

Patient Portal Test Report

[Digilugu webpage](#)

Software Development Academy

Date: Jan 22, 2023

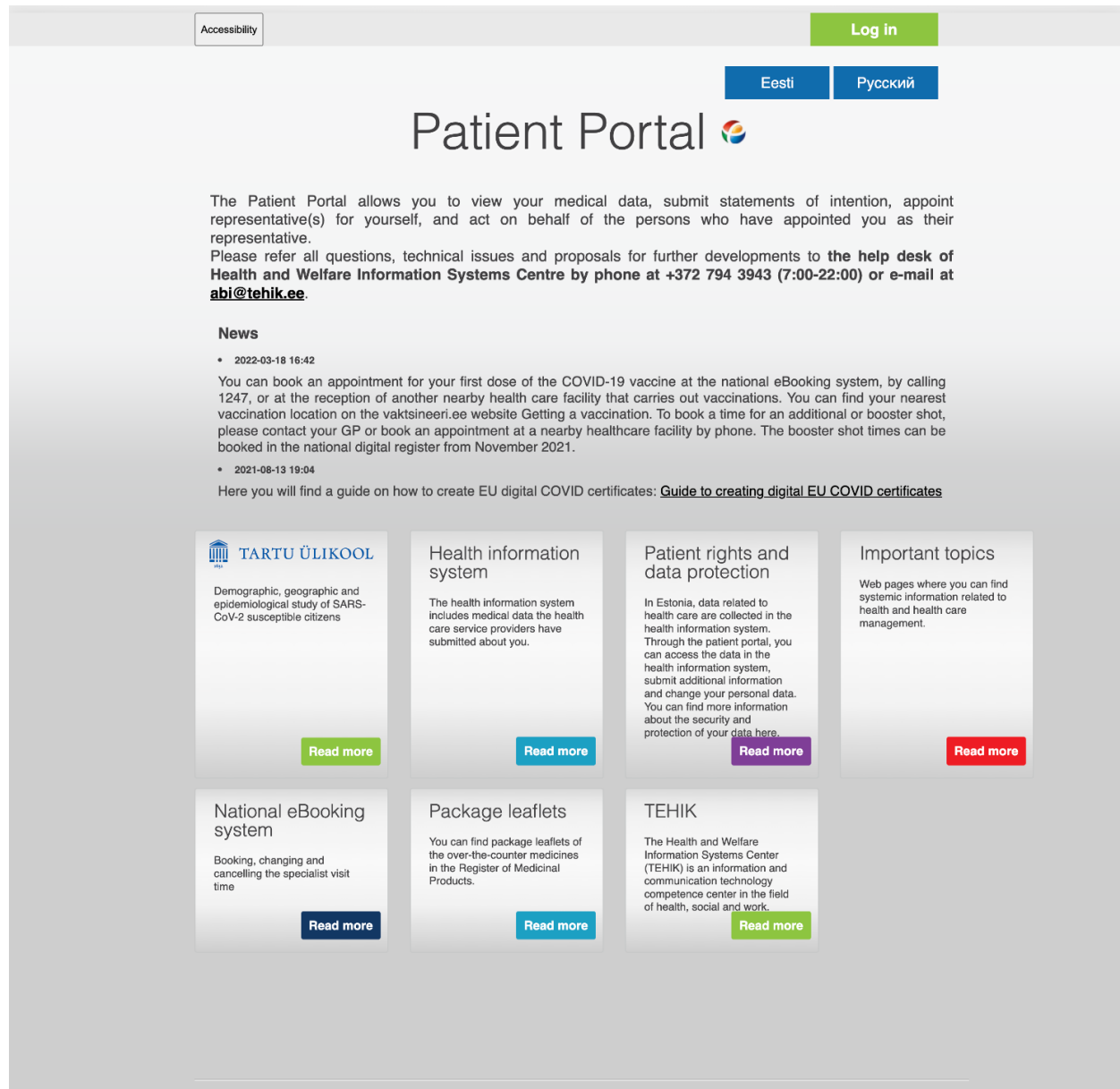
By: Keit Marjamaa

Table of Content

Document Purpose	3
Testing Section	4
Testing checklist	5
Detailed test case	7
Founded issues/bugs	11
Improvements	12
Test Designe Techniques	13
Reflection	14

