

Final Report Submission

Executive summary

- The learning management system was usable to demonstrate sample work flows to be supported in the future as courses are adopted and translated into website support.
 - High level findings include general website flow, verified fully routable path to all webpages interlinked to one another throughout the site; usability score 100/100, quiz path to determine outcomes of learning style; usability score 80/100, desire for more simplistic design and scope creep with goal to add too many features to prototype, usability score 70/100.
- Immediate Recommendations were implemented in the final product of the website. Other minor issues remained that impacted the way content was displayed which still need to be addressed. These included the sample course schedule in the demonstration with Geometry not displayed in its expected text box. The course listing page also did not have mathematics in the location it was expected, which impacted the way the content was displayed.
- The main website purpose of allowing students to discover how they learn was properly documented and demonstrated successfully. Future website design will allow for a more intuitive approach. The website had proper routing among all webpages with some minor corrections needed such as a retake quiz button, a confirm password box and clarification for expected input on the reset password page.

• **Background and motivation**

- I planned to do the project because I am a student myself. I saw how the current education system is not aimed at helping students discover how they learn best. I saw the need for this website and used the skills that I learned from my college courses to implement a proposed solution to help students discover how they learn. This is important to me because we all need to learn in college and I wanted to help students learn more effectively. The potential social impact of this project is that all future and current college students can discover their preferred learning style. This will lead to improved academic performance, greater student accomplishment and improved knowledge retention. The website stands to facilitate learning and proposed education paths and courses regardless of geographical location or access to learning resources. This solves learning inequalities and allows students access to better resources and allows them to be more successful than if the website had not been created.

• **Problem statement and objectives**

- (What did you plan to accomplish for the project? **Please state clearly the objectives, tasks, and deliverables.**)
- The problem statement was “How do students learn?”
- Objectives: Discover how students learn, create a customized test to help students discover their learning style then provide Artificial Intelligence agents to support their specific learning style. Also to link them up with college courses from accredited universities that will allow them to learn in their preferred learning style with catered course content and instructors or self-led learning.
- Improve learning accessibility and engagement.
- Allow college students to discover their learning style
- Use Artificial Intelligence to provide catered learning material to allow students to use their most efficient learning method to learn course content
- Provide seamless navigation and course management on YouLearn website
- Enable instructors and creators to easily add and maintain content to YouLearn website
- Ensure scalability and usability across all roles allowing continuous expansion of course content and expand across learning subject matter and course content
- Facilitate communication between students, communities and their professors

Tasks:

- Task 1 — “Create new account and enroll in the English 101 course.”
- Success = student created account, enrolled in English 101 and saw the English 101 course from the course dashboard
- Partial success= Student created account but could not enroll in the English 101 course or did not see the enrolled course on the course dashboard
- Task 2 — “Perform first English 101 module.”

Success = module and submodules for English 101 were completed successfully.

Task 3 — “Participate in a community forum by creating a post and replying to a classmate’s post.”

