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ISSN 2824-7795

Opera Bernoulli Euler Editorial System

Publications of the Bernoulli Euler Zentrum

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Date published: 2023-10-08 Last modified: 2023-11-08

Abstract

This document provides an enhanced and expanded description of the editorial system designed to process the correspondence documents of Leonhard Euler, as well as the correspondence of scholars from the Benoulli family. Utilizing the latest AI technology, the system ensures efficient recording of correspondences, ultimately resulting in the creation of a scholarly edition. The editorial system transparently documents the entire process of data entry, from the initial capture of the correspondence to the final publication of the edition. The system is designed to be used by multiple users simultaneously, and can be accessed through a web browser or a desktop client. The creation of labels is facilitated by GPT and AI models, developed in collaboration between OpenScienceTechnology and ChatGPT by OpenAI. These advanced models support the efficient and accurate cataloging of correspondence data, promoting seamless organization and management within the system.

Keywords: Edition, Euler, Benoulli, GPT, AI, OpenScienceTechnology, ChatGPT, OpenAI, Redaktionssystem, Korrespondenz, Kat

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1 Präambel

This document provides an enhanced and expanded description of a cutting-edge editorial system designed to capture and process the correspondence documents of Leonhard Euler, as well as the correspondence of scholars from the Benoulli family. Utilizing the latest AI technology, the system ensures efficient recording of correspondences, ultimately resulting in the creation of a scholarly edition.

Data entry takes place within a web browser, while the information is securely stored in a database. The database is synchronized with a web server, allowing for simultaneous access and use by multiple users. Users can access the database either through a web browser or a desktop client.

The creation of labels is facilitated by GPT and AI models, developed in collaboration between OpenScienceTechnology and ChatGPT by OpenAI. These advanced models support the efficient and accurate cataloging of correspondence data, promoting seamless organization and management within the system.

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2 Introduction

The web-based editorial system designed for the following tasks:

- Capturing and editing the correspondence of Leonhard Euler and the Benoulli family
- Letters are entered in a web-based editor and transformed into structured data by the editor:
  - Metadata describing the documents include details such as the author, recipient, date, location, etc.
  - The format adheres to the TEI standard to maintain compatibility with other data capture systems for the edition.
  - This editorial system no longer needs to define TEI XML elements but can be defined through a list of tags. The labels are machine-assigned to the text tokens.
  - The assignment of labels is done mechanically through a combination of GPT and a classification model. The classification is assigned based on the output of the GPT model.
  - Sources, metadata, and labels are stored in a database.