A VIRTUAL LEARNING COLLABORATION SYSTEM

PROJECT WORKPLAN

Statement of Problem

Learners often feel the need to come together to share different perspectives on different topics , but aspects such as being on different geographical location, locating a conducive environment able to foster their academic curiosity. This can leave Learners unmotivated and unwilling to participate in collaborative learning.

Project Justification

The virtual learning collaboration system is here to remedy this situation by allowing and nurturing collaborative learning on an e-learning level thus making sure all a learner needs to get in on the action is a good internet connection. Through a combination of various technologies, the system will provide a conducive virtual space always ready to serve curious minds.

Tools and Technologies for Implementation

(Technical and Economic Feasibility Projection)

Tool/Technology	Purpose	Cost (Ksh)
Laptop Min requirements: - 8GB RAM - 256GB SSD - 2.6GHz Processor - LED or TFT screen	- To install all software and platforms that I will be using to develop the app - Develop the app, test, deploy and create a documentation - Present the project at the end of the semester	0
VS CODE	- The primary IDE that will be used to develop the application's front end, back end through the django framework - Link the project with Firebase DB	0
Javascript	- To add interactive aspects to the system.	0
PYTHON 3.13.1	- This will be installed to support the developnent of the system	0
DJANGO FRAMEWORK	- To be used in the rapid development of the system	

	Total	0

Schedule Projection Gantt Chart

	ACTIVITIES/MILESTONES							
Weeks	**Project Planning**	**Project Analysis**	**Project Design**	**Project Development**	**Project Testing**	**Project Deployment**	**Project Documentation**	**Project Presentation**
17-Jan								
24-Jan								
31-Jan								
7-Feb								
14-Feb								
21-Feb								
28-Feb								
7-Mar								
14-Mar								
21-Mar								
28-Mar								
14-Apr								

Key

	Incomplete
	Complete

PROJECT ANALYSIS

This will help to reflect on who the system users are, what should the users be able to do on the system, determining of functional requirements, a reflection on what other virtual collaboration platforms there are, and a determination of system goals

Users, User Activities, Functional Requirements

User	Activities	Functional Requirements
Student/Learner/ Collaborator\(As a User)	- Sign up - Login - View a dashboard - View profile - Book sessions - View available sessions - Access sessions - Video conferencing - Participate in quizzes and polls - Logout	- Sign-up form - Login page - Dashboard page - Profile page - Booking page - Home page - Dashboard page - Google classroom - Polls and quizzes in between or after sessions - Logout button

Student/Learner/ Collaborator\(As a coordinator)	- Sign up - Login - View admin profile - Create sessions - Postpone, delay, or cancel sessions - Allow or deny access to other collaborators - Create polls - Logout	- Staff Sign up form - Login page - Admin page - Admin page - Admin page - Admin page - coordinator - Logout button

Existing Systems and Points of Inspiration

2.3.1.1 360Learning.

This is a pioneer collaborative learning platform that combines the best features of an LMS, LXP and collaborative learning academies. The system also incorporates AI powered authoring tools that streamline and automate content creation making it easy to create personalized learning programs.

2.3.1.2 Zoom.

This is the most famous online video conferencing app with robust collaboration features. The app offers a perfect face-to-face experience where users can meet, connect and collaborate through its virtual meeting feature. Other features such as Zoom Huddles, AI companion and a whiteboard ensures that the platform not only offers collaborative functionality but also customer satisfaction.

2.3.1.3 Padlet.

This is a content creation platform for collaborative classrooms. Incorporating virtual bulletin boards called padlets, students can upload, organize and share content in real time creating a collaborative learning experience.

2.3.1.4 Slack.

This is a cloud-based cross-platform instant messaging service that help ensure students engage and connect in one learning community. As an online collaboration platform it empowers a student quest for knowledge by enabling users to set up student-centered channels where they can ask questions and keep up to date.

2.3.1.5 Kahoot.

This is an online collaboration system that has gamification elements to make content creation easy and learning more impactful. Functionalities like quizzes,polls,word clouds, puzzles, and brainstorming to improve group engagements.

2.3.1.6 Google Meet.

Google Meet is a video conferencing tool developed by Google that allows users to conduct online meetings, webinars, and collaborative sessions

System Goals

General Objective

(i) To conduct a study with the view of developing a vurtual learning collaboration system.

Specific Objectives

(i) To implement multimedia technologies to allow both visual and audio interaction between learners. (i)
(ii) To implement user accounts to facilitate access to the system for the users.
(iii) To implement the appropriate technologies for user task creation and virtual events planning features.