Document Purpose

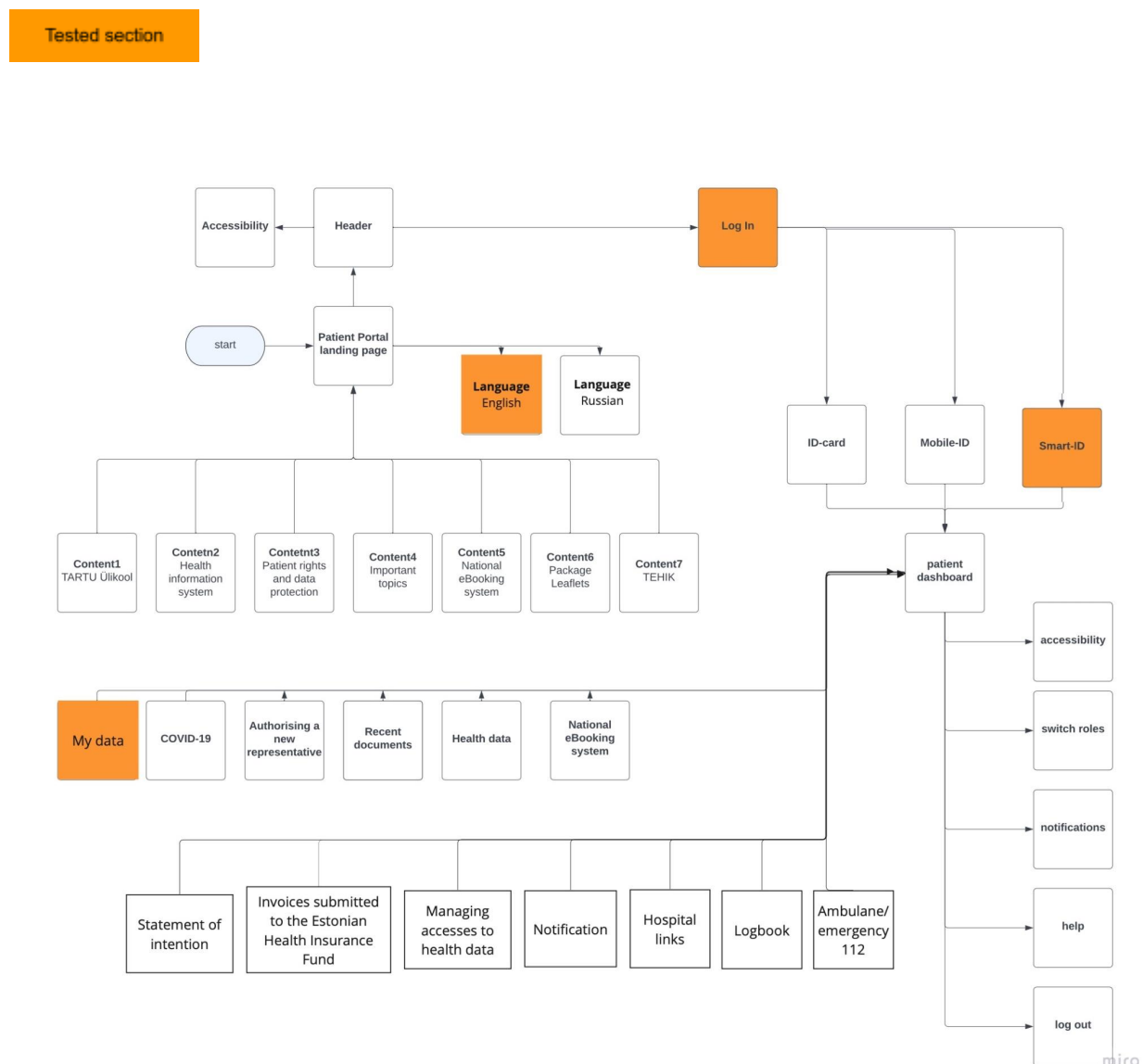
As a final project of SDA Software tester course my aim was to take a look into Estonia Patient Portal “Digilugu”. My goal was to evaluate this website as a user and analyse user experience and find bugs that are in need of improvement. During that test report I will give an overview of tested test cases, found bugs and how to improve this website overall experience.



