens with OK button disabled.		
3) Admin enters new user ID in the ID field and a password in the password field	Visual test	The OK button is enabled.		
4) Admin selects *OK*.	Visual test	The dialog closes and the newly created user now appears on the users list on `User Configuration` GUI page.		
5) Admin selects the newly created user on the users list and selects *Delete*.	Visual test	The dialog closes and the newly created user is removed from the users list.		
8) Admin selects *Back*.	Visual test	The system displays the `Admin Main Menu` GUI page.		

Test Setup Use Case 6: Configure User Privileges

The General test setup is used.

Use Case 6: **Configure User Privileges**	**Test:**	**Expected Result:**	**Result:**	**Comments:**
1) Admin selects *Users*.	Visual test	`User Configuration` GUI page opens.		
2) Admin selects a user on the users list and selects `Privileges`.	Visual test	`User Privileges` GUI page opens with the selected user's current privileges shown.		
3) Admin selects *Add*.	Visual test	`Add User Privileges` GUI page opens.		
4) Admin selects a safe deposit box and selects *OK*.	Visual test	`Add User Privileges` GUI page closes and selected safe deposit box appears in the list of safe deposit boxes on `User Privileges` GUI page.		
5) Admin selects a safe deposit box on the list of safe deposit boxes and selects *Delete*.	Visual test	Selected safe deposit box is deleted from privileges list.		
6) Admin selects a safe deposit box on the list of safe deposit boxes and selects *Retrieve*.	Visual test	`Box Retrieval` GUI page opens and SDB starts being retrieved.		
7) Admin waits until SDB is retrieved and opens hatch and places an item that is within the weight limit.	Visual test	Return button is enabled when SDB is fully retrieved.		
8) Admin closes hatch and selects Return.	Visual test	SDB returns and `User Configuration` GUI page is displayed.		
9) Admin selects *Back*.	Visual test	`User Configuration` GUI page is displayed.		
10) Admin selects *Back*.	Visual test	`Admin Main Menu` GUI page is displayed.		

Test Setup Use Case 7: Access Log

The General test setup is used. Admin is logged in, and system is displaying `Admin Main Menu`.

Use Case 7: Access Log	Test:	Expected Result:	Result:	Comments:
1) Admin selects *Log*.	Visual test	`Activity Log` GUI page opens.		
2) Admin selects `Back`.	Visual test	`Admin Main Menu` GUI page opens.		

Test Setup Nonfunctional Requirements

The system must be able to handle at least 5 SDB.	Test:	Expected Result:	Result:	Comments:
1) User do UC3 with 5 different SDB	Visual test	All five SDB tested will be retrieved for the user.		

The system must be able to measure the weight of a SDB with a precision of at least 10g.	Test:	Expected Result:	Result:	Comments:
1) An item of known weight are placed into a SDB	Measurement	Weight is registered in the system		
2) Weight registered in system is compared to the known weight.	Calculation	The difference is calculated to be less than 10 g.		

The system must reach within ± 1 cm of the specified safe deposit box with its head.	Test:	Expected Result:	Result:	Comments:
1) Measure the distance between the heads HALL element and a magnet at a fixed position	Measurement	Measured distance is less than 1 cm		

The system must be able to retrieve the specified SDB within 60 s of the order being issued	Test:	Expected Result:	Result:	Comments:
1) Using a timer, measure the time it takes to complete UC3	Measurement	Measured time is less than 60 s		

The system must handle at least 100 g of mass in the safe deposit boxes.	Test:	Expected Result:	Result:	Comments:
1) Place exactly 100 g into a SDB and perform UC3	Visual test	System is able to perform UC3, without errors		

The system must log the current user out after 2 min inactivity.	Test:	Expected Result:	Result:	Comments:
1) Perform UC1 and wait for 2 min	Visual test	System automatically logs out after the 2 min have passed.		