

# **Real-time/Field-Based Research Project Report**

**On**

## **EDUSWAP-A PLATFORM FOR SHARING, HELPING AND NETWORKING**

A dissertation submitted to the Jawaharlal Nehru Technological University, Hyderabad in  
Partial fulfilment of the requirement for the award of a degree of

**BACHELOR OF TECHNOLOGY**

**IN**

**COMPUTER SCIENCE AND ENGINEERING**

Submitted by

**KONTHAM AKSHITHA (23B81A0570)**

**POCHAMREDDY ANJALI (23B81A0572)**



Department of Computer Science and Engineering

**CVR COLLEGE OF ENGINEERING**

(An UGC Autonomous Institution, Affiliated to JNTUH, Accredited by NBA, and NAAC)

Vastunagar, Mangalpalli (V), Ibrahimpatnam (M), Ranga Reddy (Dist.) - 501510,

Telangana State.



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Ranga Reddy (Dist.) - 501510, Telangana State.

## DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

### CERTIFICATE

This is to certify that the Real Time/Field-Based Research project work entitled “**EDUSWAP- A Platform for Sharing, Helping and Networking**” is being submitted by **K. Akshitha (23B81A0570), P. Anjali (23B81A0572)** in partial fulfillment of the requirement for the award of the degree of **Bachelor of Technology in Computer Science and Engineering**, during the academic year 2024-2025.

**Professor-in-charge RFP**  
**(Dr .M. Swami Das)**

**Professor and Head,CSE**  
**(Dr .A. Vani Vathsala)**

## **DECLARATION**

I hereby declare that this Real-time/Field-Based Research project report titled **“EDUSWAP-A Platform for Sharing, Helping And Networking”** submitted to the Department of Computer Science and Engineering, CVR College of Engineering, is a record of original work done by me. The information and data given in the report is authentic to the best of my knowledge. This Real Time/Field-Based Research Project report is not submitted to any other university or institution for the award of any degree or diploma or published at any time before.

**K. AKSHITHA (23B81A0570)**

**P. ANJALI (23B81A0572)**

Date:

Place: Mangalpalli

## **ABSTRACT**

The Student Product Exchange and Networking Platform (EduSwap) is a simple web-based application developed to support students by promoting resource-sharing and peer collaboration. The platform allows students to list products such as books, electronics, or furniture that they wish to sell or donate, and also browse items posted by others. It features a basic interface for viewing and posting items and services, using local storage to temporarily hold data. Existing systems like OLX, Quirk, and other marketplaces are primarily profit-oriented and not tailored to students' academic and financial needs. In contrast, EduSwap is a non-commercial, student-focused project built with basic web development technologies like HTML, CSS, and JavaScript. It aims to create a culture of support, sustainability, and skill-sharing within academic environments. In the future, we plan to enhance the platform with features such as database integration, OTP-based user registration, and improved interactivity to make the system more secure, efficient, and scalable. In conclusion, EduSwap is a meaningful initiative that demonstrates how even with limited tools and skills, students can build impactful solutions that encourage collaboration, reduce waste, and strengthen community support in educational institutions.

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# **1. INTRODUCTION**

Education is the foundation of a strong career, but many students face challenges in accessing necessary academic resources and building professional networks. Often, seniors in college possess books, gadgets, and other educational materials they no longer need, while juniors struggle to obtain them due to financial or logistical constraints. Additionally, students with valuable skills such as programming, design, and content creation lack a structured platform to showcase their expertise or collaborate with peers. EduSwap aims to address these challenges by creating a platform where students can donate, sell, or exchange resources, share their skills, and network with peers from different colleges, locations, and branches. This initiative not only benefits students financially but also fosters a culture of collaboration, mentorship, and academic excellence.

## **1.1MOTIVATION**

Education is a fundamental right, yet many students face financial difficulties in accessing essential academic resources such as textbooks, lab equipment, and electronic gadgets. At the same time, numerous students complete their courses and leave behind materials that could be valuable to others but often go unused or discarded. This mismatch between resource availability and need creates a gap that limits learning opportunities, especially for financially disadvantaged students. Additionally, there is a lack of structured interaction between seniors and juniors, making it difficult for students to seek guidance, mentorship, or academic support. Many students also possess valuable skills such as coding, designing, and tutoring but lack a platform to showcase their talents or offer their expertise to peers. EduSwap aims to address these challenges by fostering a culture of sharing, collaboration, and networking. By enabling students to donate, sell, or exchange resources, connect with seniors, and monetize or share their skills, EduSwap creates an ecosystem where students can support each other, reducing educational disparities and enhancing career opportunities.

