Background

While the problem of Page Segmentation can be considered 'solved' in many applications, reliably detecting and extracting visual material from historical newspapers remained a problem. Recently the "Newspaper Navigator" project gained some remarkable success by training a model based on detectron 2 with millions of crowd-sourced annotations on American historical newspapers. It would be desirable to make this model usable for page segmentation in various applications in the field of digital editing.

Goal

• Incorporate the predictions from Newspaper Navigator into a graphical user interface that allows to view, but also easily correct the predicted bounding boxes of visual material.

Tasks

• Get familiar with Newspaper Navigator and Detectron 2 and set up a pipeline to perform visual element detection
• Show the results of the process in a graphical user interface. Depending on the scope of the project and interest of participants, an existing python-based interface can be used or a new one can be created
• Export the segmented images and a json file containing the coordinates of the bounding boxes.
While the problem of Page Segmentation can be considered 'solved' in many applications, reliably detecting and extracting visual material from historical newspapers remained a problem. Recently the "Newspaper Navigator" project gained some remarkable success by training a model based on detectron 2 with millions of crowd-sourced annotations on American historical newspapers. In this project you will examine the accuracy of the model on advertisement pages from the German cultural magazine “Die Jugend”.

Goal

- Process the provided data with the Newspaper Navigator Model and compare the results to the given ground truth.

Tasks

- Find a common data representation for both, the outputs from newspaper navigator and the provided ground truth
- Decide on a metric to use to compute accuracy
- Compute the accuracy of the visual element detection on the data given