Usability Test

Thanks for participating in this usability test.
In this usability test, you will test an application developed for my bachelor thesis "Effective Geospatial Data Discovery and Extraction", in which I designed an application that helps researchers to effectively browse, select and extract geospatial data.

The test will be split in 5 tasks, each will test another part of the application.

At the end of the usability test, an impression test will also be performed to measure your impressions regarding the application.

* Indicates required question

Geospatial data recap

Metadata catalogue
Metadata catalogues store information about a collection of datasets. This information is stored in the form of metadata records.

Metadata records
Metadata records contain information about a dataset, this information includes the title, abstract, technical specifications, contact information of the dataset. Importantly, the link to download the actual data is also contained in this information. These metadata records can also reference associated services, which allow the user to preview the data without first downloading the entire dataset.

WFS
WFS (Web Feature Service) is such a service, this service serves geospatial vector data.

WMS
WMS (Web Map Service) is another geospatial data service, WMS serves raster data.

CSW
CSW (Catalogue Service for the Web) is a protocol designed for programmatic interfacing with metadata catalogues. The application you will test is designed around this protocol, allowing you to input the url of any CSW service, and then providing an user interface where you can visually browse this service.

Task 1

Please open the following link in your browser, which will take you to the entry page of the application.
Here you will see a form which allows you to submit a CSW endpoint.

For this test, we will be using the CSW endpoint of the metadata catalogue of the dutch "Nationaal Georegister" (www.nationaalgeoregister.nl), which stores all kinds of geospatial datasets of the Netherlands.
Please confirm that the nationaalgeoregister.nl website is up, as it is regularly down and the application can't work if the site is down.

Your first task is:
Open the Nationaal Georegister metadata catalogue in the application.
The CSW endpoint of the catalogue is:
https://www.nationaalgeoregister.nl/geonetwork/srv/eng/csw

When you start the task, please start a timer to measure the time it takes to complete the task.

1. Did you successfully complete task 1? *

   Mark only one oval.

   - ◯ Yes
   - ◯ No

2. How long did it take to complete task 1?

   _____

Metadata record page

You are now in main page of the application.
Here you see a map which displays the bounding boxes of the metadata records of the Nationaal Georegister metadata catalogue.
You also see a table which displays information about these metadata records which are shown on the map.
If you zoom in to the Netherlands and pan around on the map, the records on the map will be updated with records within the current viewpoint.

On the left hand side, you can filter the shown records based on a keyword, or a resource type or topic.
If you click on any record on the map or table, you will see the information within the metadata record on the right hand side of the application.
At the bottom of this panel, you can see the related services, files and links that are stored in the metadata record, these will be important in another task.

Take some time to explore this page, the map, and different datasets. If you are ready, you can continue with the next task.

Task 2

For this task, you will enact a data researcher which is interested in data of historical "molens" in Noord-Holland.

As such, your task is:
Find a dataset about historical molens in Noord-Holland. The record must have a WFS service attached.

When you start the task, please start a timer.

3. Did you successfully complete task 2? *

Mark only one oval.

- ◯ Yes
- ◯ No

4. How long did it take to complete task 2?

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Task 3

If you succeeded the task, you have found and selected the dataset "Molens uit 1812".

If you did not succeed, reset any filters, enter "Molens 1812" into the search box, then zoom out on the map so the entirety of Noord-Holland is visible and click on the "Molens uit 1812" record in the table or on the map.

Your next task is:
Preview the data in the dataset using the attached WFS service.

When you start the task, please start a timer.

5. Did you successfully complete task 3? *

Mark only one oval.

- ◯ Yes
- ◯ No

6. How long did it take to complete task 3?

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Service page

You should now find yourself on the page where you can see the dataset on the map.
If you did not succeed, open the following link, where you will be routed to the correct page.

On the right side, you can still see the metadata record information, left to that, you can see the WFS service information.
The map should now show the features stored in the WFS service; the mills from 1812.
You can click a mill to view its metadata, you can also select multiple mills holding ctrl or shift.
By dragging a box, you are able to select a region of mills.

Task 4

An important aspect of the application is its integration with Jupyter.
Please create a Jupyter notebook or easily create a new Google Colab notebook using the following link:
https://colab.research.google.com/#create=true.

Your task is:
Import the "Molens in 1812" dataset in Jupyter.

When you start the task, please start a timer.

7. Did you successfully complete task 4? *

Mark only one oval.

- Yes
- No

8. How long did it take to complete task 4?

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Task 5

In the final task, the usability of the subset selection and extraction feature will be tested.

Your task is:
Select and import 5 features (in this case mills) of the "Molens in 1812" dataset in Jupyter.

When you start the task, please start a timer.

9. Did you successfully complete task 5? *

Mark only one oval.

- Yes
- No

10. How long did it take to complete task 5?

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Impression test

Finally, to measure your impression of the application, I will ask you to circle 5 words you associate most with the application.

11. Select 5 of the following 25 impressions that you think identify the application

Check all that apply.

- [ ] Accessible
- [ ] Advanced
- [ ] Annoying
- [ ] Approachable
- [ ] Attractive
- [ ] Boring
- [ ] Complex
- [ ] Comprehensive
- [ ] Confusing
- [ ] Easy to use
- [ ] Effective
- [ ] Empowering
- [ ] Exciting
- [ ] Friendly
- [ ] Hard to Use
- [ ] Inconsistent
- [ ] Ineffective
- [ ] Intuitive
- [ ] Novel
- [ ] Responsive
- [ ] Time-consuming
- [ ] Time-saving
- [ ] Unattractive
- [ ] Unpredictable
- [ ] Valuable

12. Do you have any other impressions, suggestions, or ideas about the application?

Thank you!

Thank you for participating in this study!
Hopefully you found the application interesting and thank you for your time. Your contribution is very valuable for my thesis.