Testing Section

To give a more clear overview of Patient portal user flow was created. I used the platform “Miro” to draw out a visual representation of the many avenues that can be taken when using the website. The flowchart begins with the consumer’s entry point on the product, like an Patient portal homepage, and ends with the final action. Tested sections are marked with orange colour.

Sidenote: This flow of rectangle shapes, action that needs to be taken, like “Log in”, can be improved by adding process shapes like a diamond, which means a decision is being made and is therefore followed by “Yes” and “No” arrows.



Testing checklist

Input & Buttons4

ID

Title

C1

Button sizes are similar

C2

The button hierarchy is clear

C3

Text links are visually different from body copy

C4

Grouped buttons clearly indicate which one is selected

Add Case

Add Subsection

Visual Desgin6

ID

Title

C5

Visual hierarchy leads user to the required action they must take or the most important information

C6

Related information should be grouped together clearly

C7

There are no more than three primary colours on the page

C8

There are enough space between information section

C9

On any page, the users can see the relevant information (without scrolling)

Add Case

Add Subsection

System2

ID

Title

C10

All clickable elements have a hover/ribble effect indicating they are clickable

C11

If anything takes longer than 3 sec the page or element will provide a loader (with a hint containing the remaining time)

Add Case

Add Subsection

Data1

ID

Title

C26

Users can easily update "My data" information

Add Case

Add Subsection

Help & Support2

ID

Title

C27

User can easily find where to delete their accounts or cancel a subscription

C28

The FAQ page should be user-friendly, divided into categories and searchable

Add Case

Add Subsection

Forms & Fields3

ID

Title

C29

Real-time validation for complex fields (password, username), the user does not find out they did something wrong after they hit enter

C30

Form text field's name is always visible

C31

There is a login or sign-in heading visible

Add Case

Add Subsection

Functionality7

ID

Title

C33

Verify that authentication works with Mobile-ID

C34

Verify that authentication works with ID Card

C35

Verify that authentication works with Smart ID

C36

Verify that the user can't login with Smart-ID without entering "Personal code"

C37

Verify that Smart-ID two way authentication works

C38

Verify that entering "Personal code" input field lets the user enter only numbers

C39

Verify that entering less than 10 digit "Personal code" shows error message

Add Case

Add Subsection

Navigation & Structure 7

ID	Title	
C12	The page you are currently on is clearly communicated and visible	>
C14	About page is easily accessible	>
C15	Menu and page terms are user-friendly and follow conventional names	>
C16	Navigation is consistent across each page/screen if the product	>
C17	User can navigate back and forth on any page/screen	>
C18	The search bar is present and visible on every page/screen if the search is a large product component	>
C19	The logo in the header is displayed on every page and lead to the main page	>

[Add Case](#) | [Add Subsection](#)

Accessibility & Compliance 8

ID	Title	
C20	The product is compatible with Google Chrome	>
C13	Support number or email is easily accessible on home page	>
C21	The contrast on the main text is not less than AA	>
C22	Active objects are visually clickable while inactive ones don't change the mouse pointer or respond when clicked	>
C23	SSL cert on your website	>
C24	When a button is not active the product tells the user why it's not	>
C25	Before performing potentially dangerous actions (e.g. deleting files) the website asks for user confirmation and explains the consequences of deleting	>
C40	Verify that selected language remains the same across the user journey	>

[Add Case](#) | [Add Subsection](#)

Detailed test cases

T20The product is compatible with Google Chrome

View Case

Edit Case

User Interface Testin > Input & Buttons > Navigation & Structure > Accessibility & Compliance

Type	Priority	Estimate	References
Other	Medium	None	None
Automation Type			
None			

Preconditions

1. Access Google Chrome web browser

2. Access to https://www.digilugu.ee/login web page

Steps

1

Click on the Google Chrome icon and open up a web browser

Google Chrome browser should open

2

Click on the URL tab and insert https://www.digilugu.ee/login

Entered WEB address should be displayed in the address section and the webpage should be opened

