CLOWiz

An NLP-Based Question Categorization Application

Table of contents

1 Project Overview

2 AI Engineering

3 UI/UX Design

4 Frontend/Backend

5 Testing

6 Report Management

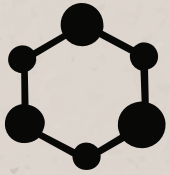
1 Project Overview

Introduction

Teachers encounter difficulties in aligning exam questions with Course Learning Outcomes (CLOs), requiring manual sorting for each question, thus consuming time and effort.

Solution?

Text Categorization



2 AI Engineering

Input	Output
CLO’s with short Descriptions List of Questions	Questions categorized into corresponding Course Learning Outcomes (CLOs) presented in a tabulated format

Techniques and Model

SVM Linear Classifier

Cosine Similarity

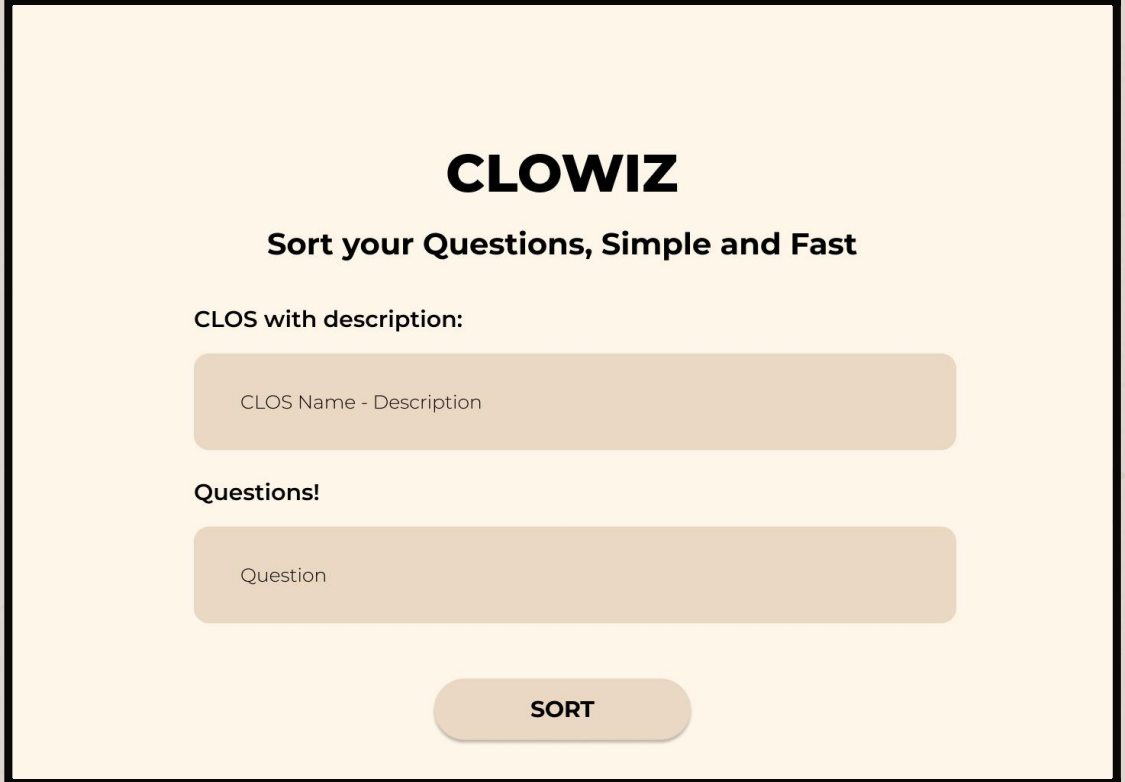
3 UI/UX Design

Role Overview

- UI Wireframes
- UI Prototypes

Figma

Sort.jpg


CLOWIZ
Sort your Questions, Simple and Fast
CLOS with description:
CLOS Name - Description
Questions!
Question
SORT

