

moodle-block_lemo4moodle

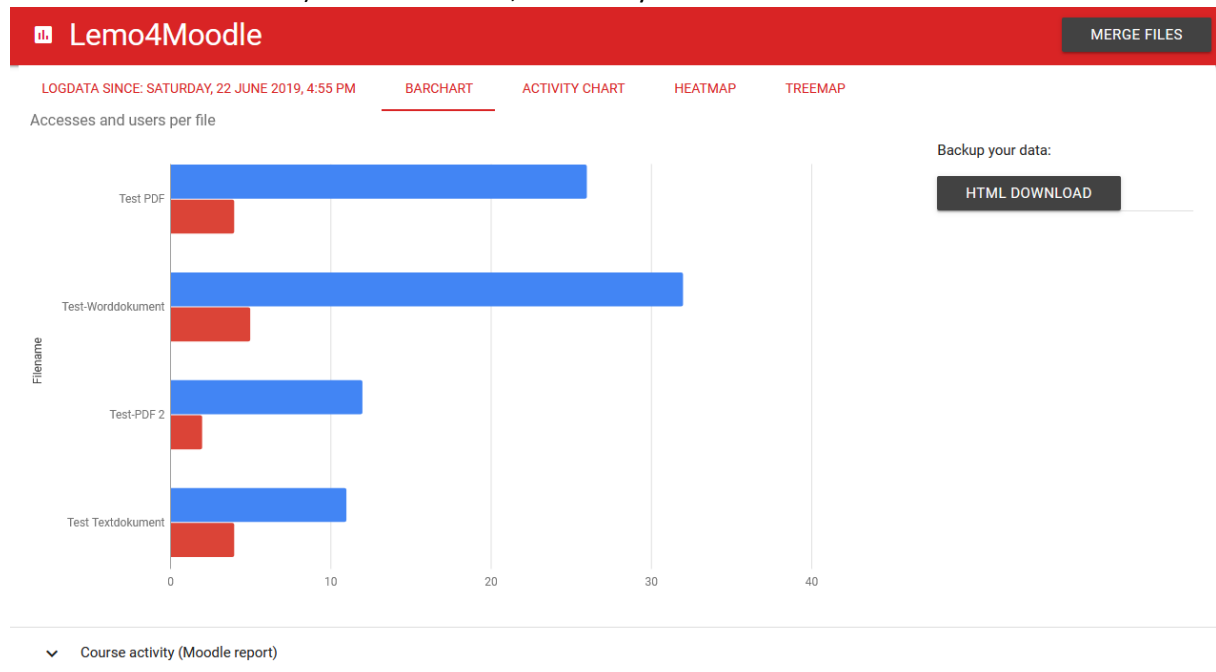
Overview

The Lemo4Moodle-plugin visualizes the number of actions and clicks (overall and user specific) inside a moodle course in four different types of charts: barchart, linechart, heatmap and treemap. The data can also be filtered (only linechart and heatmap) and downloaded as an html-document.

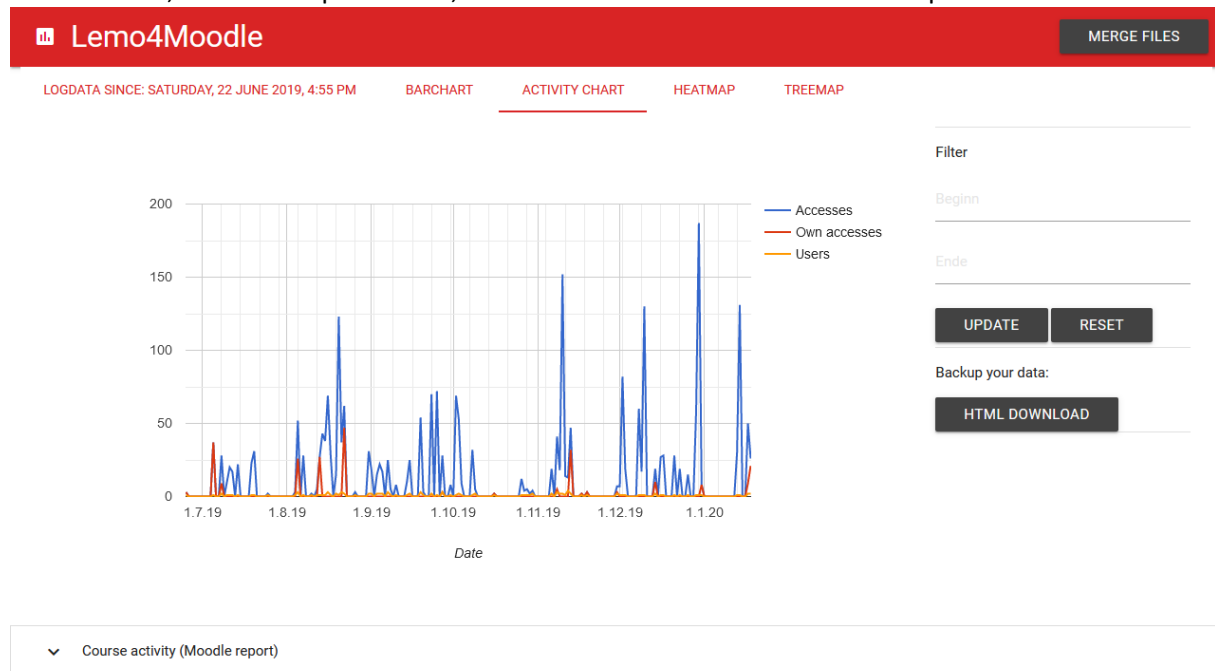
The Lemo4Moodle-plugin uses data from the moodle-database to display actions and clicks inside of a moodle course. It neither creates new tables nor writes in the database.