RESULTS & COMMENTS

HISTORY & CONTEXT

DEFECTS

Comment

1/21/2023 8:32 AM John D. Edit

Passed

1/21/2023 8:07 AM John D. Edit

Elapsed
17s

The webpage opens up with Google Chrome successfully

Steps

1

Click on the Google Chrome icon and open up a web browser

Expected Result

Google Chrome browser should open

2

Click on the URL tab and insert https://www.digilugu.ee/login

Expected Result

Entered WEB address should be displayed in the address section and the webpage should be opened

T40

Verify that selected language remains the same across the user journey ⁺

←

→

🔍

📄

🔍 View Case

✎ Edit Case

User Interface Testin > Input & Buttons > Navigation & Structure > Accessibility & Compliance

Type	Priority	Estimate	References
Other	Medium	10 minutes	None
Automation Type			
None			

Preconditions

- Access to a web browser
- Access to the "https://www.digilugu.ee/login?locale=et" webpage

Steps

1	Click on the web browsers.	The web browser should open
2	Click on the URL and go to the "https://www.digilugu.ee/login?locale=et" webpage	The user opens up "Digilugu" webpage
3	On the "Digilugu" webpage, from the top right corner, click on the "English" language button	The user clicks on the "English" button and the webpage language changes to English
4	Click on the "Log in" button	The user clicks on the "Log in" button and navigates to the log-in webpage. The Log-in page language remains the same.

RESULTS & COMMENTS 2

HISTORY & CONTEXT 2

DEFECTS 2

Comment

1/21/2023 8:31 AM John D. [Edit](#)

FAIL!

The log-in page language changed to Estonian in step 4. But it should remain in English

Failed

1/21/2023 8:25 AM John D. [Edit](#)

Defects

https://test2021a.atlassian.net...

1

This test was marked as 'Failed'.

Steps

1

Click on the web browsers.

Expected Result

The web browser should open

2

Click on the URL and go to the "https://www.digilugu.ee/login?locale=et" webpage

Expected Result

The user opens up "Digilugu" webpage

3

On the "Digilugu" webpage, from the top right corner, click on the "English" language button

Expected Result

The user clicks on the "English" button and the webpage language changes to English

4

Click on the "Log in" button

Expected Result

The user clicks on the "Log in" button and navigates to the log-in webpage. The Log-in page language remains the same.

T26

Users can easily update "My data" information

←

→

📄

🔍 View Case

✎ Edit Case

User Interface Testin

Input & Buttons

Navigation & Structure

Accessibility & Compliance

Data

Type	Priority	Estimate	References
Other	High	None	None
Automation Type			
None			

Preconditions

1. The user can log-in to the "Digilugu" webpage

Steps

1	The user logs in to "Digilugu" webpage	The user is logged in to the "Digilugu" and can access all the personal information
2	Click on "My data"	The users click on "My data" and navigated to the next page
3	Click on "Update my general data"	The user clicks on "Update my general data" and a new page opens up
4	Click on the "Phone" input field and update the phone number	The user clicks on the "Phone" input field and enters new number
5	Click on the "Save" button	The user clicks on the "Save" button and new phone number is updated and visible to the user

RESULTS & COMMENTS

HISTORY & CONTEXT

DEFECTS

<div>Comment</div> <div>1/21/2023 8:46 AM John D. Edit</div>	The user can successfully add information
<div>Passed</div> <div>1/21/2023 8:45 AM John D. Edit</div> <div>Elapsed 1m 2s</div>	<div>This test was marked as 'Passed'.</div> <div>Steps</div> <div>1 The user logs in to "Digilugu" webpage Expected Result The user is logged in to the "Digilugu" and can access all the personal information</div> <div>2 Click on "My data" Expected Result The users click on "My data" and navigated to the next page</div> <div>3 Click on "Update my general data" Expected Result The user clicks on "Update my general data" and a new page opens up</div> <div>4 Click on the "Phone" input field and update the phone number Expected Result The user clicks on the "Phone" input field and enters new number</div> <div>5 Click on the "Save" button Expected Result</div>

