READ

Recognition and Enrichment of Archival Documents

D5.3.
e-learning application
To train and test transcription against ground-truth documents

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http://read.transkribus.eu/

READ
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Executive Summary

This document provides an overview of an e-learning application designed to help the general public improve their transcription skills before using the other transcription tools.

1. Purpose of E-learning function within READ

The purpose of the e-learning application within the context of the READ project is to provide a web user interface that will act as an introduction to HTR assisted transcription and the other more complex outputs of the project.
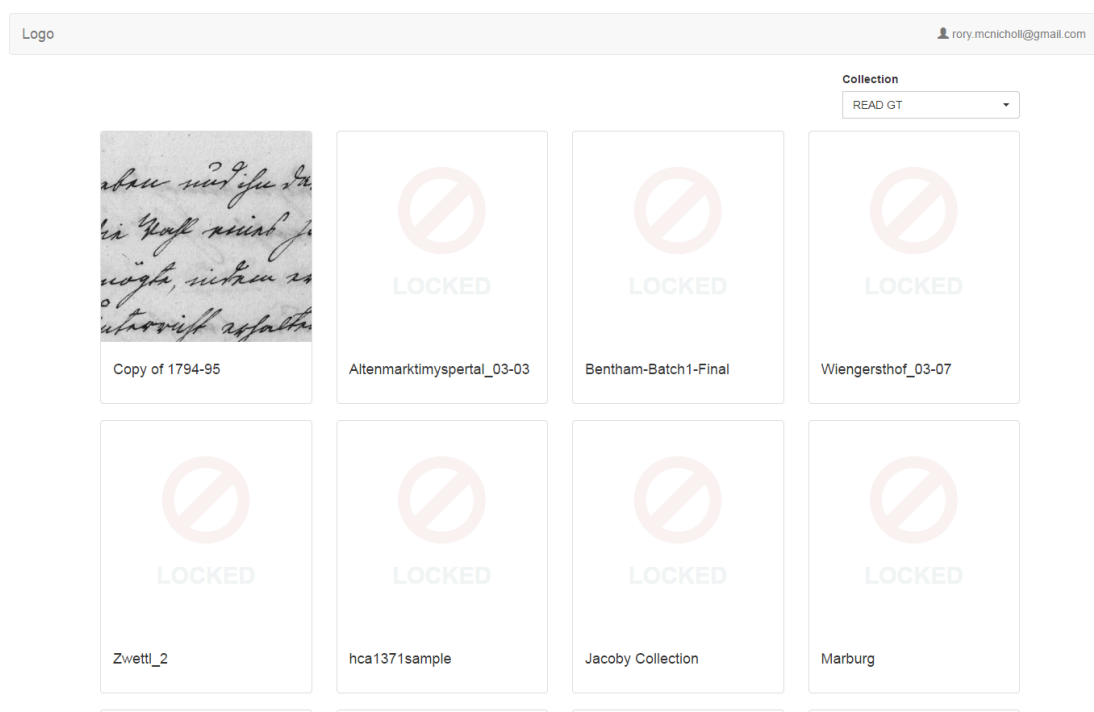
Initial screen from the e-learning application

Users are presented a selected sample of texts that they can use to practice the reading and transcription of words. Their progression is tracked and scored so that e-learning application can be configured to provide a criterion for access to transcription of "real" yet to be transcribed documents.

2. E-learning application in detail

2.1 Source material

It is required that the documents selected for the e-learning application have a ground-truth transcription. The configurable ordering of how the texts are presented allows a collection owner to provide a progression from simpler to more difficult to read texts as appropriate.

Data on the proportion of correctly transcribed words – as per the ground truth – is stored againt the user object, and made available to other applications for use as access profeciency for user as a criterion for access to the editing functions for a given collection. So the criterion for a collection X maybe that "user Y has correctly transcribe > 90% words for test Z."

2.2 Initial screens

On arrival the user can choose from the documents that they are associated with from a drop-down menu, though only the documents specifically selected for the e-learning app will be available (ie thouse with ground-truth and a flag set by the collection owner).

Once a document is selected the user is presented with data on proficiency and previous sessions and a choice to then train, test or explore the document.


