

Knight Foundation School of Computing & Information Sciences

Automated Grading of Essays

Summer 2022 Capstone 2

Students: Kyle Maxwell

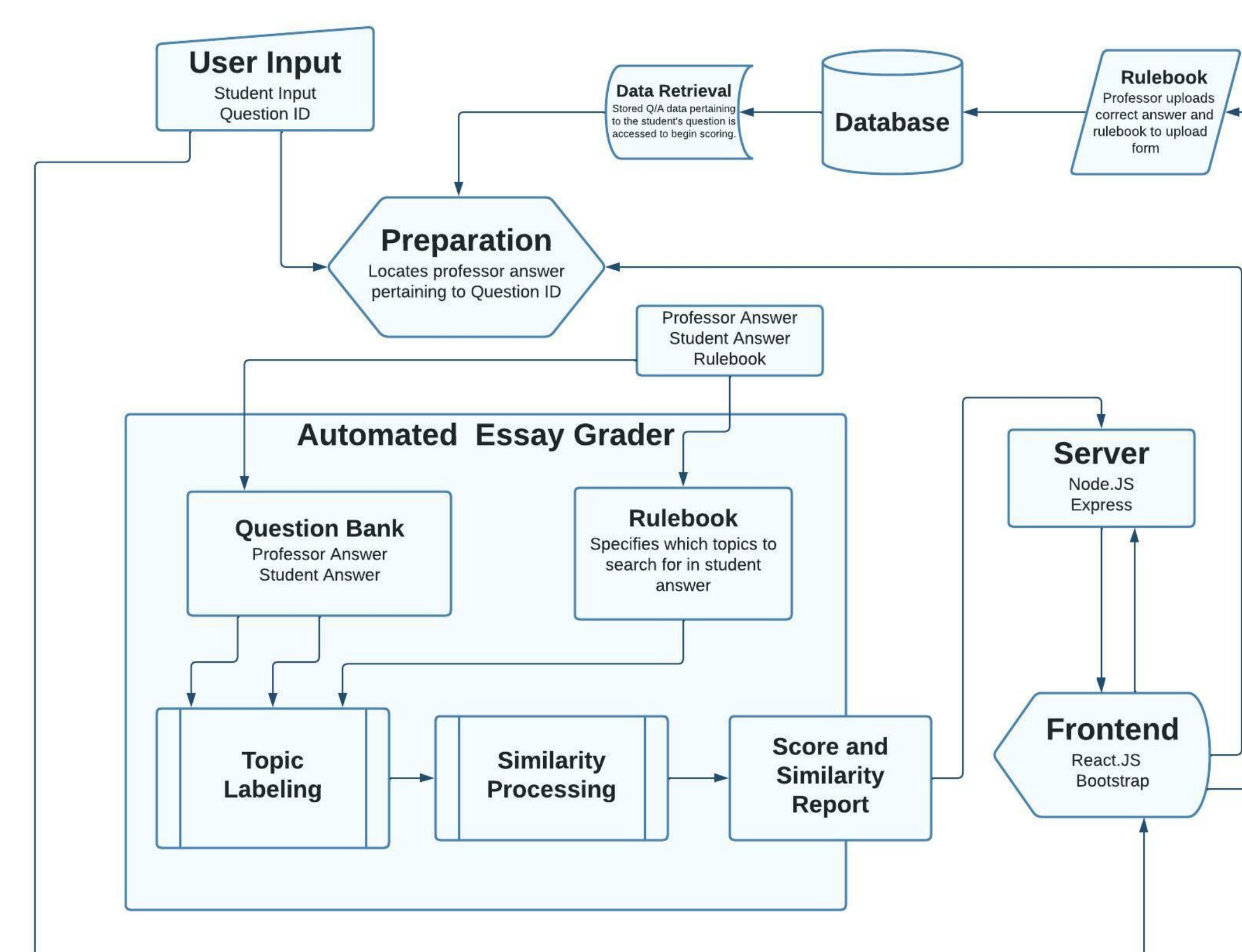
Mentor: David Gray, BSBA/JD, StudyBuddy Pro LLC

Instructor/Faculty: Dr. Masoud Sadjadi, PhD, Florida International University

PROBLEM

Law school curriculums are almost entirely writing-based and the essays students have to write and instructors have to grade are numbered in the thousands. StudyBuddy Pro aims to create a means for students to practice writing essays and get feedback without the need for manual review.