Deliverables

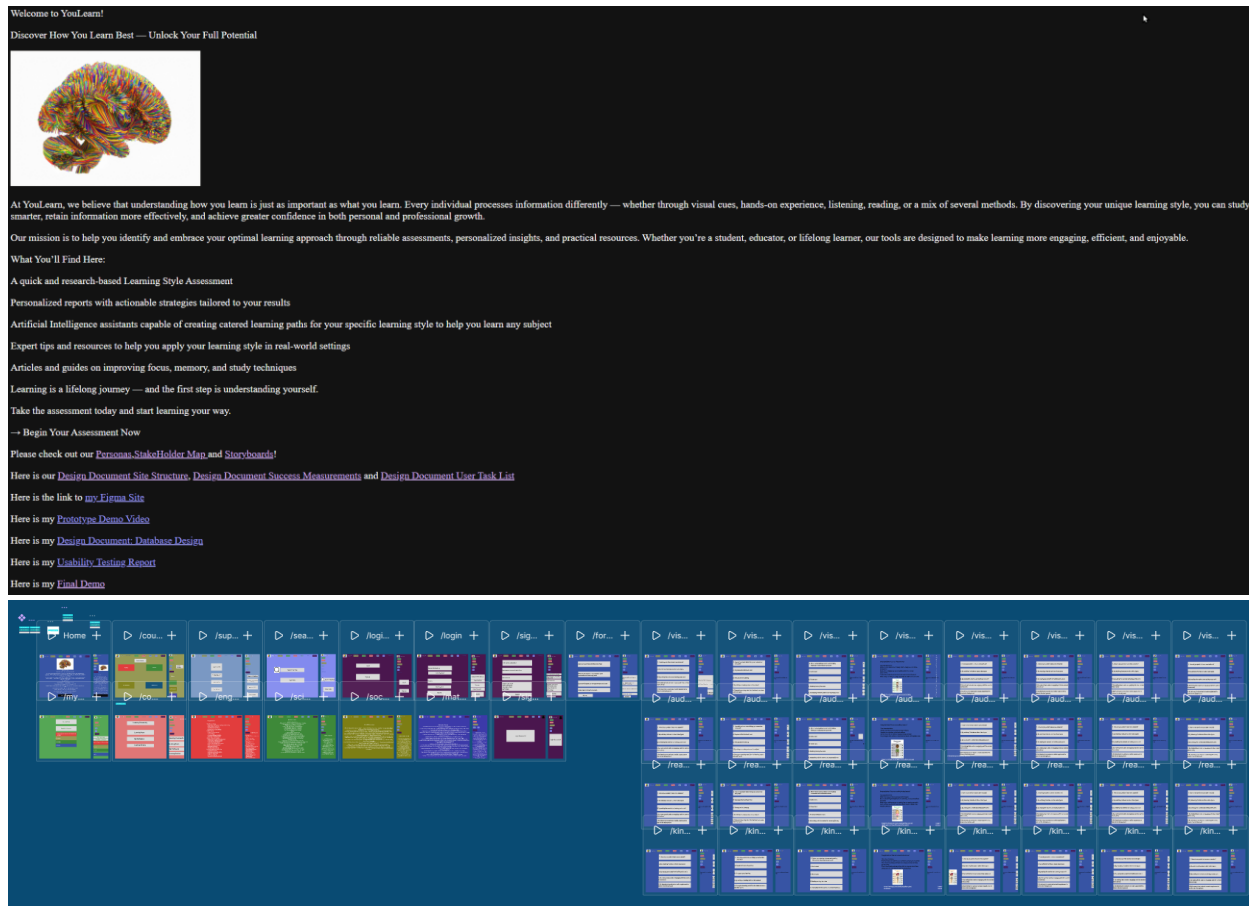
1. Personas list
2. Stakeholder map
3. Storyboards
4. Design Document Site Structure
5. Design Document Success Measurements
6. Design Document User Task List
7. Figma Site
8. Prototype Demonstration Video
9. Design Document Database Design
10. Usability Testing Report
11. Final Demonstration


Project design and implementation


(How did you complete the project? Please include major details of all your design and implementation. **Please include the data collection and analysis you have done for the**

project. Please also include screenshots of your project, such as user interfaces, database settings, etc.)

- I completed the project by observing the requested documentation and creating the documents meeting the expectations set forth by the course. These included creating sample personas, a stakeholder map, user storyboards, the site structure, success measurements, User task lists, the Figma site, a prototype demonstration video, the Database Design document, a usability testing report and the final demonstration video. Utilized tools included Figma, Adobe Dream Weaver 2021, Zoom, and Microsoft Word for requested documents.



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Welcome to YouLearn!

Discover How You Learn Best — Unlock Your Full Potential

At YouLearn, we believe that understanding how you learn is just as important as what you learn. Every individual processes information differently — whether through visual cues, hands-on experience, listening, reading, or a mix of several methods. By discovering your unique learning style, you can study smarter, retain information more effectively, and achieve greater confidence in both personal and professional growth.

Our mission is to help you identify and embrace your optimal learning approach through reliable assessments, personalized insights, and practical resources. Whether you're a student, educator, or lifelong learner, our tools are designed to make learning more engaging, efficient, and enjoyable.