T31

There is a login or sign-in heading visible +

←

→

🗨

🔍

View Case

✎

Edit Case

User Interface Testin > Input & Buttons > Forms & Fields

Type	Other	Priority	High	Estimate	None	References	None
Automation Type	None						

Preconditions

1. Access to the webpage "https://www.digilugu.ee/login"

Steps

Open up the webpage "https://www.digilugu.ee/login"

Expected Result

The user opens up "https://www.digilugu.ee/login" and log in or sign-in button is visible

RESULTS & COMMENTS 1

HISTORY & CONTEXT 1

DEFECTS 0

Passed

1/21/2023 7:25 AM John D. [Edit](#)

Assigned To

Nobody

There is a log-in heading visible

+ Add Result

/ Assign To

10

T38

Verify that entering "Personal code" input field lets the user enter only numbers

View Case

Edit Case

User Interface Testin > Input & Buttons > Forms & Fields > Functionality

Type Other	Priority High	Estimate 15 minutes	References None
Automation Type None			

Preconditions

- Access to "https://www.digilugu.es/login?locale=en" webpage
- Access to Google Chrome Version 109.0.5414.87 (Official Build) (arm64)
- Access to Safari Version 16.1 (16014.2.9.1.12)
- Access to Firefox version: 109.0 (64-bit)

Steps

1	Click on the browser	The browser opens up
2	At the top of your browser, click the address bar and enter "https://www.digilugu.es/login?locale=en" webpage	the user is navigated to the "Digilugu" main page
3	Click on the "Log in" button	The user clicks on the button and navigates to the log-in page
4	Click on the "Smart-ID" tab	The user clicks on the tab and "Smart-id" log-in info opens up Captured screenshot
5	Click on "Personal code" input field	"Personal code" input field is active
6	Click on the keyboard and type letters, numbers and special characters	The input field only accepts numbers

RESULTS & COMMENTS 2 HISTORY & CONTEXT 2 DEFECTS 2

Comment

1/21/2023 11:37 AM John D. Edit

STEP nr. 6 FAILED

Expected Result

The input field only accepts numbers

Actual Result

It accepts letters and special characters also

Failed

1/21/2023 11:34 AM John D. Edit

This test was marked as 'Failed'.

Steps

1

Click on the browser

Expected Result

The browser opens up

2

At the top of your browser, click the address bar and enter "https://www.digilugu.es/login?locale=en" webpage

Expected Result

the user is navigated to the "Digilugu" main page

the user is navigated to the "Digilugu" main page

3

Click on the "Log in" button

Expected Result

The user clicks on the button and navigates to the log-in page

4

Click on the "Smart-ID" tab

Expected Result

The user clicks on the tab and "Smart-id" log-in info opens up

5

Click on "Personal code" input field

Expected Result

"Personal code" input field is active

6

Click on the keyboard and type letters, numbers and special characters

Expected Result

The input field only accepts numbers

137

Verify that Smart-ID two way authentication works +

View Case

Edit Case

User Interface Testin • Input & Buttons • Forms & Fields • Functionality

Type	Priority	Estimate	References
Functional	Critical	30 minutes	None
Automation Type			
None			

Preconditions

- Access to *<https://www.diglugu.ee/login?locale=en>* webpage
- Valid Personal code
- valid Smart-ID account
- Smart-ID installed on the phone
- 4.1 Valid PIN 1 and PIN 2
- Smart-ID connected with the personal code
- Access to Google Chrome Version 109.0.5414.87 (Official Build) (arm64)
- Smartphone