SYSTEM DESIGN



VERIFICATION

- Uses LanguageTool API to detect grammar errors within an essay and grades accordingly.
- Uses GloVe to measure similarity between a student's key points and a professor's key points to grade structure.

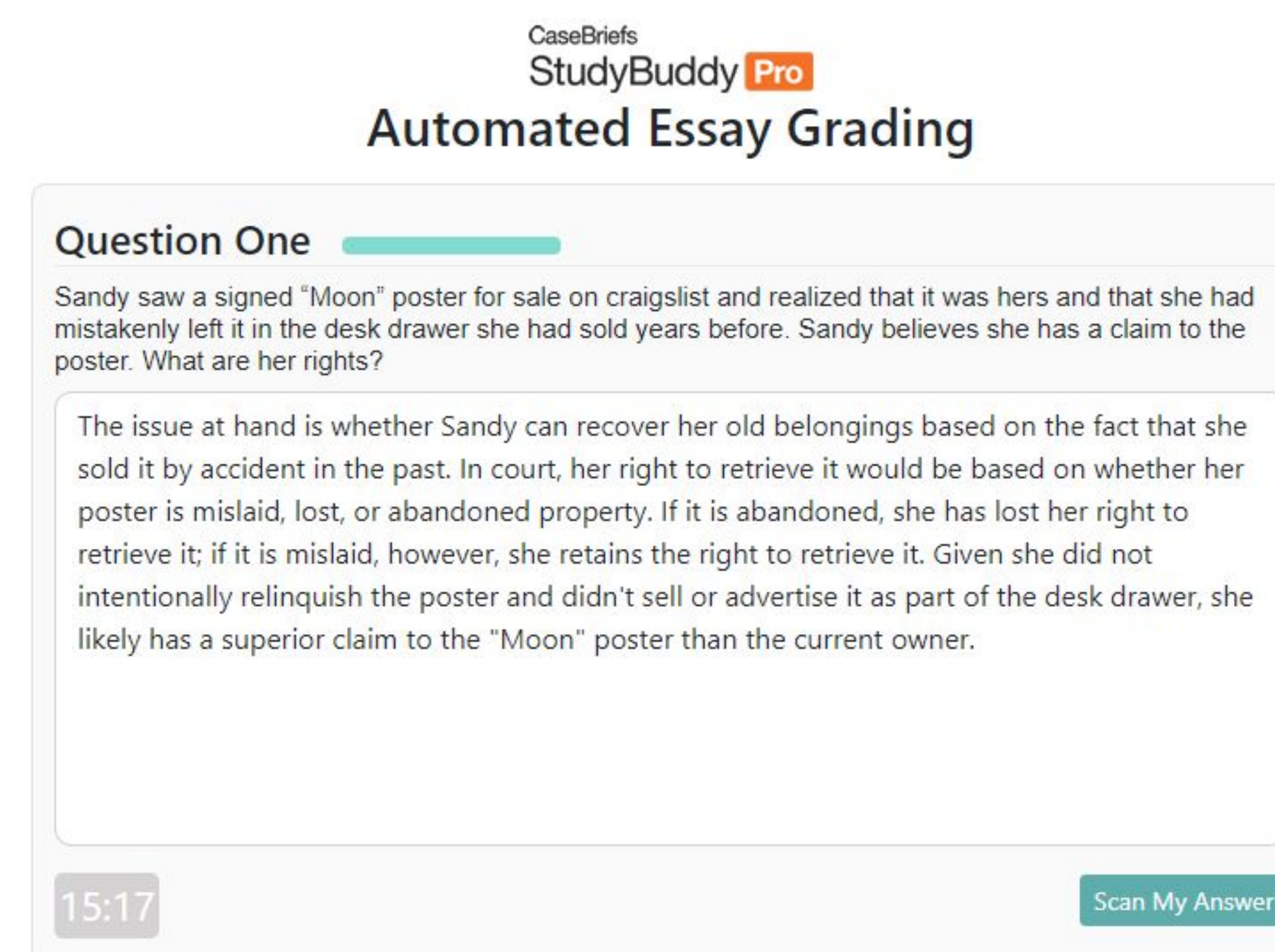
ACKNOWLEDGEMENT

The material presented in this poster is based upon the work supported by Mr. David Gray. We thank Mr. David Gray for his assistance and mentorship that we received throughout this process.

CURRENT SYSTEM

StudyBuddy Pro currently has case briefs, lessons, outlines, refresher courses, issue spotting essays, multiple choice quizzes, exam prep workshops, and charts, and notes.