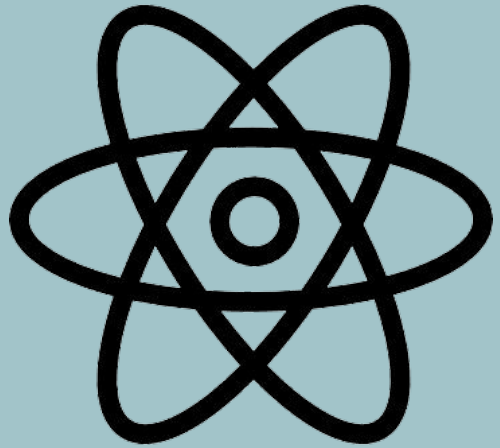
Result.jpg

Processed Successfully!
CLO-1
CLO-2
CLO-3
Copy to Clipboard
SORT AGAIN

4 Frontend/Backend

Frontend

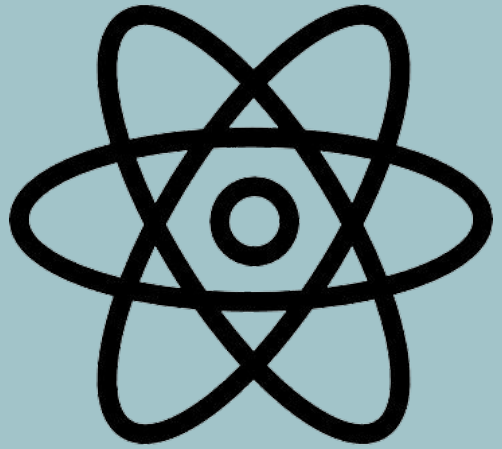
- User Interface Implementation
- Client-Side Logic
- React Js, HTML, CSS, Javascript