Steps

1	Click on the Google Chrome web browser	The user opens up Google Chrome
2	At the top of your browser, click the address bar and enter * https://www.diglugu.ee/login?locale=en * webpage	The user opens up the webpage
3	Click on the "Log in" button	The user clicks on the button and navigates to the log-in page
4	Click on the "Smart-ID" tab	The user clicks on the "Smart-id" tab
5	Next to the "Personal code" text click on the empty input field	The user clicks on the empty input field
6	Enter valid 10 digits "Personal code"	The user enters 10 digit valid personal code
7	Click "Continue" Button	The user clicks on the button and navigates to the next page with a valid verification code displayed and at the same time notification is sent to the user's phone with a valid matching verification code
8	Click on the notification on the phone	The notification modal opens up with a selection of 3 codes
9	Click on the valid matching verification code on the phone shown on the webpage	The user should be able to click on the code
10	Press the valid 4 digits code on your phone screen (PIN1)	the user enters a valid 4-digit code and logged in

RESULTS & COMMENTS 0

HISTORY & CONTEXT 0

DEFECTS 0

Passed

1/21/2023 10:20 AM Jahn D. [Edit](#)

Elapsed

3m 12s

The test was PASSED. Two-way authentication works.

Steps

- Click on the Google Chrome web browser
Expected Result
The user opens up Google Chrome
- At the top of your browser, click the address bar and enter *<https://www.diglugu.ee/login?locale=en>* webpage
Expected Result
The user opens up the webpage
- Click on the "Log in" button
Expected Result
The user clicks on the button and navigates to the log-in page
- Click on the "Smart-ID" tab
Expected Result
The user clicks on the "Smart-id" tab
- Next to the "Personal code" text click on the empty input field
Expected Result
The user clicks on the empty input field
- Enter valid 10 digits "Personal code"
Expected Result
The user enters 10 digit valid personal code
- Click "Continue" Button
Expected Result
The user clicks on the button and navigates to the next page with a valid verification code displayed and at the same time notification is sent to the user's phone with a valid matching verification code
- Click on the notification on the phone
Expected Result
The notification modal opens up with a selection of 3 codes
- Click on the valid matching verification code on the phone shown on the webpage
Expected Result
The user should be able to click on the code
- Press the valid 4 digits code on your phone screen (PIN1)
Expected Result
the user enters a valid 4-digit code and logged in

T36

Verify that the user can't login with Smart-ID without entering "Personal code"

View Case
Edit Case

User Interface Testin > Input & Buttons > Forms & Fields > Functionality

Type	Functional	Priority	Critical	Estimate	10 minutes	References	None
Automation Type	None						

Preconditions

- Access to webpage <https://www.digilugu.ee/login?locale=en>
- Access to Google Chrome Version 109.0.5414.87 (Official Build) (arm64)

Steps

1	Open Google Chrome	The user opens up Google Chrome
2	Click on the URL and go to the page https://www.digilugu.ee/login?locale=en	The user is on the "Digilugu" webpage
3	Click on the "Log in" button	The user clicks on the button and navigates to the log-in page
4	Click on the "Smart-ID" tab	The user clicks on the "Smart-ID" tab
5	Click on the "Continue" button	The user clicks on the button. "Personal code" input field outline is red and the error message "Please enter your personal code" is displayed and you are not logged in

RESULTS & COMMENTS

HISTORY & CONTEXT

DEFECTS

Passed

1/21/2023 9:55 AM John D. [Edit](#)

Elapsed

2m 1s

The test was successful, the user can not log in without entering "Personal code"

Steps

1

Open Google Chrome

Expected Result

The user opens up Google Chrome

2

Click on the URL and go to the page <https://www.digilugu.ee/login?locale=en>

Expected Result

The user is on the "Digilugu" webpage

3

Click on the "Log in" button

Expected Result

The user clicks on the button and navigates to the log-in page

4

Click on the "Smart-ID" tab

Expected Result

The user clicks on the "Smart-ID" tab

5

Click on the "Continue" button

Expected Result

The user clicks on the button. "Personal code" input field outline is red and the error message "Please enter your personal code" is displayed and you are not logged in

T35

Verify that authentication works with Smart ID

View Case

Edit Case

User Interface Testin > Input & Buttons > Forms & Fields > Functionality

Type	Priority	Estimate	References
Functional	Critical	30 minutes	None
Automation Type			
None			

Preconditions

- Internet Connection
- Smart-ID app installed on the phone
- Smart-ID valid PIN1 and PIN2
- Access to Google Chrome Version 109.0.5414.87 (Official Build) (arm64)
- Access to the webpage <https://www.digilugu.ee/login>
- All the valid credentials to log in to digilugu

