



CHARLES --- EXPLORER

User documentation

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1 Introduction

While Charles Explorer has been designed with user experience in mind, some less technical users might still find it difficult to use. This document contains simple user manual for the Charles Explorer web application.

2 Accessing Charles Explorer

To start using Charles Explorer, navigate to [`https://explorer.cuni.cz`](https://explorer.cuni.cz)¹ in your web browser. While the application has been tested in modern versions of Google Chrome (v116) and Mozilla Firefox (v117), any modern desktop browser should be sufficient.



Charles Explorer provides support for mobile devices - however, due to the limited screen space, some features (such as the faculty word cloud) are unavailable on mobile. From now on, this guide will only be talking about the desktop version of the application.

After accessing the instance URL, your screen should look something like this:

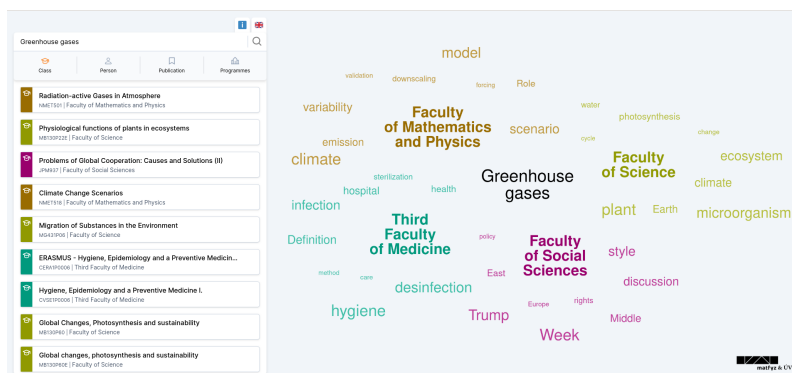


Figure 1: Initial search in the Charles Explorer application

¹This is the URL of the Charles Explorer instance connected with the Charles University, Prague. In case you want to browse other universities' data, you'll have to navigate to their respective instances' URLs.

When accessing the page for the first time, the application will generate a random query and will show you search results for it. In the left part of the screen, you can see the search results under the search box with the current generated query, on the right side, you see a word cloud with the university faculties connected to the query.

On the first access, the application also reads your browser settings and sets the application language to the preferred localisation version. If this is not correct for any reason, you can easily change the app language by clicking the country flag above the top right corner of the search box.

3 Search

After clicking and typing into the search box in the left top part of the screen, the application will start giving you search suggestions in the dropdown list. In the very end of the dropdown list, there is also short history of your searches.

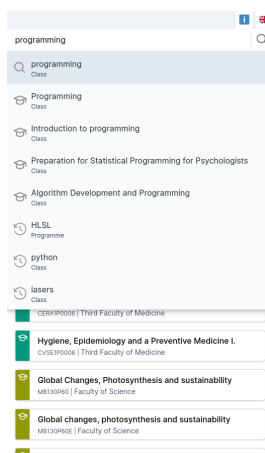


Figure 2: Searching for a keyword opens a suggestion list.

The suggestion / history list can be navigated by arrow keys. A given suggestion / history entry can be submitted by Enter or by clicking it. The original query will always be the first entry in the list and can be submitted by pressing Enter or by clicking the "Magnifier" icon right of the search box.

After submitting the query, the application will load the search results. This can take a few seconds, based on the current usage of the application and the complexity of the query. While the results are loading, the application will

show a progress bar in the top part of the screen and the results are replaced with "skeleton loaders" to convey the information that the search results are loading.