OBJECT DESIGN



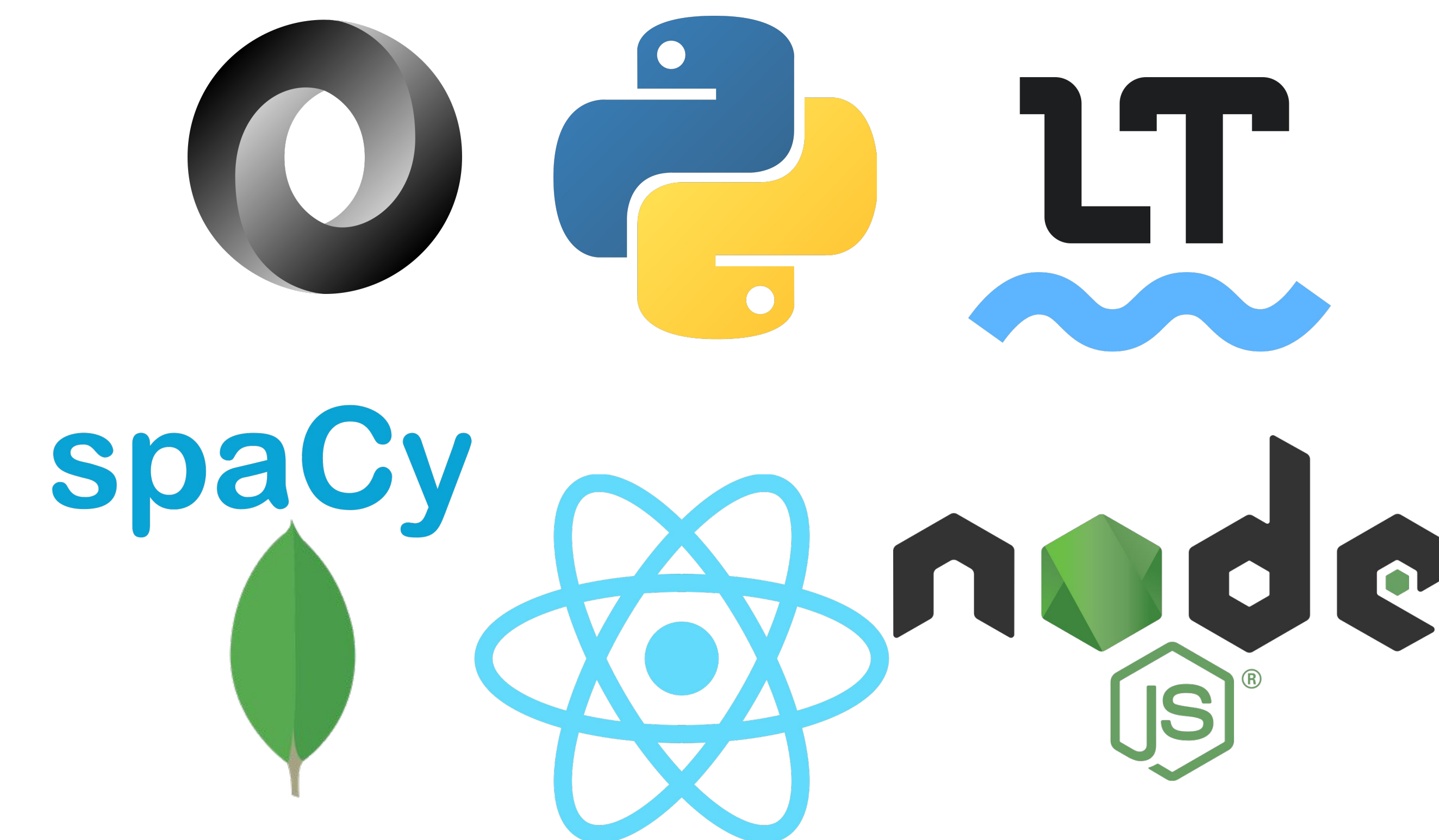
SUMMARY

StudyBuddy Pro is a platform for helping law students succeed in law school by giving them essay questions to practice. Students get scores based on how well they answer the questions and receive feedback about sections missed as well as spelling and grammatical errors.

REQUIREMENTS

- Create functions that can parse an essay for grammatical errors and score the essay accordingly.
- Create functions that can identify key topics within an answer to an essay question and grade it accordingly, much like how essays are normally graded in law schools.

IMPLEMENTATION



REFERENCES

The appropriate materials for research were provided by the project owner David Gray from StudyBuddy Pro.