## **1.2 PROBLEM STATEMENT**

In the current academic environment, students face multiple challenges that hinder their learning experience and personal growth. Despite the availability of resources, there is no structured system that enables students to share, exchange, or access these resources efficiently. Many students face limited access to essential educational resources, such as books, lab kits, and electronics, which are often unaffordable. Current second-hand sales platforms do not cater specifically to students, and their prices are typically high. Additionally while seniors may be willing to donate valuable resources, there is no convenient platform to facilitate this. As a result, many students end up discarding items that could benefit others. Communication barriers between seniors and juniors further exacerbate the issue, as juniors lack direct access to seniors for academic guidance, career opportunities, or skill development, and without structured networking, mentorship and career-building opportunities are often missed. Furthermore, many students possess valuable skills in areas like software development, content creation, and research, yet lack platforms to showcase or monetize these talents, making it difficult for them to collaborate on projects or offer assistance to others.

## **1.3 PROJECT OBJECTIVES**

EduSwap is designed to create a structured platform that enhances student interaction, facilitates resource sharing, and promotes skill development. The platform aims to bridge the gap between senior and junior students while ensuring ease of access to educational materials, networking opportunities, and skill-based services. To address these challenges, the platform aims to enable resource exchange by providing a space where students can donate, sell, or exchange academic resources like books, gadgets, and study materials. This will allow students in need to request and receive resources either for free or at an affordable price, reducing educational waste by ensuring valuable materials are reused rather than discarded. The platform will also facilitate direct and intermediary contact for exchanges, giving donors the option to share their contact details with borrowers for direct communication. Additionally, a skill marketplace will be created,



allowing students to offer, sell, or request services such as website development, graphic design, content writing, PPT preparation, and tutoring. Students will be able to build profiles showcasing their skills and past work, attracting potential clients or collaborators.

## 1.4 PROJECT REPORT ORGANIZATION

The report is structured as follows to provide a comprehensive overview of the "EDUSWAP-A Platform for Sharing and Networking" project.

In the Chapter 1 Introduction, the report outlines the motivation that Addresses the challenges students face in accessing academic resources and networking. The **Problem Statement** Highlights key issues such as limited access to educational materials, communication barriers. The **Project Objectives** are Enabling students to donate, sell, or exchange resources, Facilitate direct contact for exchanges and Create a Skill Marketplace for students to offer and request services. The **Literature Review** Analyses existing platforms like Facebook Marketplace, Craigslist, Depop, TaskRabbit, Skill share, and Chegg. Identifies gaps in existing solutions and highlights how EduSwap provides a structured, student-focused approach. In **Requirement Analysis** Chapter the **Software Requirements** Uses Visual Studio Code for development., HTML, JavaScript core technologies and Features like user management, resource exchange. **Hardware Requirements** uses Internet Connection, Minimum 2GB RAM, Devices (Any basic computer, laptop, tablet, smartphone). **User Requirements** uses Students can easily register, share resources, and communicate securely and moderate communication.

System Design presents how user registration, Implementation of a Skill Marketplace for services like tutoring, web development, and graphic design.

**Diagrams:** Class, Use Case, and Sequence Diagrams for better visualization.

### **Implementation & Testing**

Screenshots of the Platform Interface and Testing Methods: Covers functional testing, validation, and discussions on results.

**Conclusion & Future Scope** Reinforces how EduSwap promotes collaboration, networking, and sustainability in student communities.

## **2.LITERATURE SURVEY**

In this survey it provides an overview of existing work related to the EduSwap project, helping to identify gaps in existing platforms, solutions, and the unique features EduSwap aims to bring to the table. By examining various resources, including academic papers, articles, and existing platforms, we can better understand the current landscape and the potential for innovation through EduSwap.

**Mark Zuckerberg [1].et.al** Facebook has long been a place where people connect, and in recent years, more students have been using it to connect in a new way: buying, selling, and exchanging items with each other on Facebook Market Place(Student Groups). This activity started in student-specific groups and has grown substantially. Hundreds of thousands of students visit these groups each month — from college students in a local campus to peers across the globe. To make these connections even easier, they have introduced a dedicated platform for students to discover, buy, sell, and donate items within their university community. This platform will make it simple for them to find things that they'll love, whether it's textbooks, furniture, or electronics, and give their items a new home with fellow students who need them

**Simon Beckerman[2].et.al** Depop's College Ambassador Program empowers students to promote sustainable fashion and the circular economy within their university communities. Ambassadors lead marketing campaigns, organize events, and create content to raise awareness of Depop's platform among their peers. This initiative fosters a sense of community among students, connecting them over shared interests in sustainable fashion and environmental impact. Through activities like clothing swaps and educational events, ambassadors encourage the adoption of secondhand clothing, offering sustainable alternatives to fast fashion.

