



Software Engineering Test Case Template and Examples

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Test Case Template (Simple test)

Pre-conditions: Must have the app downloaded and installed or access through a web browser be able to log in with credentials. Input and EMS message.

Step	Action	Expected System Response	Pass / Fail	Comment
1	Log into the app	Pulls up the login page and lets customers input email and password.	P	Works -BM
2	Click on EMS tab	Sends you to the EMS page to generate a map of the river and has a text entry for customers to input their location.	P	Works -BM
3	CCC receives message	The employee gets alerted of an EMS Message able to access and send a response back to the customer.	P	Message is sent -BM
4	CCC forward information to appropriate EMS	Sends information out to EMS crew or workers for a non emergency pickup	P	Can't replicate, out of scope of app -BM
5	CCC sends message to customer	CCC sends a message back stating that EMS has been notified of the location and are working to get to them quickly.	P	Can't replicate, out of scope of app -BM
6	Customer is able to receive message	Customers should get notified of a new message they should follow instructions.till EMS arrives.	P	Can't replicate, out of scope of app -BM

Post-conditions: Owners will be sending a message back to the customer through the app or web browser. Alerting them that ems is on there way or they are sending out a rescue team to get them.

Test Case Template (Simple test)

Precondition: Have an admin account set up, and the user is entrusted with the admin root escalation password - allowing them to interact with super admin capabilities on the admin portal.

Step	Action	Expected System Response	Pass / Fail	Comment
1	Log into the app as an Admin	Pulls up login in page and lets admin input email and password./	P	Works -BM
2	Click on manage staff page and create an admin and employee	Admin will be let known to create an admin requires root. The admin will be able to create a standard employee.	P	Works (looks a bit wonky) -BM
3	Elevate permissions by going to the home page, click elevate permissions, and enter root password.	Assuming the admin entered in root password in three tries or less, they are treated as a super admin	P	Works (looks a bit wonky) -BM
4	Repeat step two	Admin (now super admin) can create both staff types	P	Works -BM

Postcondition: only super admins are able to make admin accounts. Admins and super admins can make employee accounts.

Test Case Template (Simple test)

Precondition: Have an existing customer account

Step	Action	Expected System Response	Pass / Fail	Comment
1	Log into the interface with the customer account.	The customer should be greeted with a JS alert telling them to be on land by 8:00 pm	P	Works -BM
2	Acknowledge the JS alert by pressing Okay.	The customer dashboard appears and a session token along with a CSRF token is assigned to the user. Note: The session token is appended to the end of the URL ?st=<session token>.	P	Works -BM
3	Go to the update account tab of UI via the sidebar	The user will be prompted to enter an email.	P	Works -BM
4	Give account email.	The email bridge will give an OTP which is used to verify the user.	P	Works -BM
5	Log into your email that you gave and find the OTP given by the system. Then enter it on the verify OTP page.	The system will look at the MFA table of the database, compare the record on hand, and see if the OTP is correct. If correct. Assuming correct OTP, the user can then update or delete the account	P	Works -BM
6	Update the account details	New details are logged in DB	P	Works -BM
7	Conform the new account records by logging out and logging back in with the new credentials.	The user should be regretted with the JS alert saying to be on the land by 8:00 pm.	P	Works -BM

Postcondition: Customers can update account details on their own

Test Case Template (Simple test)

Precondition: Have an existing customer account

Step	Action	Expected System Response	Pass / Fail	Comment
1	Log into the interface with the customer account.	The customer should be greeted with a JS alert telling them to be online by 8:00 pm	P	Works -BM
2	Acknowledge the JS alert by pressing Okay.	The customer dashboard appears and a session token along with a CSRF token is assigned to the user. Note: The session token is appended to the end of the URL ?st=<session token>.	P	Works -BM
3	Go to the update account tab of UI via the side bar	The user will be prompted to enter an email.	P	Works -BM
4	Give account email.	The email bridge will give an OTP which is used to verify the user.	P	Works -BM
5	Log into your email that you gave and find the OTP given by the system. Then enter it on the verify OTP page.	The system will look at the MFA table of the database, compare the record on hand, and see if the OTP is correct. If correct. Assuming correct OTP, the user can then update or delete the account	P	Works -BM
6	Once on the update account details. Delete the account.	All the account details are deleted including the chat history, user records, MFA records, emergency records, reviews, etc. The information of the parent table is cascaded to children relationships in the database. The system will log out the user once the account is deleted.	P	Works -BM
7	Conform account is deleted by trying to login with account credentials.	The system will say the account does not exist. The user will have to remake the account.	P	Works, when creating new account email verification message doesn't show on screen until after verification -BM

Postcondition: Customers can delete their own accounts.

Test Case Template (Complex Test)

Preconditions: Have admin account, customer account, and an employee account.

Step	Action	Expected System Response	Pass / Fail	Comment
1	On the log in menu first login as the admin account	User is directed to the admin portal.	P	No issue -BM
2	Go to chat.	user is at chat menu	P	No issue -BM
3	Enter in the following as a chat message <script>alert("Hello, world!");</script>	Jinja2 and plain text rendering scrubs the Cross site scripting (XSS) payloads and renders a ‘ ‘ ’ message. The safe scrubbed message is logged in message table and is rendered in chat.	P	No issue -BM
4	See Postcondition 1		P	No issue -BM
5	Log out of the admin interface and repeat steps 1-3 for the customer account.	A similar outcome to step 3 but for customers.	P	No issue -BM
6	See Post condition 2		P	No issue -BM
7	Log out of the customer interface but repeat steps 1-3 for the employee account.	Similar outcome for step 3 but for employees.	P	No issue -BM
8	See post condition 3		P	No issue -BM

Post conditions

1. Admins and super admins are unable to exploit the chat system via XSS and inject unwanted script payloads.
2. Customers cannot exploit the chat system via XSS.
3. Employees cannot exploit the chat system via XS