Initial document screen, with proficiency, recent session and options
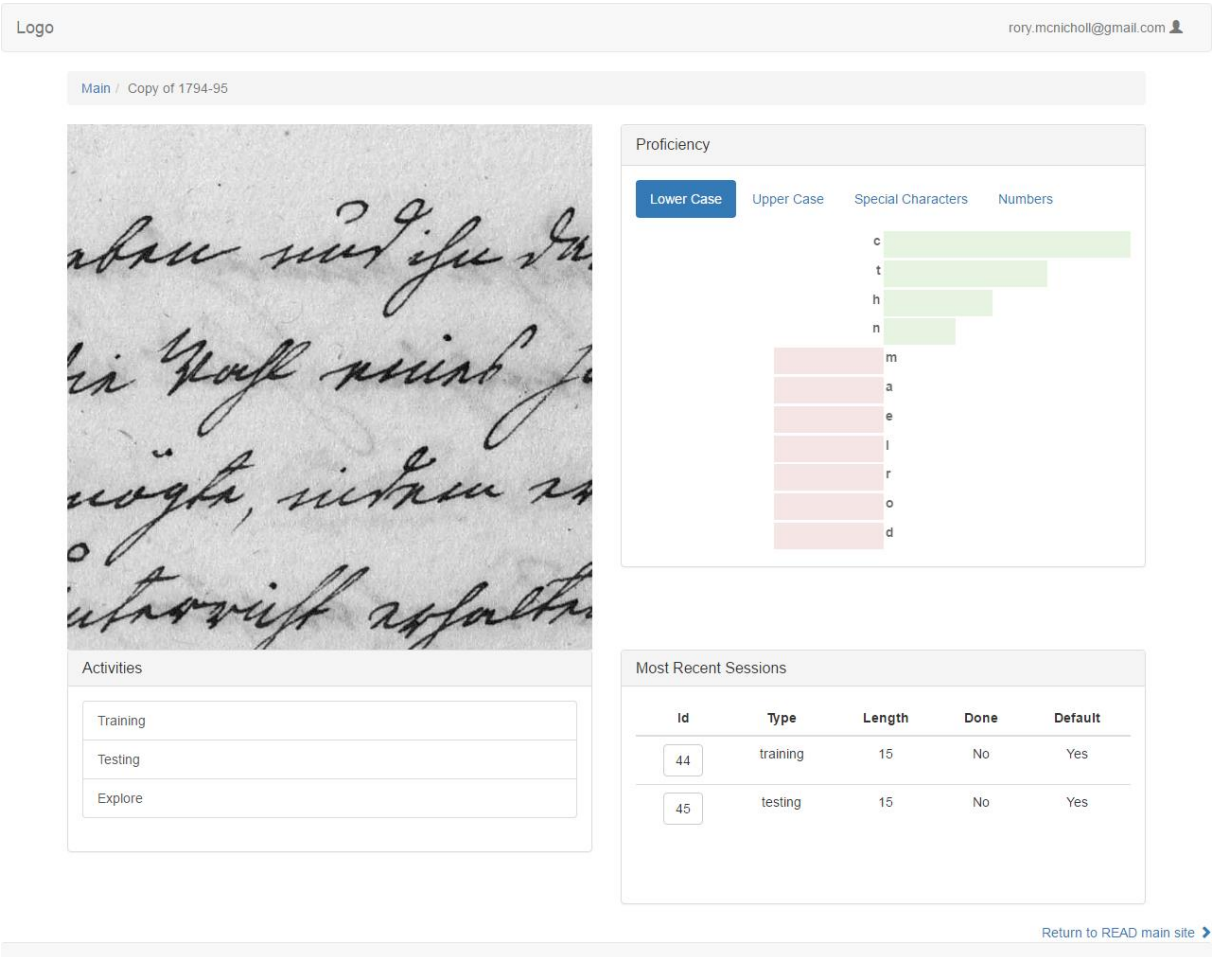
2.3 Training and testing

Training sessions allow the user to practice transcription. Entering a word and pressing "check" or alternatively pressing "cheat" to reveal the groud-truth word. The data from test sessions are not used to calculate profeciency scores. Proficiency scores are broken down by character to help inform users training and document exploration.

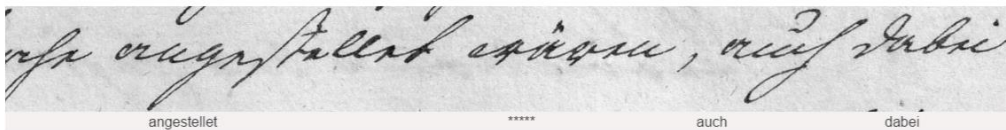Main / Copy of 1794-95 / Training / Item 436

Item 436

Continue

Verlust   empfinde   **   einem   hienechst
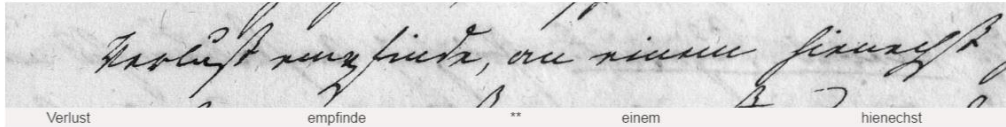
[a] [n]