After the search results are retrieved, they are displayed below the search box in a list:

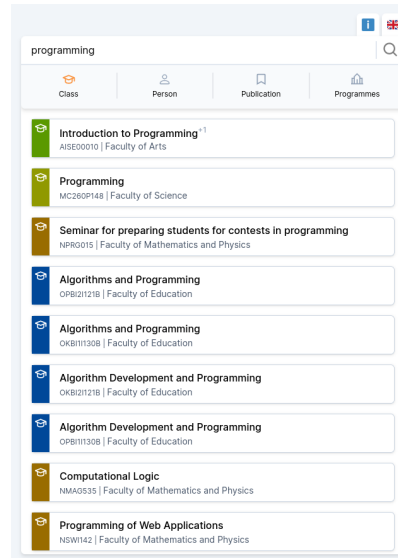


Figure 3: A successful search returns results.

The search results list is ordered based on the relevance of the entity to the current query. Each of the results list items has a title (localized entity name), a subtitle (name of the affiliated faculty) and a small color coded icon in the left part of the result.

The color denotes the faculty and matches the faculty color in the word cloud on the right side of the screen and the small white icon tells us of what type (class / person / publication / study programme) is this result. The faculty is denoted twice (with the color and with the actual subtitle) to make Charles Explorer accessible for people with color vision deficiency.

By default, Charles Explorer will search for **classes** relevant to the current query. To search for another type of an entity, click the respective entity icon below the search box.

4 Explore

By clicking a specific search result, Charles Explorer will open a *detail page*. On this page, you can find more information about the entity.

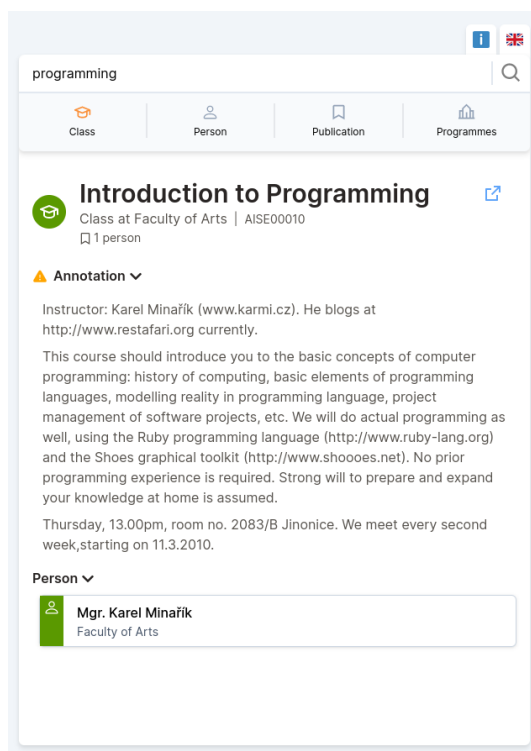


Figure 4: Clicking the search result switches to entity detail view

The entity detail view contains the title (localized name of the entity), the faculty affiliation and additional data like the course code for classes, or the language and type of the study programme.

To the right of the title, there can also be an "external link" button, leading to an external page about the current entity. This page will always open in a new tab, so that you don't lose your Charles Explorer session.

Under the entity header, there are type-specific text information relevant to the current entity. For classes, this can be class annotations and syllabi, for publications abstract and keywords etc.

Below these, there will be lists of related entities. For classes, for example, these contain people affiliated with the class, study programmes this class is

relevant for etc. These entities are rendered in the same manner as search results, i.e. with the color coded faculty icons, title and subtitle.

In some cases, those entities also have a small green indicator showing. This tells the user that this *related entity* is also relevant to the current query.

