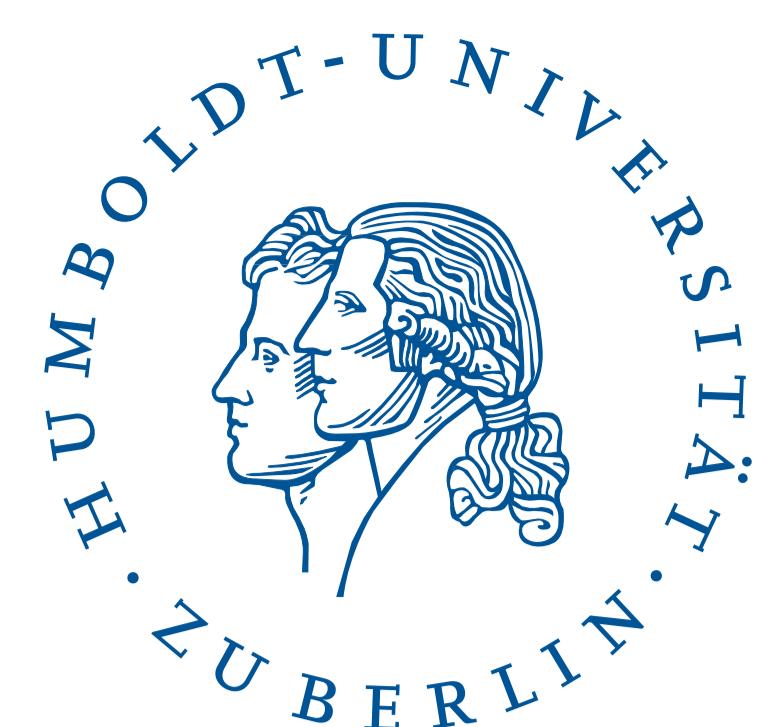


CALLIDUS

Computer-Aided Language Learning: Lexikonerwerb im Lateinunterricht durch korpusgestützte Methoden
(Vocabulary Acquisition in Latin Classes using Corpus-Based Methods)



HUMBOLDT-UNIVERSITÄT ZU BERLIN: COMPUTER AND MEDIA SERVICE, CORPUS LINGUISTICS, PEDAGOGY OF CLASSICS
Andrea Beyer, Malte Dreyer, Stefan Kipf, Milena Kühnast, Anke Lüdeling, Konstantin Schulz, Andreas Vollmer

Gefördert durch
DFG

Introduction

goal: improve Latin language learning in high schools
method: analog and software-based intervention studies in schools
software: generates exercises from raw text („Machina Callida“)
infrastructure: database, REST API, web application, external repositories

Software quality

FAIR principles: findable, accessible, interoperable, reusable
automated testing, documentation, operating-system-level virtualization
exchange of static data with other projects through REST API
cross-platform functionality, multiple ways of installation

Machina Callida is ...

modular: interfaces easily extendable by new functionality
efficient: graph database for corpus storage and search
sustainable: installation as Docker container for increased stability and comfort
collaborative: open source code using common languages and frameworks
shareable: permissive license (MIT)
flexible: difficulty level of exercises depends on user's previous knowledge
visible: visual representation of dynamically added linguistic information