Steps

1	Open Google Chrome	Google Chrome opens up
2	Go to the Webpage https://www.digilugu.ee/login	Digilugu opens up
3	Click "Log in" button	The user clicks on the "Log-in" button and navigates to the log-in page
4	Select "Smart-ID"	The user selects "Smart-ID" and only the Smart-ID authentication information is displayed to the user
5	Click on the "Personal code" input field	The user clicks on the input field
6	Enter valid Credentials	The user is logged in successfully

RESULTS & COMMENTS

HISTORY & CONTEXT

DEFECTS

Comment

1/21/2023 9:32 AM John D. Edit

Test was successful user can log in to "Digilugu"

Passed

1/21/2023 9:25 AM John D. Edit

This test was marked as 'Passed'.

Steps

1

Open Google Chrome

Expected Result

Google Chrome opens up

2

Go to the Webpage <https://www.digilugu.ee/login>

Expected Result

Digilugu opens up

3

Press "Log in" the top right corner

Expected Result

Pressing the Log-in button takes you to the next page, where the user can choose which authentication the user would like to use

4

Select "Smart-ID"

Expected Result

The user selects "Smart-ID" and only the Smart-ID authentication information is displayed to the user

5

Enter valid Credentials

Expected Result

Elapsed

44s

Founded issues/bugs

Example tickets that was created about founded bug on the page:

Add epic / TES-2

🔒

👁 1

👍

🔗

⋮

✕

"Personal code" input should allow only numeric values

📎 Attach

👤 Add a child issue

🔗 Link issue

⌵

⋮

Description

Clicking on the " Personal code " input field should let the user insert **only numbers**, but letters and special characters are also accepted.

Steps to reproduce

1. Open up "digilugu" webpage

2. Click on the "Log in" button

3. Click on the "Smart-ID" tab

4. Click on the "Personal code" input field

5. Insert numbers, letters and special characters

Expected result: Accepts numbers

Actual result: Accepts: numbers, letters and special characters

Environment

🌐 Patient Portal - Patient Portal

browser.- Google Chrome - Version 109.0.5414.87 (Official Build) (arm64)

Safari - Version 16.1 (18614.2.9.1.12)

Firefox - 108.0.2 (64-bit)

Priority

🟡 Medium

Attachments (1)

⋮ +

Screenshot 20..._19.png

18 Jan 2023, 09:31 PM

To Do ⌵

Pinned fields

✕

Click on the 📌 next to a field label to start pinning.

Details

⌵

Assignee

👤 Unassigned

[Assign to me](#)

Labels

None

Reporter

👤 paulm

Created 3 days ago

Updated 1 hour ago

⚙ Configure

15

Projects / tester / Add epic / TES-1

Attach
 Add a child issue
 Link issue

▼
...

Selected "English" language changes when navigating to the "Log in"page

Description

On the home page clicking "English" button changes the webpage language to **English**, but after clicking "Log in" button the user is navigated to the log-in page and the page changes to the Estonian language.

Steps to reproduce

1. Go to the home page
2. On the top right corner click on the "English" button
3. Click on the "Log in" button

Expected result: Log in to the webpage should be in the English language

Actual result: Log in to the webpage in the Estonian language

Environment

Patient Portal - Patient Portal

browser.- Google Chrome - Version 109.0.5414.87 (Official Build) (arm64)

Safari - Version 16.1 (18614.2.9.1.12)

Firefox - 108.0.2 (64-bit)

Priority High

Attachments (2)

To Do ▼

Pinned fields

Click on the next to a field label to start pinning.

Details

Assignee	paulm
Labels	None
Reporter	paulm

Created 3 days ago
Updated 17 seconds ago

Accessibility issue

Attach
 Add a child issue
 Link issue

▼
...

Description

When the user navigates to the "Digilugu" home page and is trying to look for support nr or email, it's hard to find from the body text.