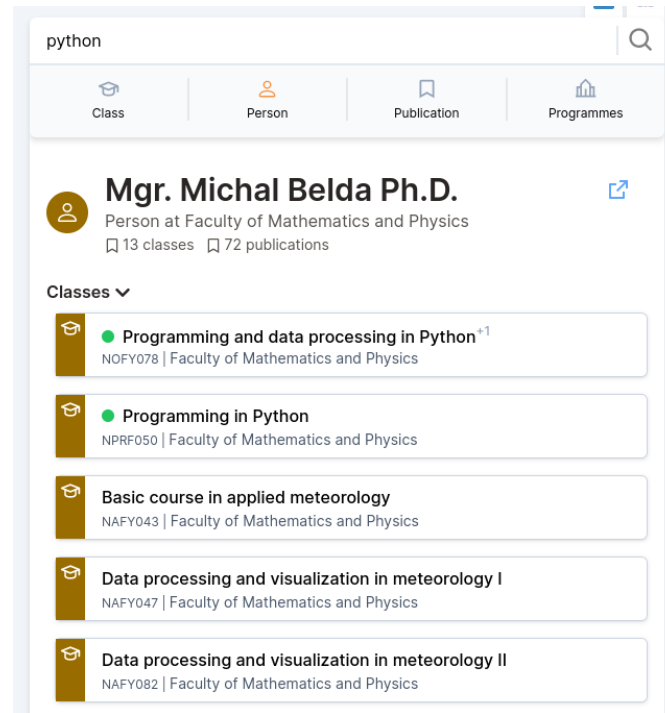


Figure 5: The first two related classes are relevant to the current query "python"

Using this "smart reranking" technique, the application provides better user comfort, as it's immediately visible through which relevant entities is a person or a study programme is relevant to the current query.

5 Word cloud



This part is only relevant for the desktop version of the application, as the mobile version does not render the word cloud due to limited screen space.

The right side of the screen includes the faculty word cloud. This is a graph view on the faculties affiliated with the query-relevant entities.

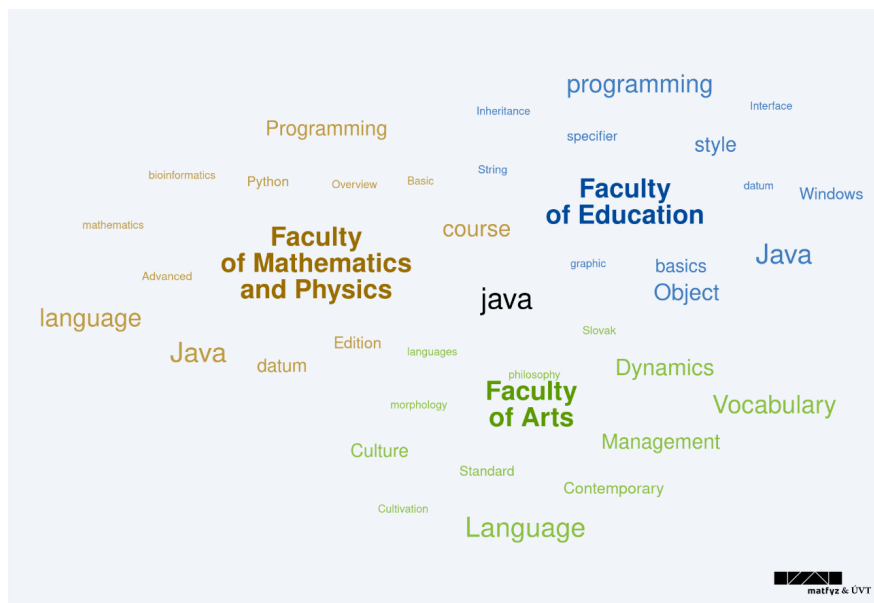


Figure 6: The query results for "java" are affiliated with three faculties in total.

Each faculty name is rendered in bold. The faculties are using the same color code that is used in the search results items. Around each faculty name, there are keywords relevant to the results from this faculty in the same color. The larger the keyword, the more relevant it is for the results from the respective faculty.

Clicking the word cloud keywords performs a search with the clicked keyword as the query.

The current word cloud implementation is rather stub. For future improvements, there are plans to e.g. render search results in the word cloud and visualize their connections.

6 More questions

Chances are, this user manual didn't solve your issue. In case you have a question, or you want to report a bug, please open an issue in the GitLab repository or send us an email to explorer@jindrich.bar.