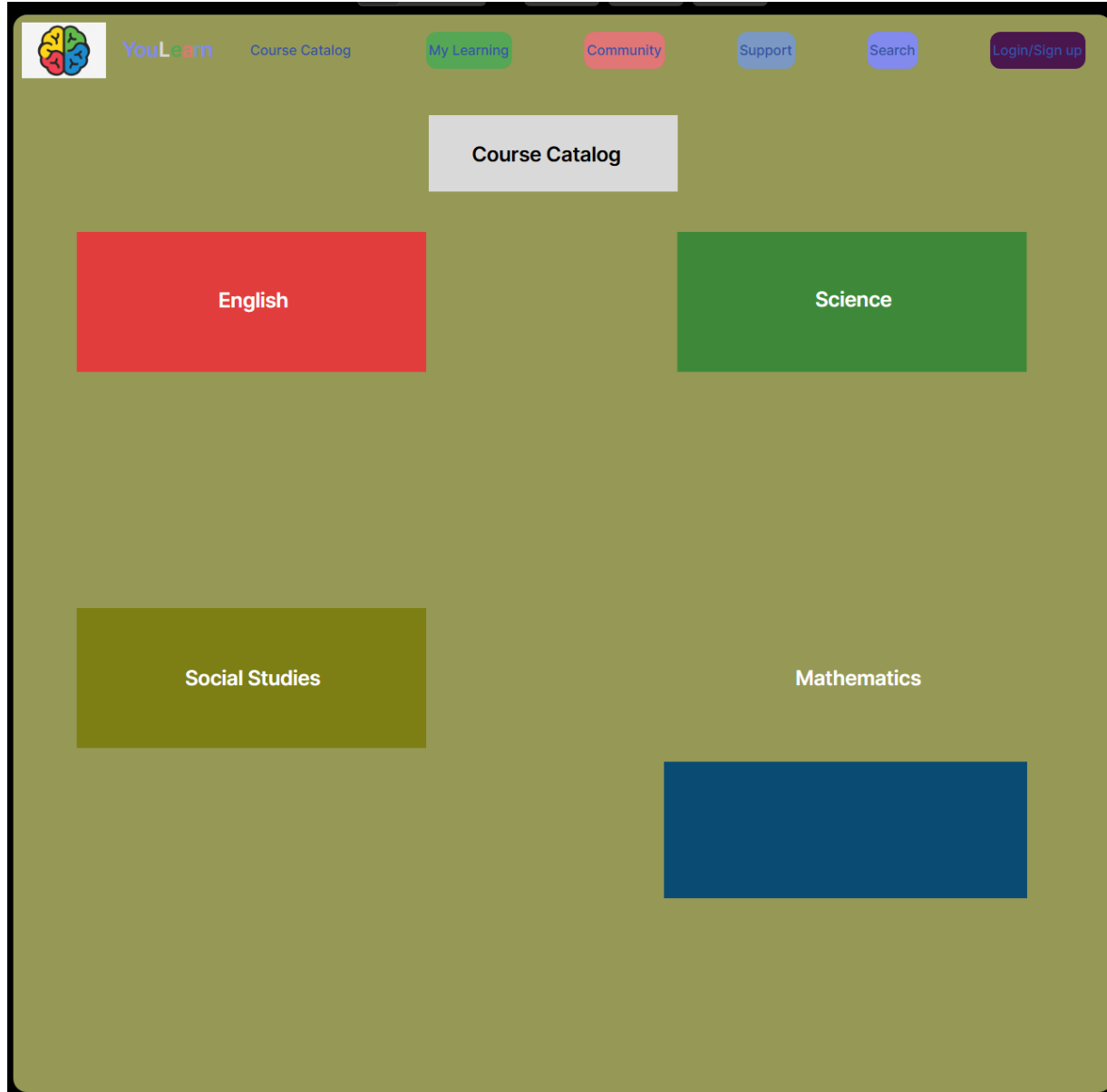
What You'll Find Here:


- A quick and research-based Learning Style Assessment
- Personalized reports with actionable strategies tailored to your results
- Artificial Intelligence assistants capable of creating catered learning paths for your specific learning style to help you learn any subject
- Expert tips and resources to help you apply your learning style in real-world settings
- Articles and guides on improving focus, memory, and study techniques

Learning is a lifelong journey — and the first step is understanding yourself.

Take the assessment today and start learning your way.

Take the learning style test!



