PM Name: Oluwakayode Akinseesin Last Updated: November 9, 2023

Peer Reviewed by: Abdulwahab, David Marks, Adaobi Agbalugo,

Katharine Sliwinski Mentor Reviewed by:

I want to move forward to build this product with a cross-functional team in the Co.Lab Program

Answer: Yes

Executive Summary

The problem of enhancing students' online learning experience through improved resource access and navigation is a multifaceted challenge that involves technology, psychology, and logistics. Our aim is to improve access and navigation of resources for greater efficiency and productivity.

Problem Background

Since the start of the COVID-19 pandemic, Students of all ages have faced significant disruptions in their access to education. The shift to digital and remote learning has highlighted the importance of ensuring a seamless and productive educational experience for students. Our Research has shown that a central challenge revolves around making online learning resources easily accessible and navigable, as these factors are vital for students to fully benefit from virtual education. (*Source: Canada.ca, 2021*).

However, research has shown that students often encounter issues accessing and navigating these materials. Challenges include the absence of centralized platforms and inconsistent user interfaces. Even when resources are accessible, poor organization and labeling can hinder students' learning experiences, leading to missed content and lower educational outcomes. (Source: uk.indeed, 2022).

While conducting our own user research, **45.5**% of students interviewed identified the decentralization of learning materials as a major issue facing them when trying to access and navigate online learning materials, while **54.5**% noted information overload as a major issue when trying to access and navigate online learning materials.

Solving this problem requires innovative solutions that address both technological

and educational aspects of resource accessibility and navigation. The goal is to empower students to maximize the advantages of virtual education and mitigate the adverse effects of these issues on their educational journey.

Goals

Our aim is to improve access and navigation of resources for greater efficiency and productivity by streamlining resource access and organizing resources to make it easy for students/users to traverse the virtual learning environment for their desired resources.

- To leverage technology solutions that enhance resource accessibility and navigation, making the learning process smoother and more user-friendly.
- To empower students to accomplish more within the same timeframe by optimizing the quality and organization of educational materials.
- To create or advocate for centralized platforms or systems that consolidate online learning resources for students' convenience

User Stories

- As a student, I want a centralized platform for my course materials so that I can easily find and access all my resources in one place, saving me time and reducing frustration.
- As a student, I want user-friendly content management tools so that I can efficiently organize and update course materials, enabling a smoother learning experience for me.
- As a student who prefers step-by-step guidance, I want interactive tutorials integrated into the platform to help me navigate and utilize the online resources effectively.

Proposed Solution

The proposed solution aims to create a user-friendly centralized platform, improve resource labeling, and ensure compatibility for equitable access, enhancing online learning efficiency and effectiveness.

Scenarios

Scenario for User/Student:

Situation: You're dealing with late submission for a research project and you need a platform that provides centralized resources with easy navigation

Scenario: Utilize the platform to collate all needed research resources while easily navigating and saving time to enable on time submission.

Scenario for Project Manager:

- Situation: You're a Project Manager who is pressed for time, trying to develop a problem statement for a particular topic, and you are researching a topic that is densely populated with articles.
- Scenario: Using the platform's categorisation and navigation tools, you can easily filter out the unnecessary articles/resources.

Measuring Success

Success by Demo Day would entail delivering a comprehensive and user-friendly product (platform) that addresses the diverse needs and preferences of students, ultimately enhancing the online learning experience.

- This platform will be able to filter articles/resources using keywords/authors/Titles for easy navigation of the platform.
- This platform will have a large database of resources/articles for easy accessibility.
- This platform will be able to allow users bookmark resources for later use.
- This platform will take a survey that at least 50% of users will confirm that it made the ease of doing research considerably easier.

Milestones & Timeline

Weeks 1-2: Project Kickoff and Design Sprint

- Define project scope, objectives, and success criteria.

- Rapidly analyze user stories and requirements.
- Develop initial wireframes and UI design.

Weeks 3-4: Development and Initial Testing Sprint

- Set up backend infrastructure.
- Begin frontend development with navigation features.
- Start mobile app development and basic testing.
- Initiate integration of multilingual support and time-management tools.

Weeks 5-6: Multimedia and Interactive Sprint

- Develop multimedia-rich learning resources.
- Create interactive tutorials for user guidance.
- Implement analytics features for educators.
- Integrate gamified elements.
- Conduct comprehensive user testing and initial optimizations.

Week 7: Demo Day Preparation and Presentation

- Finalize optimizations based on user testing.
- Prepare a comprehensive demonstration for Demo Day.
- Create presentation materials showcasing key features.
- Rehearse the demo for a smooth and impactful presentation.

Open Questions

- How do you envision the ideal user experience for online learning platforms, considering the diverse needs and preferences of students?
- Thinking about the future of education, what trends or innovations do you foresee that could further enhance the online learning experience for students?
- In your experience, what strategies have proven effective in keeping students engaged and motivated in an online learning environment, and how can these be integrated into digital platforms?

Useful Resources

https://www.timeshighereducation.com/campus/simple-way-improve-navigation-online-learning

https://uk.indeed.com/career-advice/career-development/website-navigation https://www.timeshighereducation.com/campus/steer-course-help-students-navigate-online-learning-journey

https://hbsp.harvard.edu/inspiring-minds/10-ways-to-help-your-students-cope-wit h-the-transition-to-virtual-learning