There are four different visualizations included in this plugin/block.

Barchart: The barchart shows the number of clicks on all uploaded files inside the course (e.g. .pdf-, .docx- or .txt-documents). It also indicates, how many different users have ever clicked on this file.



Linechart: The linechart shows the overall actions and the individual actions of the user performed inside the moodle course, as well as the number of people that accessed the course on a daily basis. For this chart, a filter is implemented, with which the user can limit the timespan of the shown data.



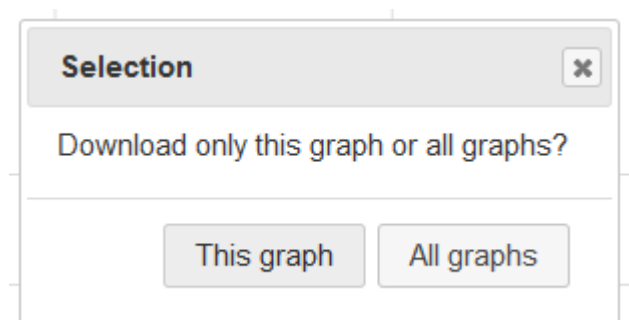
Heatmap: The heatmap shows, how many actions inside the moodle course were performed on which weekday and in which time interval (0:00-6:00, 6:00-12:00, 12:00-18:00 and 18:00-24:00), overall and by the user. The chart also displays the total amount of actions per weekday, as well as the average amount of actions on each weekday. The option to filter is also implemented for the heatmap, where the user can again limit the timespan of the shown data.



Treemap: The treemap shows the number of overall clicks performed on each uploaded file inside the moodle course (similar to the barchart). The bigger a files field, the more total clicks this file has amassed. By hovering over a labeled field, the number of clicks is displayed in a tooltip.