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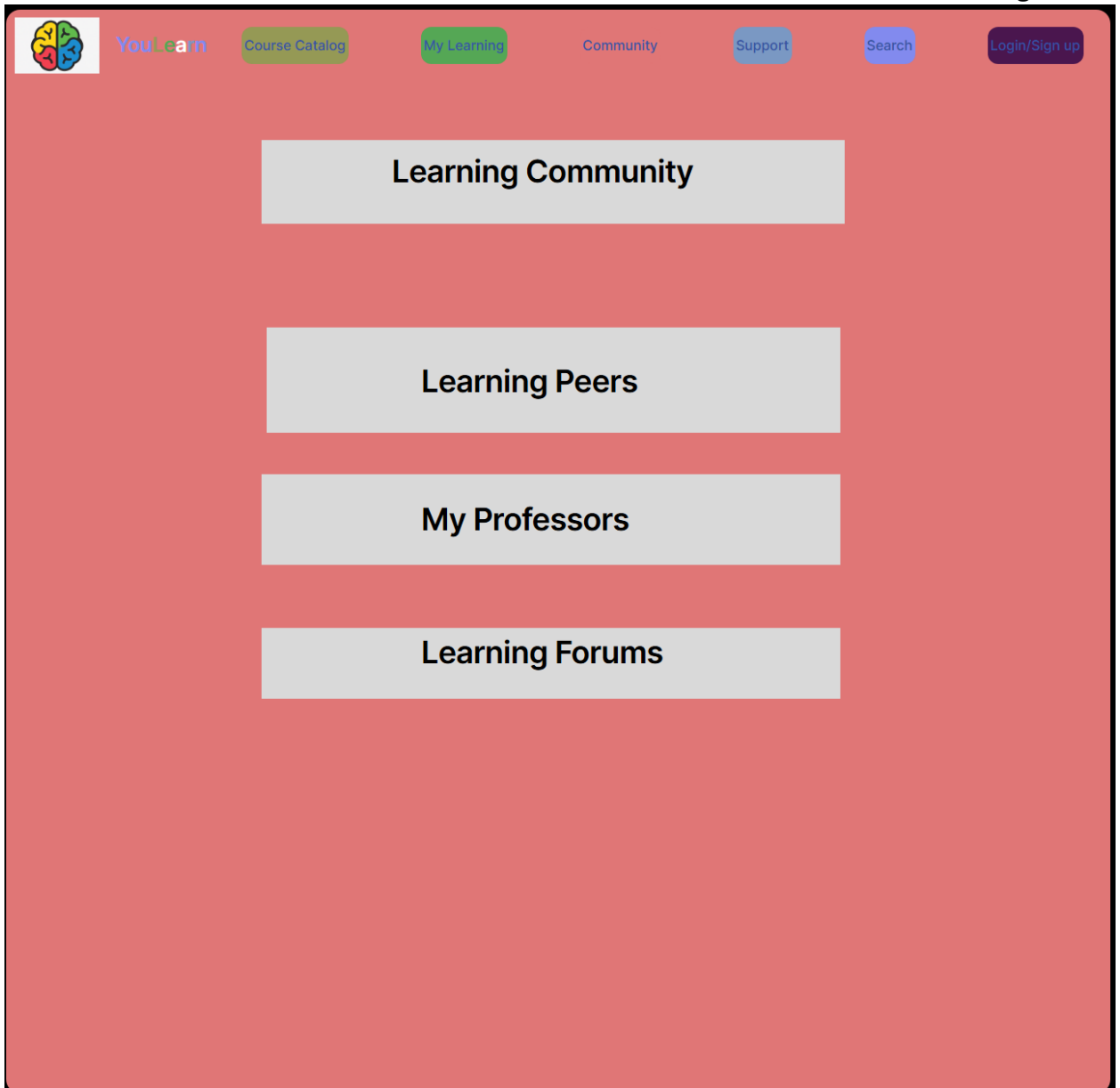
Enrolled Courses

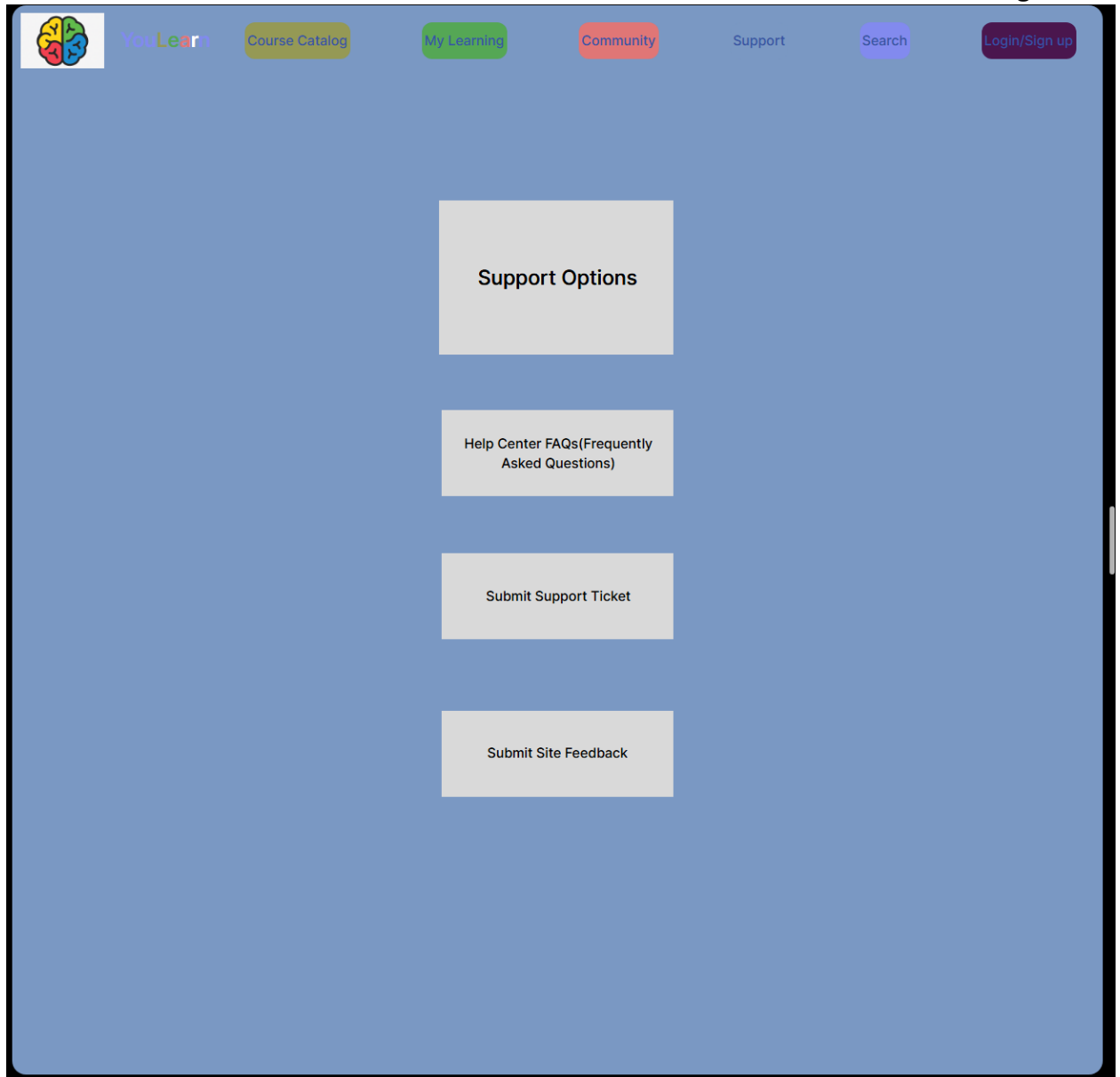
- English 101: Introduction to College-Level Writing