Correct solution is **an**

A correct guess

Main / Copy of 1794-95 / Training / Item 437

Item 437

Continue

angestellet   *****   auch   dabei

[ ] [ ] [ ] [ ] [ ]

Incorrect!
Correct solution is **wären**
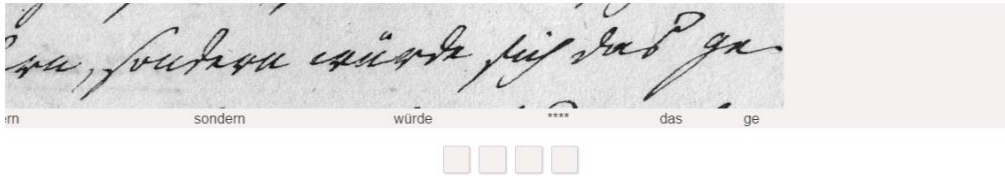
Incorrect guess

The test function presents the same however the scores from these sessions are used to cacluate the profeciancy score.
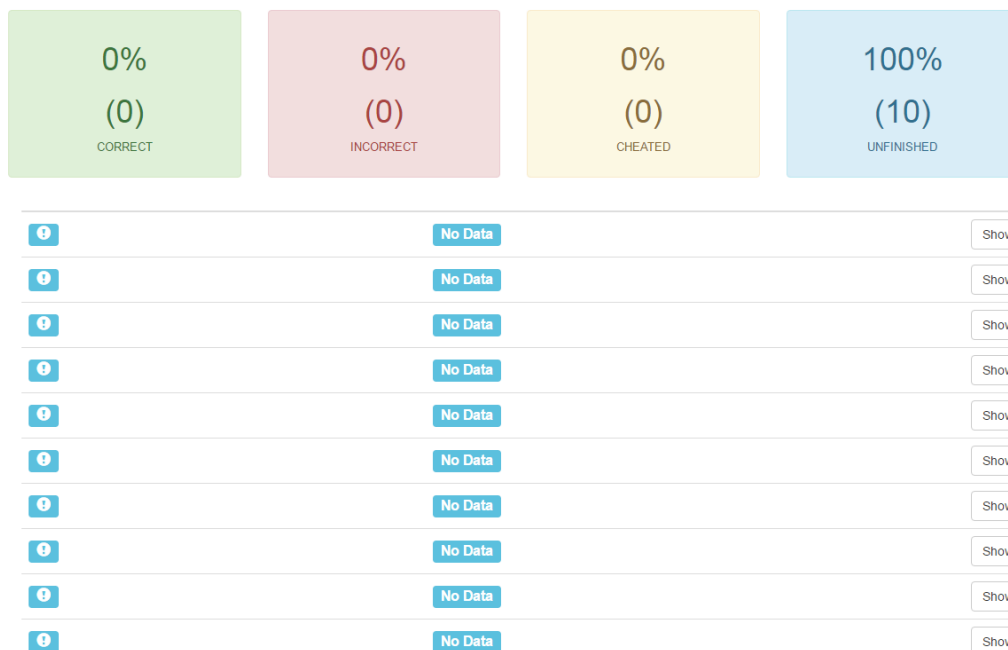
Cheat: the answer can be revealed despite no attempt made to transcribe

2.4 Results

Results are presented to the user at the end of the session showing the proportion of correct, incorrect, cheated or unfinished. A break down then follows which allows the user to review each line.

Results screen: #TODO get a screenshot of a more interesting result screen

2.5 Explore

The explore option allows the user to hone in on specific characters and symbols. This allows them to self-select characters with which they may be having difficulty. Lines with words containing the target character are presented to the user for review.

Explore screen, exploring lines with the character 'c'

2.5 Note on presentation technique

The words to transcribe are presented in the context of their containing line. The line image above the transcript below (with the target word starred-out) Below this a box-per-character input can be used to enter a guess. The source transcript documents (in the PAGE XML format) tags data to the line level only, so the position of the word within the line must be calculated given the line length and num,ber of words. This then allows the words in the text box to presented beneath the appropriate part of the line image. Image and text can be scrolled in parallel so the user can read the whole line if need be.

3. Integration

Like the other web-UI elements, the e-learning application has been written using the python-django framework. The e-learning application is an "app" in the django sense. This means it can be integrated with other web-UI apps and maintained by those familiar with the web UI code base. The e-learning application makes use of the READ utilities app to interact with the transkribus RESTful web service.