Steps to reproduce

1. Go to the home page
2. Find the support nr or email on the home page

Expected result: The user can find information quickly and easily

Actual result: Information is highlighted from the text but information that is very important to the users who have an accessibility

Environment

Patient Portal - Patient Portal

Priority Medium

To Do ▼

Pinned fields

Click on the next to a field label to start pinning.

Details

Assignee	Unassigned Assign to me
Labels	None
Reporter	paulm

Created 2 hours ago
Updated 1 minute ago

Configure

Improvements

During my exploratory testing session I noticed some user interface flaws, functionality and accessibility shortcomings. Tested portal main purpose is to get easy access to the patient portal and navigate through webpage to personalised dashboard. During the testing some of the steps were irritating and not clear to understand.

Accessibility & Compliance

Accessibility point of view was not clear when changing the language from Estonian to English in a landing page it won't remain in the following pages. Instead I had to change the language in every page again and I believe it's bad user experience and extra time and effort to navigate through pages. I can't imagine how much extra effort it would be for customers with vision disabilities.

Navigation and Structure

Patient portal landing page can be improved by adding different sections and different information by using user experience best practices, e.g. contact info can be in the footer or more prominent way displayed.

Since there was not that much content on the landing page I would say that it was rather easy to consume the page but would definitely use some UI improvements, e.g. buttons could be harmonised etc.

On the other hand after logging in and landing on the dashboard it was not clear where to find what and navigation including UI can be improved tremendously. Since there is a lot of content it would need some user research of what are the most important features that user is looking for on the site and show these more prominently. Good thing that I noticed in the header was search bar that is definitely needed in a such content heavy pages.

[Accessibility](#)[Switch roles](#)

Logged in and representing:

[Help](#) [Log out](#)

EestiРусский

My e-Health

My data

INSURED

Family doctor:

COVID-19

AUTHORISING A NEW REPRESENTATIVE

Recent documents

Health data

[Time critical data](#)[Dental care documents](#)[Dental care charts](#)[Dental status chart](#)[Passport of Immunization](#)[Ambulance charts](#)[Prescriptions](#)[Referrals](#)[Invalid referrals](#)[Valid referrals](#)[Referrals related to an appointment](#)[Health declarations](#)[Health certificates](#)

[Case summaries](#)[Out-patient case summaries](#)[Day-care case summaries](#)[In-patient case summaries](#)[Birth case summaries](#)[Notifications](#)[Development assessment notifications](#)[Immunisation notifications](#)[Growth notifications](#)[Examination notifications](#)[Counselling notifications](#)[Examination results](#)[Image references](#)[Referral responses](#)[Working ability assessment](#)

National eBooking system

Invoices submitted to the Estonian Health Insurance Fund

Click on the box to view medical invoices, click on the information sign for more information

Statements of intention

Click on the box to view and prepare statements of intention, click on the information sign for more information

Managing accesses to health data

Managing access rights of the medical committees under the Estonian Ministry of Defence area of government. Managing Emergency Response Centre and cross-border data exchange. Click on the information sign for more information.

Notifications

Click on the box to view notifications, click on the information sign to receive notifications on your e-mail or to view additional information

Hospital links

Logbook

Ambulance/emergency 112

Family doctor's hotline 1220

Poisoning information phone number 16662

Test Design Techniques

List of UI testing techniques that was used during testing Patient portal:

- exploratory testing
- error guessing
- Case tests

Reflection

Exploration of Estonian Patient Portal page gave me insight into testing tools and mapping out user (my) experience of landing page, log in Smart-id functionality, user dashboard and “my data” page. During this report different tools were used, such as Testrail - creating Test Cases; JIRA software - creating Bug Reports; Miro - Creating flow charts and snipping tools.

Most easiest was to consume information on the Log in authentication (TARA) methods, since it's common to most of the Estonian Public portals and are widely used. UI and UX of this site is outdated and do not follow best practises of design what made it really difficult to consume content and understand navigation of user dashboard. There were a lot of UI bugs like different button colours and not consistent design components. Under user dashboard I found buttons/content cards on the bottom of the page with hover effect but only two out of three where buttons that you could actually click on because third one was just informational. If we think about content accessibility e.g. contact information then it should be clearly visible and separated from body text to consume it also as a user with visible disabilities.