Economics

Chemistry

Geometry





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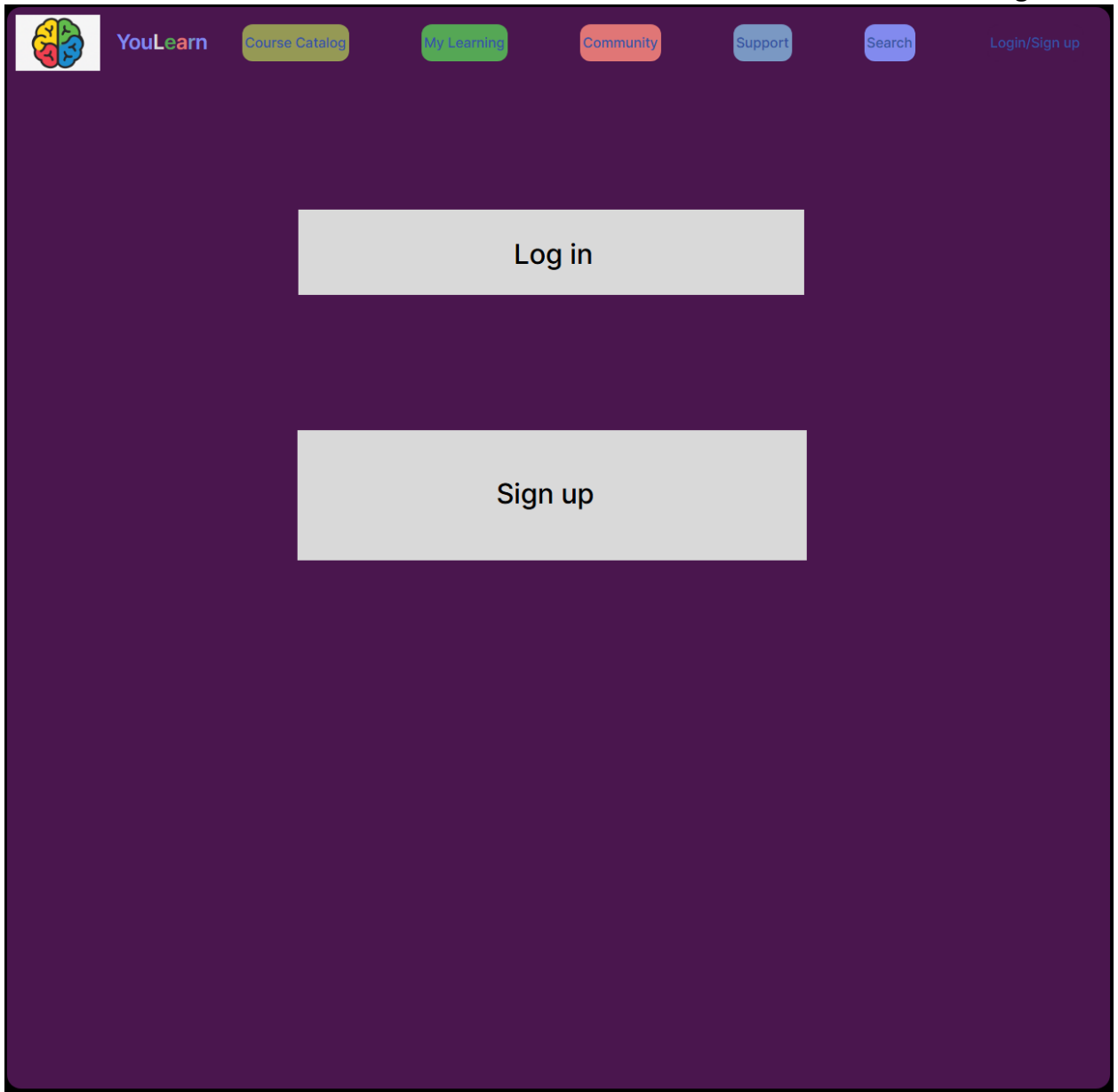
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Search the Site!