Backend

- Integration with Frontend and AI
- **/predict**
- Implemented using Flask

Backend



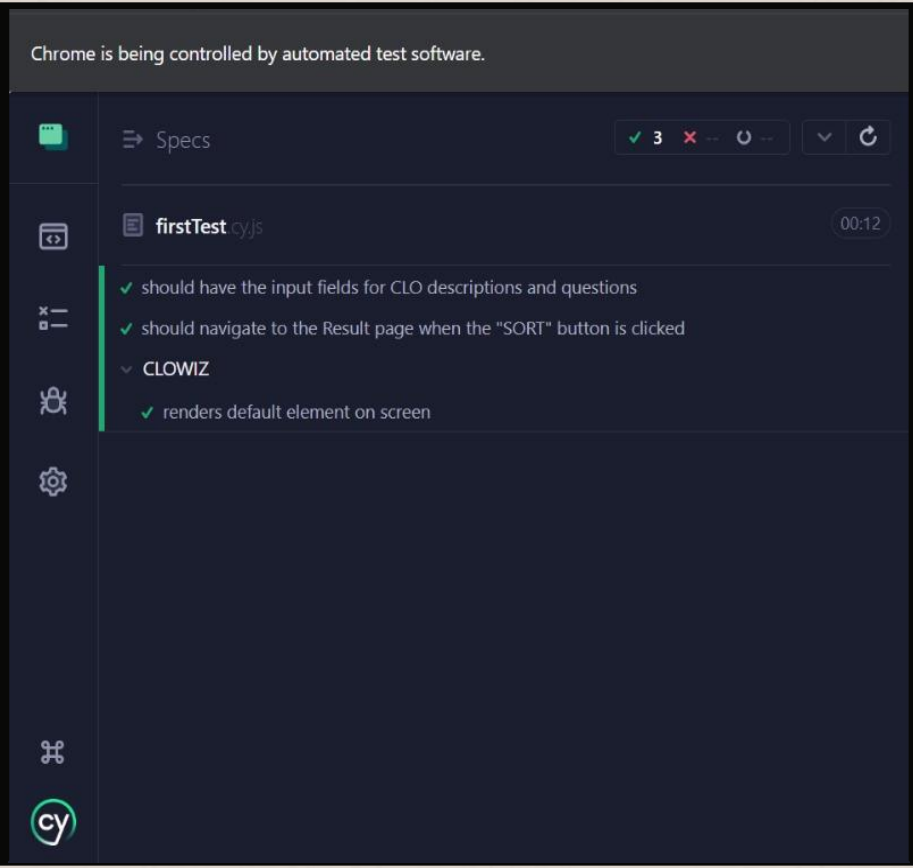
5 Testing

Role Responsibility

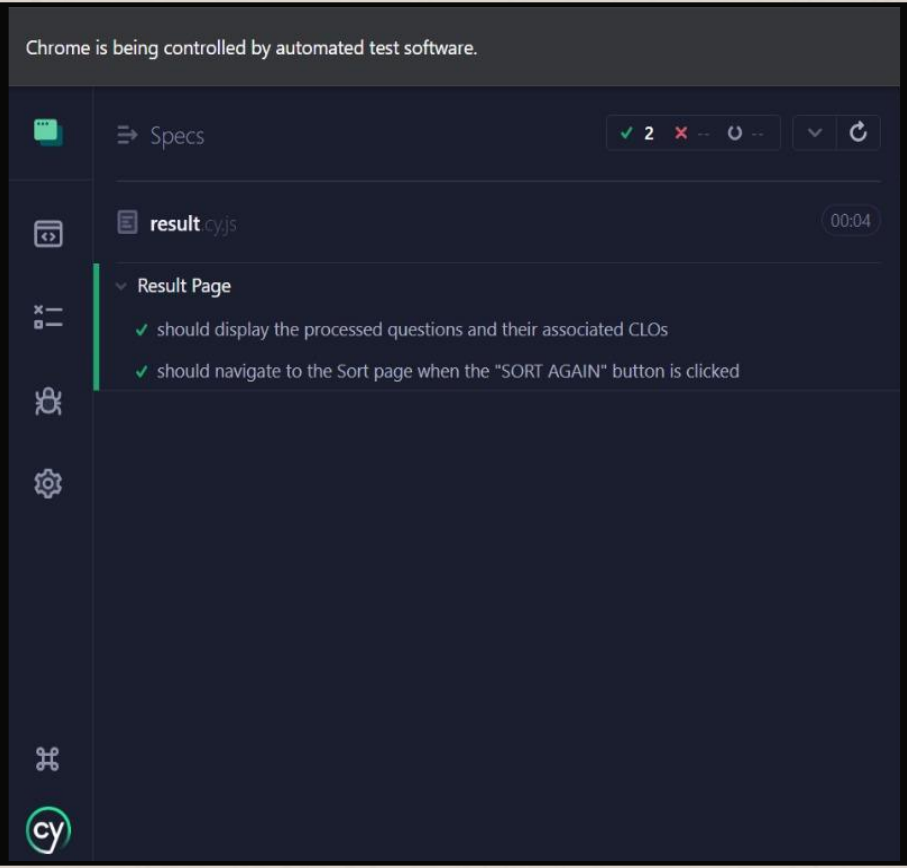
- Testing is conducted using Cypress and RTL
- Testing UI + Component
- Verification and Validation

cypress

firstTest.cy.js



result.cy.js


Chrome is being controlled by automated test software.
Specs
2
result.cy.js
00:04
Result Page
should display the processed questions and their associated CLOs
should navigate to the Sort page when the "SORT AGAIN" button is clicked

6 Report Management

Role Responsibilities

- Report Writing
- Collaborating with team members
- Incorporating changes

Thank you.

Team and Roles

Farouq Haider . 20P-0091	Project Manager/Backend Engineer
Aabideen . 20P-0006	AI Engineer
Shahzaib Niaz . 20P-0558	AI Engineer
Hassaan Waheed . 20P-0474	AI Engineer
Arslan Mumtaz . 20P-0143	UI/UX Designer

Team and Roles

Nabeel Yaseen . 20P-0486	Frontend Engineer
Munzir Kalim Ahmed . 20P-0477	Frontend Engineer
Adda Hussain Qazi . 20P-0488	Backend Engineer
Javeria Naeem . 20P-0456	Application Tester
Muhammad Shaheer . 20P-0480	Application Tester

Team and Roles

Muhammad Umar . 20P-0062	Report Architect
Azhar Jadoon . 20P-0631	Report Architect