

Changelog

Project: **CentroGeo Interactive Dashboard**

Group number: **27**

Period: 16 - 26 June

Please describe all changes in your project from 16 to 26 June in this changelog document. Export as PDF and add it to a 'documents' folder in your git project.

Keep it short and concise, but be specific about what changed. Feel free to resize the feedback text areas.

DESIGN

Project Description (project manual 4.1)

At first, the project description was not very elaborate, so we improved it by adding more specifications as to how our project works.

HTML/CSS Mockup (project manual 4.2)

Describe what changed, or mention 'unchanged'
We have created a new login page, and added a few new different buttons to the homepage as well as the metadata edit menu.

The mockup can be found in the design/html_mockup folder with html pages log_in.html and homepage.html respectively.

Use Case Diagrams (project manual 4.3)

unchanged

Database Design: Class Diagram and schema.sql (project manual 4.3 and 4.4)

In the database schema added the simulation id as the second primary key for lanes and vehicles.

FUNCTIONAL REQUIREMENTS

Added or revised functionality

Describe your changes with some bullet points, or mention 'unchanged'

- *Display stored simulations stored in the database.*
- *Selecting a simulation.*
- *Added a additional security through the use of SCrypt algorithm*
- *Updated metadata editing functionality.*
- *Deleting a selected simulation.*
- *Filter the displayed simulations by their name or tag.*
- *New chart options (following the recommendations in Mah's email)*
- *Added database transactions which allows multiple users to use the API at the same time.*
- *Added sessions which allows secure authentication*
- *Added the ability to generate a report*
- *Updated/Revised some of the front-end design*
- *Added a number of API endpoints/functions, see (All of the endpoints specified in Swagger did not exist prior to the previous grading round, most of the functions return data for the specified chart) :*

<https://app.swaggerhub.com/apis-docs/NoiceName/CentroGeo/1.0.0#/>

HTML/CSS/JS Frontend

Describe what changed, or mention 'unchanged'

Focus on the used software / frameworks, added pages, functionality you are proud of etc.

We added some small quality of life improvements to the homepage, such as an undo button for generating the graph and a spinner for uploading a file.

We finally implemented the option to generate a report.

We changed the login page completely. We believe it looks much better now.

*Added the ability to interactively select a simulation, in addition the selected simulation can now be deleted. (The selected simulation is also used for generating charts thus the chart generation is independent of simulation selection and multiple charts for different simulations can be generated and displayed at the same time),
When selecting a simulation, the displayed simulations now also have a filter that filters simulations by their name or tag.*

We added the option to change the password.

Edited change metadata page and integrated the page into a modal on the homepage.

Added a number of new chart (we used google charts js library) visualizations

Transactions (project manual 5.9)

All database transactions are secured with an isolation level of serializable. This is set when the connection to the database is opened.

JDBC / Prepared Statements (project manual 5.7)

*Describe what changed, or mention 'unchanged'
All of the sql queries now use prepared statements.*

XML/JSON (project manual 5.5)

*Describe what changed, or mention 'unchanged'
Think of Jackson/Jersey annotations, URL formatting and XML/JSON formatting*

When making requests for different charts (which is most of the API) we specify the simulation_id as a path parameter and the options for those charts if any as query parameters.

All requests return JSON ("application/json") mediatype.

For easier and detailed inspection see the api definition:

<https://app.swaggerhub.com/apis-docs/NoiceName/CentroGeo/1.0.0#/>

Usage of JSP/REST (project manual 5.5)

Think of added or revised REST endpoints or JSPs and the way your front-end communicates with your REST endpoints.

*We added endpoints for: -getting simulation ids -getting vehicle ids
 -getting edge ids -getting lane ids*

As described before, the REST that we have defined during this period of time is mostly related to getting data from the database about a specific chart that the user would want to generate in the front-end. Those are communicated through the usage of get requests. Additionally we have a delete post request that allows the user to delete a specified simulation.

Again see the API definition for more detail:

<https://app.swaggerhub.com/apis-docs/NoiceName/CentroGeo/1.0.0#/>

Testing (project manual 5.2 and 6.2)

Added a test that attempts to delete a simulation as well as select a simulation and edit its metadata. To facilitate this, Selenium was used, the tests can be found in java/front_end_tests package. The tests do not make use of the browser plugins however they make use of the Java library provided by Selenium which allows the Java code to simulate a browser.

Security (project manual 6.3)

Describe what changed, or mention 'unchanged'

We change the algorithm from Argon2 to SCrypt to hash the password of users and saved to the database, and the method of encode() and match() from SCryptPasswordEncoder of spring security is used to encode and verify the password.

OTHER

Other changes
<i>Write anything that you want us to know that is not covered by the above categories.</i>