Type here:



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Login/Sign up


Username (Email address):

Forgot Username?

Password:

Forgot Password?

Submit

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Login/Sign up


Username and Password Recovery Page

Enter email address or username to send
username/email recovery email

Enter email address to send password reset code

Enter code received from email:

Submit

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Login/Sign up


Enter academic email address:

Enter username to be used for public forums

Create password

Password requirements:
At least 15 characters long
At least 1 uppercase letter
At least 1 lowercase letter
At least 1 number
At least 1 symbol

Submit

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1. How do you prefer to learn new material?

A. By watching Youtube or other video types

B. By reading the content and writing notes on it

C. By making flash cards or engaging with the content interactively

D. By listening to a podcast or audio supplement to listen in the background

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2. How did you learn about things you remember very well?

A. Diagrams/Charts/Visual Form

B. Through active listening

C. By writing or reading notes on the subject

D. Through interacting with fill in the blank exercises and flash cards

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3. When remembering a lesson and recalling information what stands out most?

A. Audio cues

B. Visual cues

C. Reading/writing the notes

D. Interacting with the content in a meaningful way



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Congratulations! You are a visual learner!

Your characteristics:

Prefers to see information through charts, diagrams, or written instructions

Remembers images and visual details better than verbal explanations

Tends to be detail-oriented and observant of visual elements

Often enjoys drawing or using visual aids to understand concepts



Image from <https://pasen.org/visual-processing-is-important/>



Congratulations! You are a reading/writing learner!

Your characteristics:

Prefers to read and write to process information

Good at absorbing information from textbooks, notes, and written resources

Often enjoys writing essays or making lists to organize thoughts

Favors written instructions and finds them easier to follow than verbal explanations



Image from
<https://www.workreadytraining.com.au/whats-your-learning-style-read-write-learner>



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Congratulations! You are a kinesthetic learner!

Your characteristics:

Prefers hands-on experiences, movement, and physical activity

Often learns by doing and feels more engaged when actively participating

Can be easily distracted by sitting still for long periods of time

Strong memory for physical tasks and movement

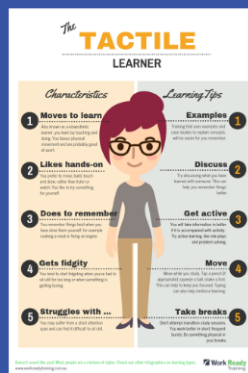


Image from

<https://www.knilt.arcc.albany.edu/Kinesthetic>



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Congratulations! You are an auditory learner!

Your characteristics:

Prefers listening to instructions or explanations

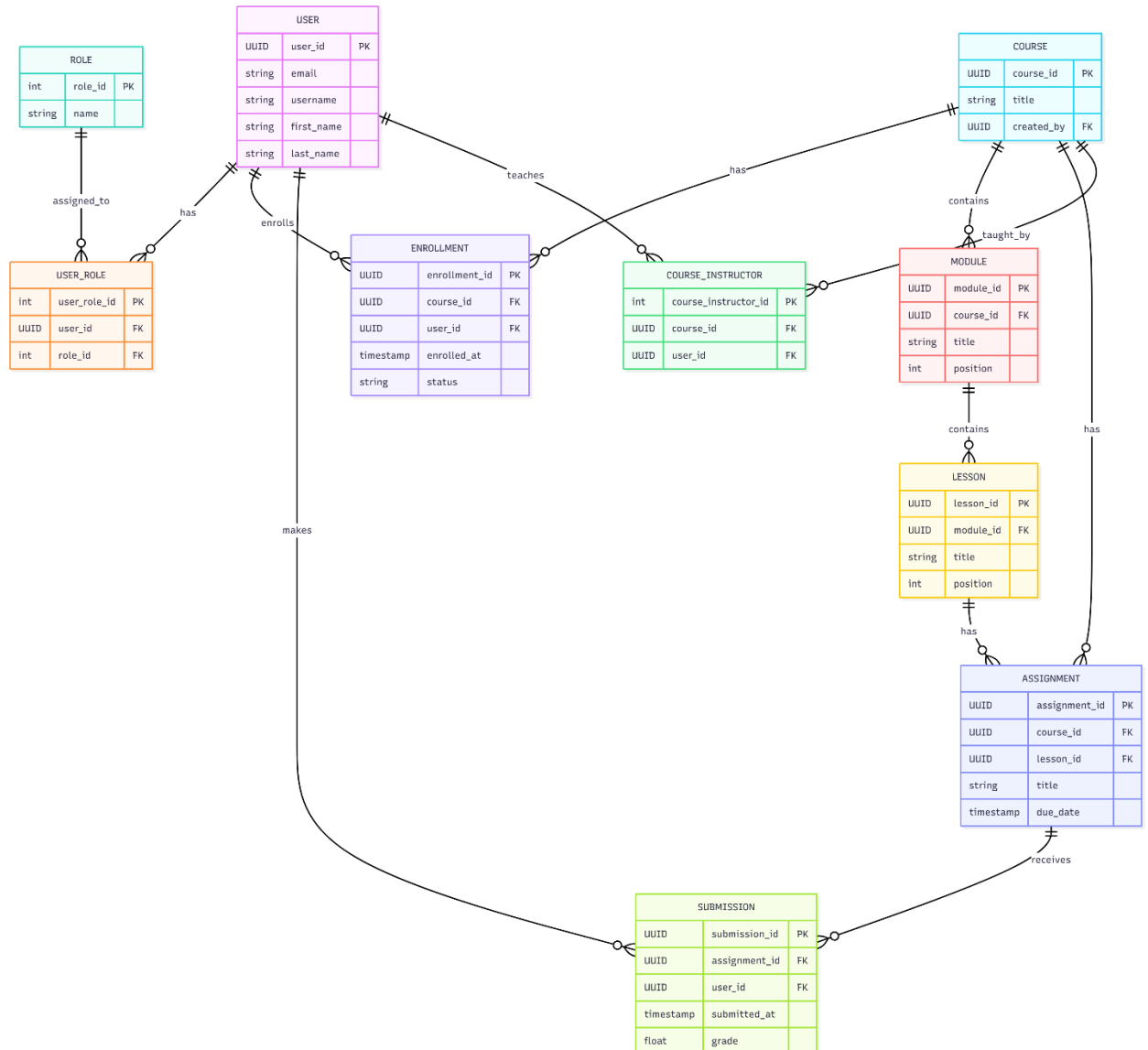
Good at remembering verbal instructions

Often talks to themselves or repeats things out loud

May struggle with written instructions but excels with spoken ones



[Image from https://studytipsly.com/auditory-learners/](https://studytipsly.com/auditory-learners/)



Testing/Evaluation/Validation

- I measured if my completed project met the set objectives by performing extensive testing to make sure the set forth tasks could be completed.
- Test types include moderated and unmoderated. Primary learning methods include remote with the ability to support live hybrid environments to support real time learning with student and instructor interaction.
- Number of participants: 30

- Session length: 1 hour
- Tools: Recording tools, website analytics and screen capture tools.
- Notes on facilitator script and pilot included having the students self-enroll in the website and perform their first lesson.

2. Participants

- Recruiting criteria for students includes the student bodies of accredited elementary schools, middle schools, high schools and college students. The key benefit of the website is facilitating education beyond geological boundaries allowing for adoption across the United States with plans to support other countries once language support is improved. , Target demographics are all students within the education system regardless of race, gender, identity, religion, or other protected classes. The only criterion for demographics is that students be enrolled in an accredited elementary, middle, school, high school or college. Beginning sample sizes will include starting with a sample elementary school, middle school, high school and college accepting volunteers. Current scalability will begin with elementary school then progress through each education level to create support framework which will then allow for scaling beyond cities to widespread adoption. Students self-reported their level of learning with learning management systems and were asked for feedback on how this website performed compared to those other learning management websites.

3. Tasks & scenarios

Write tasks as realistic scenarios and include exact success criteria.

Example tasks for an LMS:

- Task 1 — “Create new account and enroll in the English 101 course.”

Success = student created account, enrolled in English 101 and saw the English 101 course from the course dashboard
- Partial success= Student created account but could not enroll in the English 101 course or did not see the enrolled course on the course dashboard
- Task 2 — “Perform first English 101 module.”

Success = module and submodules for English 101 were completed successfully.
- Task 3 — “Participate in a community forum by creating a post and replying to a classmate’s post.”