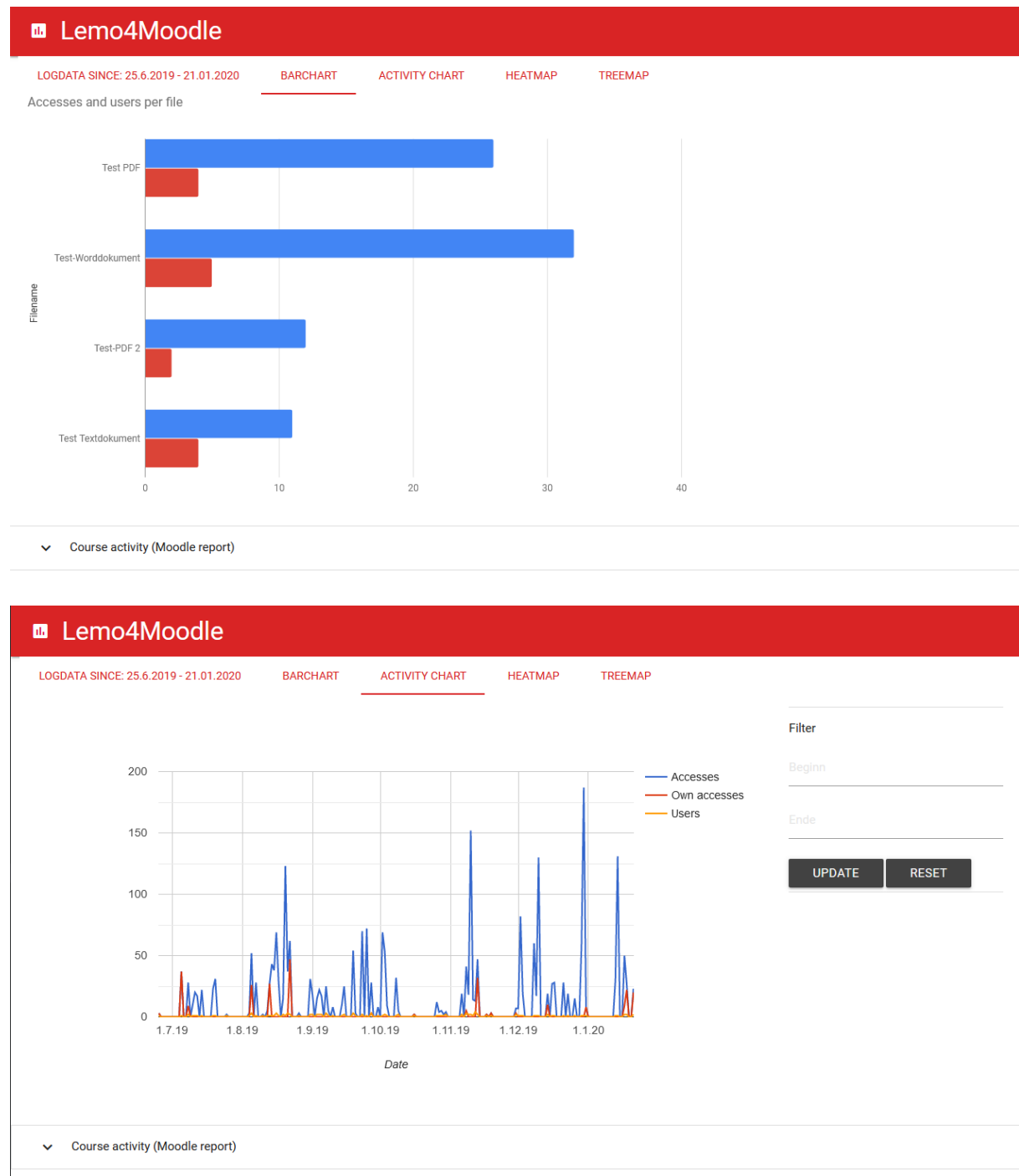


HTML Download: When clicking the “HTML Download”-Button, the user is first prompted to choose, whether to download only the currently displayed chart or all chart data.



Upon clicking one of the options, the standard download dialog of the used browser is opened.

The downloaded file looks exactly like the webversion of the plugin, with the slight difference, that the “HTML Download”-button and the “Merge files”-button are removed. The reason for this being, that those functionalities are not available for the downloaded version. (Even the filters for linechart and heatmap are working the exact same way).



Merge files: Another feature, which is soon to be added, is the possibility to merge files. If your moodle database only stores data for a limited amount of time, this should be useful for users to keep all their data in one file. To merge files, these must be selected from previously downloaded files. Lemo4Moodle then reads the data included in the selected files, merges them and then prompts to download a new file that includes all the merged data.

The screenshot shows the Lemo4Moodle web application interface. At the top, there is a dark red header with the Lemo4Moodle logo and a 'MERGE FILES' button. Below the header, a navigation bar contains links for 'LOGDATA SINCE: SATURDAY, 22 JUNE 2019, 4:55 PM', 'BARCHART', 'ACTIVITY CHART', 'HEATMAP', and 'TREEMAP'. The main content area displays a bar chart titled 'Accesses and users per file' with a y-axis labeled 'Filename' and an x-axis labeled '0'. The chart shows four bars: 'Test PDF' (blue), 'Test-Worddokument' (blue), 'Test-PDF 2' (red), and 'Test Textdokument' (blue). A 'MERGE FILES' dialog box is overlaid on the chart. The dialog box has a title 'Merge files' and contains the following text: 'Now choose the files you want to merge the data from.', '(Hold down the "ctrl"-button on your keyboard when selecting multiple files and click on each file you want to merge.)', and 'At the moment, only the linechart data will be merged. For the other graphs, the current data from the moodle database will be downloaded.' Below this text is a search bar with the placeholder 'Durchsuchen...'. Under the search bar, two files are listed: 'File 1: lemo4moodle_2019_08_15.html' with a timespan of '25.6.2019 - 15.08.2019', and 'File 2: lemo4moodle_2020_01_14.html' with a timespan of '11.12.2019 - 14.01.2020'. At the bottom of the dialog box is a 'MERGE FILES' button.

Lemo4Moodle

LOGDATA SINCE: SATURDAY, 22 JUNE 2019, 4:55 PM BARCHART ACTIVITY CHART HEATMAP TREEMAP

Accesses and users per file

Filename

Test PDF

Test-Worddokument

Test-PDF 2

Test Textdokument

0

▼ Course activity (Moodle rep

Merge files

Now choose the files you want to merge the data from.

(Hold down the "ctrl"-button on your keyboard when selecting multiple files and click on each file you want to merge.)

At the moment, only the linechart data will be merged. For the other graphs, the current data from the moodle database will be downloaded.

Durchsuchen...

File 1: lemo4moodle_2019_08_15.html Timespan: 25.6.2019 - 15.08.2019

File 2: lemo4moodle_2020_01_14.html Timespan: 11.12.2019 - 14.01.2020

MERGE FILES

Information on data privacy:

No one outside of the course where the plugin is implemented has access to the internal course data (e.g. overall clicks and accesses etc.).

Data displayed by the barchart and heatmap is the same for every course participant, no personal data is shown.

The data shown to each user by the linechart and heatmap consists only of his own actions and the actions of all course participants together. Therefore, no student or teacher can access other students or teachers personal action and click data.

Queries to the database use personal data in form of the currently logged in users ID to find the corresponding number of actions.