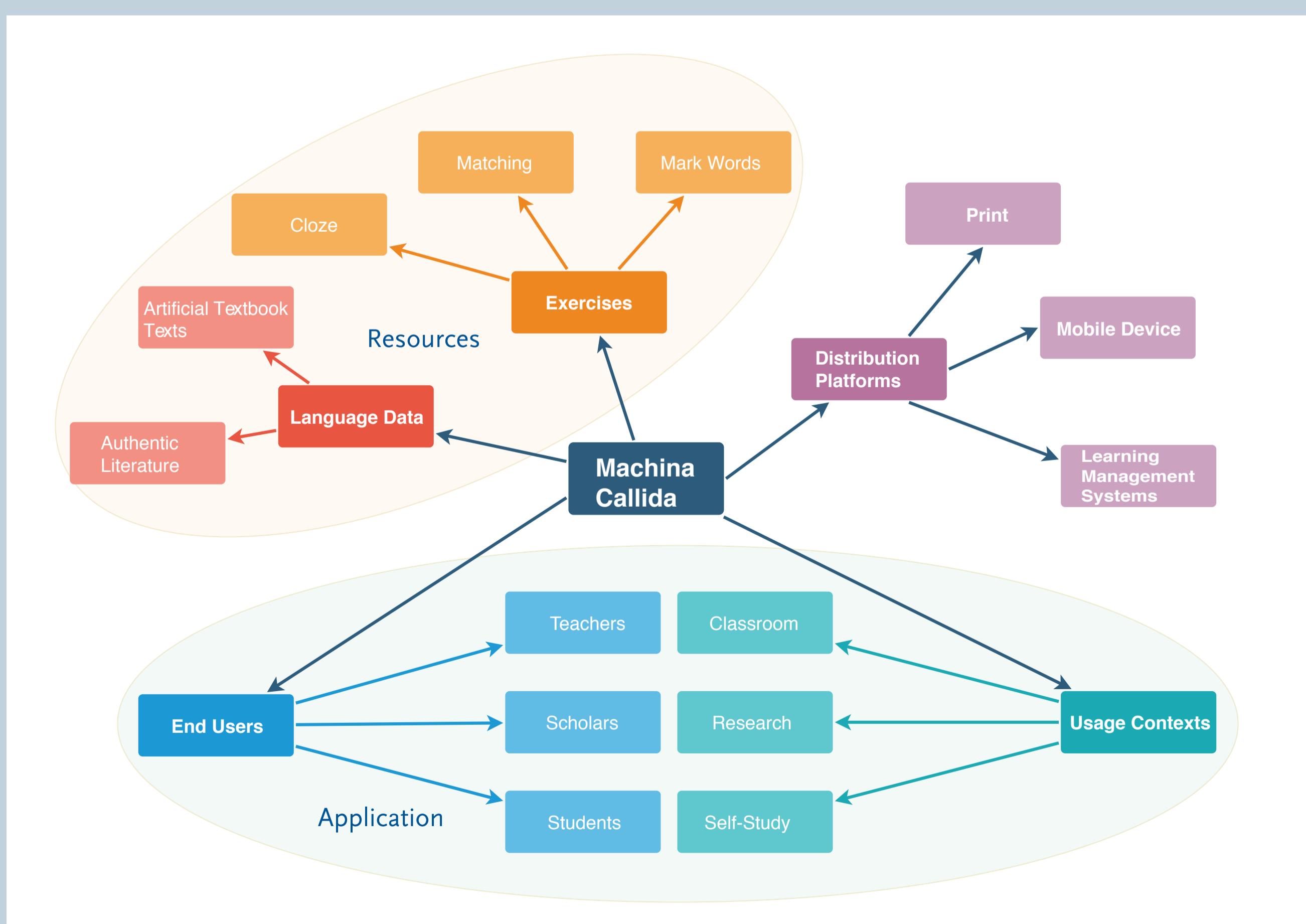


Fig. 4: Resources and their application in the Machina Callida

Resource Workflow

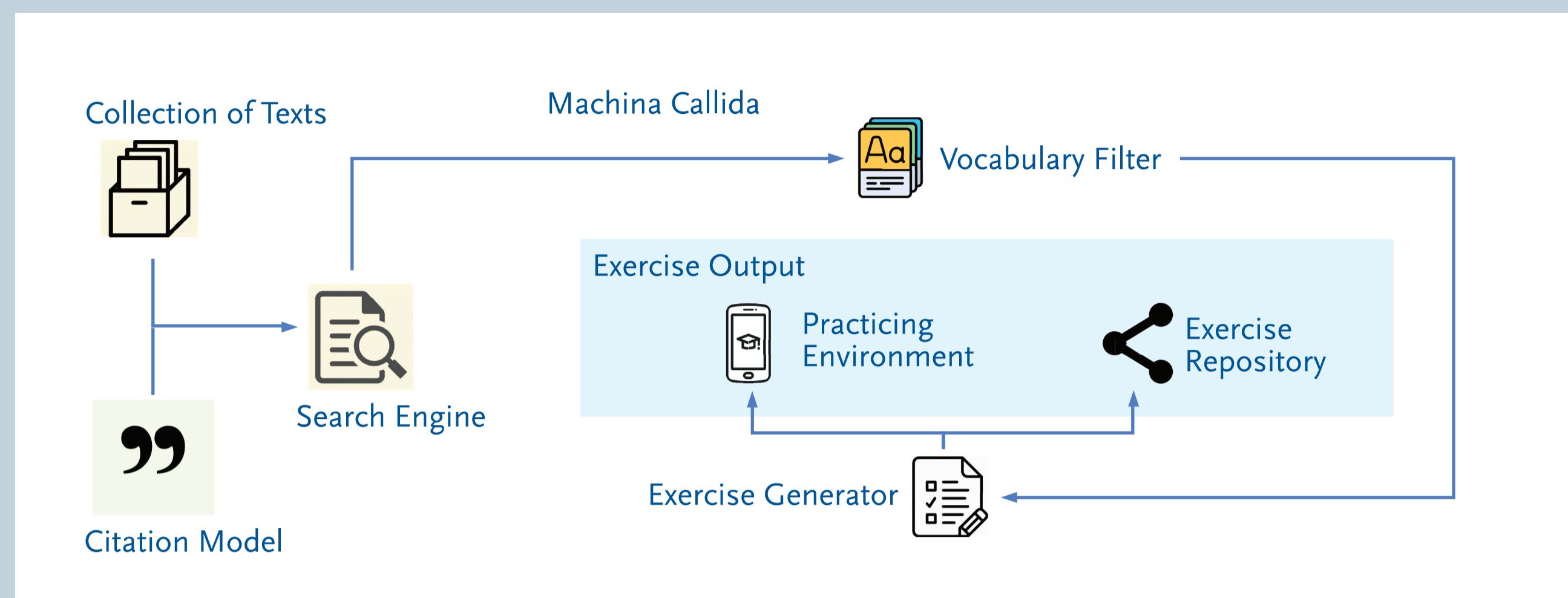


Fig. 1: Processing of resources in the Machina Callida

Intelligent Decisions

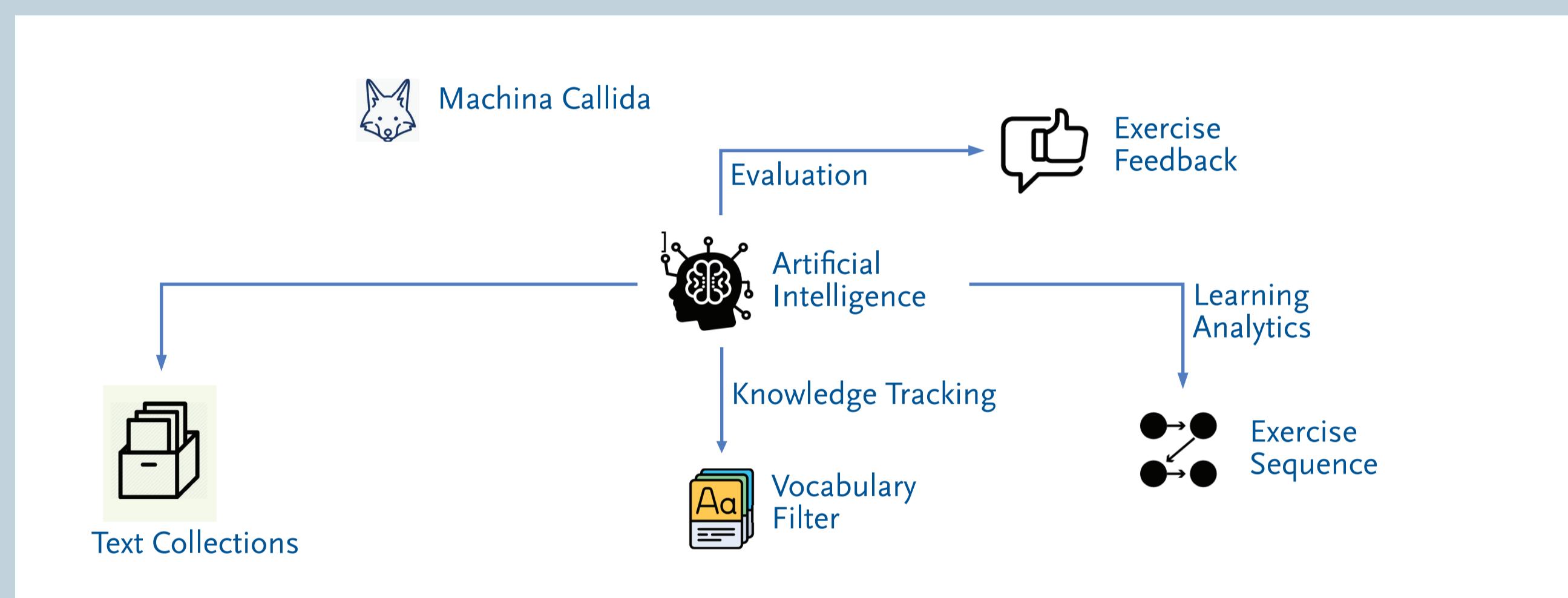


Fig. 2: Artificial Intelligence in the Machina Callida

Technology: Machina Callida

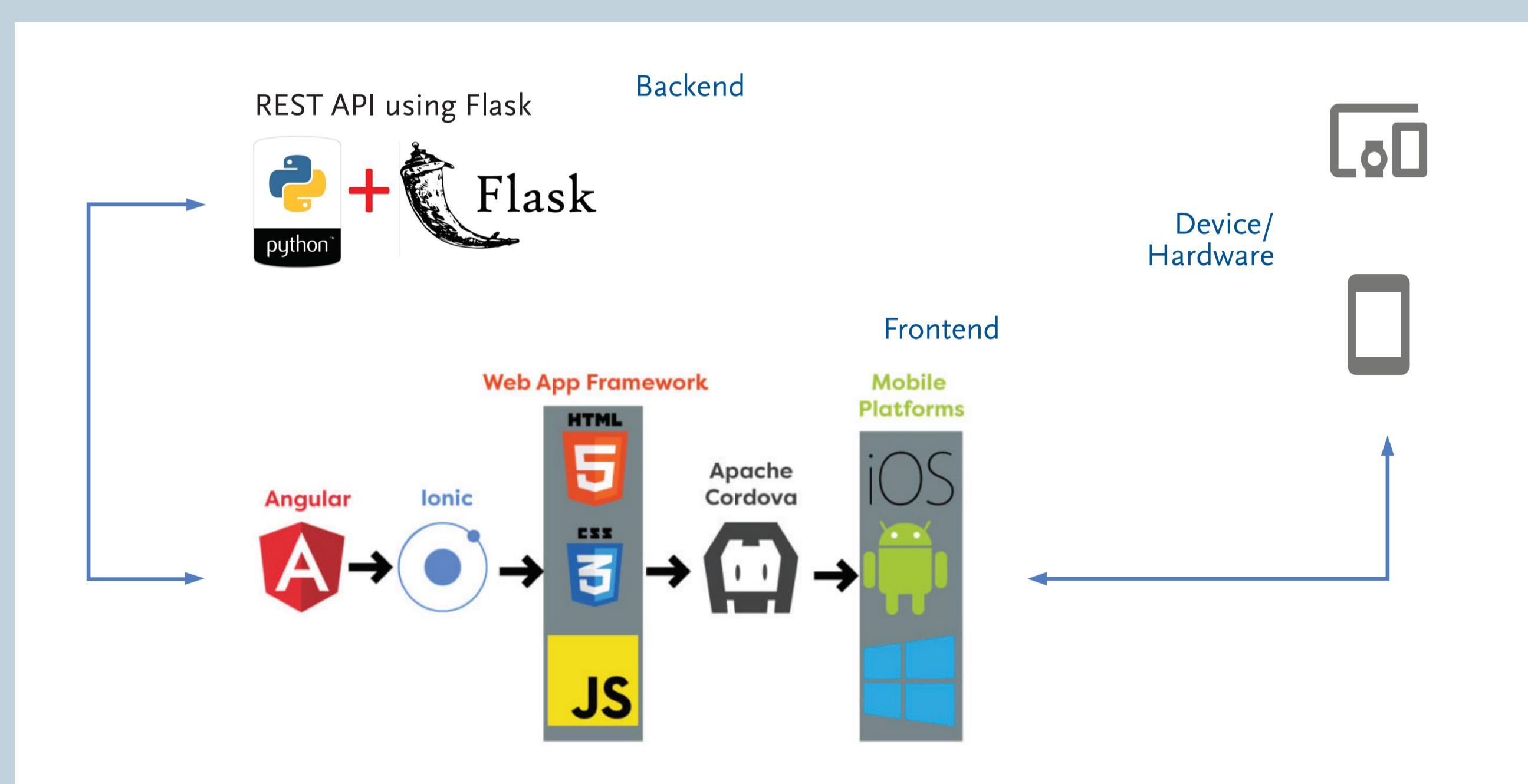


Fig. 3: Software Stack

Plans for the future

diagnose level of language competence more precisely
use learning analytics to monitor a user's progress and make recommendations
combine single exercises to longer, complex sequences
offer advanced training for teacher trainees on how to use the software
cross-references to dictionaries to support translation exercises

Try it yourself!



Contact

Project Website: <https://hu.berlin/callidus>
Source Code: <https://scm.cms.hu-berlin.de/callidus>
Public Software Installation: [https://korpling.org/mc/ \(v1.1.0\)](https://korpling.org/mc/)
DFG Project number: 316618374
Running time: 2017-2020
E-mail: konstantin.schulz@hu-berlin.de

Address

Konstantin Schulz
Humboldt-Universität zu Berlin
Sprach- und Literaturwissenschaftliche Fakultät
Institut für deutsche Sprache und Linguistik
Unter den Linden 6
10099 Berlin



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