Success = Student creates their own post; it is displayed in the forum, and they reply to a classmate’s post and see their response in the forum as well.

4. Metrics collected

- Quantitative measurements
- Completion rate
- Time spent
- Failure rate
- Usability test result

- User satisfaction test

5. Results — Quantitative/Qualitative / findings

- Completion rate - % of students who were able to perform the requested task
- Last test results demonstrated 100% of students were able to create an account
- Time spent – the time spent (in minutes) per beginning the task and completing it or stopping the attempt to complete the task.
- Time spent averaged 2 minutes to create an account without extraneous variables
- Failure rate – Number of errors generated when attempting to complete a task
- Usability test result – 1-5 scale (5 being best) for ease of use for website with 10 questions. Total score is out of 50.
- Current results showed an average score of 40/50. Students noted that pages such as the enrolled courses page did not display properly when showing enrolled courses. Received reports that the account creation page was confusing and did not have the ability to reset password or update account details.
- User satisfaction test – Net promoter score out of 5 (5 being best) for user satisfaction with the site performance.
- Current results showed 4/5 the website still needs improvement to meet the student's expectations for what the site should look like and how it should perform.

- Demonstration of results using tables/charts. These can include a bar chart or pie graph comparing students across quantitative measurements. Such as success rate demonstrated with a bar chart where task is the x axis and success rate is % on the y axis.

Produce tables or visual data representations to demonstrate results clearly and effectively. The goal being to demonstrate the severity of the issue, frequency of occurrence, the priority relative to other tasks, whether the fix is quick and how long efforts are estimated to fix the problem.

- Severity scale (1-10) 10 is most urgent
- Frequency is the likelihood that the issue occurs with a % out of 100 per attempt
- Priority (1-3) 3 is most urgent
- Current issues were priority level 2 because these prevented or caused confusion when users were performing the user task list as demonstrated in the design documents.
- Quick fix means that the problem can be solved in 1 day or less
- Effort estimate is the number of days to fix the problem
- Findings from surveys or outlier data through quantitative measurements such as low success rate, high time to complete tasks or high number of errors produced.
- List of usability issues with demonstrated examples from user input
- These included a confusing account login successful page which did not allow customization of user account. There is not a reset password button as would be expected, and the form fills were confusing to users on what is a static box or

meant to be a button clicked by a user. This led to confusion when students tried to reset their password and did not have a button to send the code and a box for them to enter the received code.

- High level findings include general website flow, verified fully routable path to all webpages interlinked to one another throughout the site; usability score 100/100, quiz path to determine outcomes of learning style; usability score 80/100, desire for more simplistic design and scope creep with goal to add too many features to prototype, usability score 70/100.

6. Recommendations & prioritized roadmap

- This contains recommendations produced from quality assurance testing and end users. The recommendations are then graded based on severity and effort estimate along with their impact to usability of the site.
- Suggestions included correcting account login successful pages to include the ability to edit account information, username, profile picture and a biography for each student. The reset password page needs a clearly defined send code button and enter code here text boxes to receive typed text. This needs to be discernable as text entry fields as opposed to the currently confusing static non-interactive boxes they currently are. Minor issues included issues of displaying course listings which did not display in the expected location but did not interrupt usability of the site but prevented it from looking like a finished product. The account creation page needs to have a password confirmation as well to verify the

password is entered correctly as well. The demonstration for the course sections

did not have mathematics display properly within its text box. The demonstration

course schedule had Geometry not represented within its expected text box as

well.

• Discussions

The main ethical concern with this project is that although the website shows great opportunity it is still only available to those with an Internet connection. This still demonstrates the resource inequality of the world that those without access to the Internet are restricted from learning by using the World Wide Web. In the face of this disparity the website can still benefit those who have access to the Internet but may not be able to access learning resources due to geographical location.

Challenges encountered were mainly formatting issues from tools such as Figma. These posed problems for the look of the website and impeded functionality in some cases. I was able to resolve most of these issues, but they could have been avoided by using other tools or from increased familiarity with Figma.

Suggestions for future work are to create the content needed for the site instead of linking to external resources and using Figma to create interactive buttons, design to demonstrate text input by users and to make a more realistic user experience for the website.

Works Cited

OpenAI. (2025, November 3). *ChatGPT (GPT-5)* [Large language model]. OpenAI.
<https://chat.openai.com>

Barnum, C. M. (2020). *USABILITY TESTING ESSENTIALS : ready, set...test!*. Morgan Kaufmann Publisher.

Horine, G. (2017). *Project management* (4th ed.). Que.

Kumar, R. (2019). *Research Methodology: a Step-by-Step Guide for Beginners* (5th ed.). Sage.

Project Management Institute. (2017). *Agile practice guide*. Project Management Institute, Inc.

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