

Test Approach

- **Entry criteria:** availability of business requirements or user stories.
- **Scope:** login functionality.
- **Test types:** component UI testing, functional testing of API-endpoint and verifying E2E scenarios.
- **Test environment:** the latest versions of the following browsers – Google Chrome, Mozilla Firefox, Edge, Opera, Safari.
- **Exit criteria:** no blocker, critical or major defects found; all tests with “high” and “middle” priority have passed.

Test Cases

End-to-end test cases

1. *Title:* Successful login with valid credentials (email in lower case)

Priority: High

Preconditions	Steps	Expected results
User has an active account in the system	1. Open “Anmelden” page	<ul style="list-style-type: none">• “Mit Kundenkonto einloggen” section is displayed• empty e-mail and password inputs with placeholders are displayed in the section• enabled “Anmelden” button is displayed
	2. Specify a valid existing email (all letters in lower case)	The specified email is displayed in the field
	3. Specify a valid existing password	The specified password is displayed in the field in a masked form
	4. Click “Anmelden” button	<ul style="list-style-type: none">• The spinner showing authentication process is displayed.• “Mein Konto” page is opened

2. Successful login with valid credentials, but email is in a wrong case (case-insensitive)
3. Successful login with a new password after changing
4. Successful login with correct email and password of max length (values are not truncated)
5. Unsuccessful login with a correct email but wrong password
6. Unsuccessful login with a correct password but wrong email
7. Unsuccessful login with a correct email but blank password

8. Unsuccessful login with a correct password but blank email
9. Unsuccessful login with correct email and password in wrong case (case-sensitive)
10. Unsuccessful login with an old password after changing
11. Unsuccessful login with valid credentials of deactivated account
12. Unsuccessful login with valid credentials of removed account
13. Clicking “Back” button after authorization doesn’t lead to log off.

Component UI tests

1. Validation on entering an email in a wrong format exists
2. Pasting value to login/password fields is allowed
3. Copying from password field is not allowed
4. Login by pressing “Enter” in email field is allowed
5. Login by pressing “Enter” in password field is allowed
6. Showing/hiding masked values in password field is allowed
7. Simultaneous authorization in different browsers under the same account is allowed
8. Verifying session timeout.

API tests for POST /auth/v1/{tenant}/login

1. Successful call with valid tenant and valid request body (customerNumber and password belong to the tenant)
2. Unsuccessful call with valid tenant, but customerNumber and password don’t belong to the tenant
3. Unsuccessful call with not existing tenant
4. Unsuccessful call with null tenant
5. Unsuccessful call with non-existing customerNumber and correct password
6. Unsuccessful call with existing customerNumber and wrong password
7. Unsuccessful call with existing customerNumber but without password
8. Unsuccessful call with existing password but without customerNumber
9. Unsuccessful call if stop server was stopped.