**Craig Newmark[3].et.al** Craigslist's College Communities section serves as a digital marketplace and social hub tailored for university students. It enables students to buy and sell items such as textbooks, furniture, and electronics,

facilitating affordable access to essential goods. Additionally, it offers a platform for students to find housing, seek roommates, and discover local events, fostering a sense of community within the campus environment. Research indicates that online exchanges like Craigslist can positively impact the environment by promoting the reuse of items, thereby reducing waste. A study by Penn State researchers found that the introduction of Craigslist in a geographic market corresponded with a 2 to 6 percent annual decrease in municipal solid waste, suggesting that such platforms encourage the reuse of products and contribute to environmental sustainability.

**Leah Busque [4].et.al** TaskRabbit is an online marketplace that connects individuals with local freelancers, known as "Taskers," to assist with various tasks and errands. Founded in 2008 by Leah Busque, the platform was initially launched in Boston to help neighbors find assistance with everyday errands. Over the years, TaskRabbit has expanded its services to include a wide range of tasks such as furniture assembly, home repairs, moving assistance, cleaning, and more. The platform operates in multiple cities across the United States, United Kingdom, and Canada, offering users the convenience of hiring Taskers for both one-time and recurring tasks. In 2017, TaskRabbit was acquired by IKEA, further enhancing its ability to provide services related to furniture assembly and home improvement.

**Michael Karnjanaprakorn and Malcolm Ong[5].et.al** Skill share is an online learning community that offers a vast array of classes for creative and curious individuals. Founded in 2010 by Michael Karnjanaprakorn and Malcolm Ong, the platform provides classes on topics such as illustration, design, photography, video, and freelancing. The platform operates on a subscription-based model, granting members access to thousands of classes taught by experts in their respective fields. Skill share emphasizes project-based learning, allowing students to apply their knowledge through hands-on projects and receive feedback from a supportive community. Skill share's mission is to empower individuals to learn new skills, find inspiration, and make discoveries, fostering a community where both learners and teachers can share expertise and grow together.

**Aayush Phumbhra and Osman Rashid[6].et.al** Chegg initially began as a textbook rental service and has since expanded its offerings to include online tutoring, homework help, and other student services. The company's mission is to assist students in achieving their best in school and beyond by providing tools and services that support them throughout their educational journey. As of 2021, Chegg reported having 2.9 million subscribers to its services. In recent years, Chegg has faced challenges due to the rise of AI-powered tools like Chat GPT, which offer similar services. This shift has led to a decline in subscribers and stock value. Despite these challenges, Chegg continues to focus on providing comprehensive educational support to students, aiming to improve the overall return on investment in education by helping students learn more efficiently and at a lower cost.

**Gabriel Engel[7].et.al** Rocket. Chat is an open-source communication platform designed to facilitate real-time messaging, collaboration, and integration within teams, organizations, or communities. It offers a secure, private, and customizable solution for instant messaging, audio and video conferencing, file sharing, and more. Rocket. Chat is a versatile and robust communication tool that can be beneficial for student networks, academic communities, and educational institutions. Its open-source nature and extensive feature set make it a compelling choice for promoting collaboration and engagement within academic.

### **3.REQUIREMENT ANALYSIS**

Visual Studio Code is a tool used to build both the Applications, User end and Admin end. HTML language is used to build the front end of the app (User Interface). Java language is used as Listener for accessing User details. All the database will be maintained in MYSQL database.

#### **3.1. Software Requirements:**

The platform will feature robust user management, including secure sign-up and login functionalities, profile setup, and role-based access tailored for learners, mentors, and administrators. A dedicated Resource Hub will allow students to donate, sell, or request academic materials such as books, notes, and gadgets, making essential resources more accessible and reducing waste. Additionally, a Skill Exchange section will enable users to offer or seek various services, including programming assistance, subject tutoring, and graphic design, fostering collaboration and peer-to-peer support within the student community.

#### **3.2. Hardware Requirements:**

The platform will be supported by cloud-based servers to ensure scalability, efficient database storage, and reliable backup management. Users will be able to access the platform from a range of devices, including desktops, laptops, and mobile devices across both iOS and Android operating systems. For administrative purposes, dedicated workstations will be used by platform managers to oversee operations, maintain the system, and ensure a smooth user experience.

#### **3.3. User Requirements:**

**Students:** Easy registration, resource discovery, skill listing, secure communication, mentorship access. This concise analysis outlines the core components needed for EduSwap to function effectively, ensuring resource sharing, skill development, and student interaction.

## 4.SYSTEM DESIGN

### 4.0Proposed System architecture

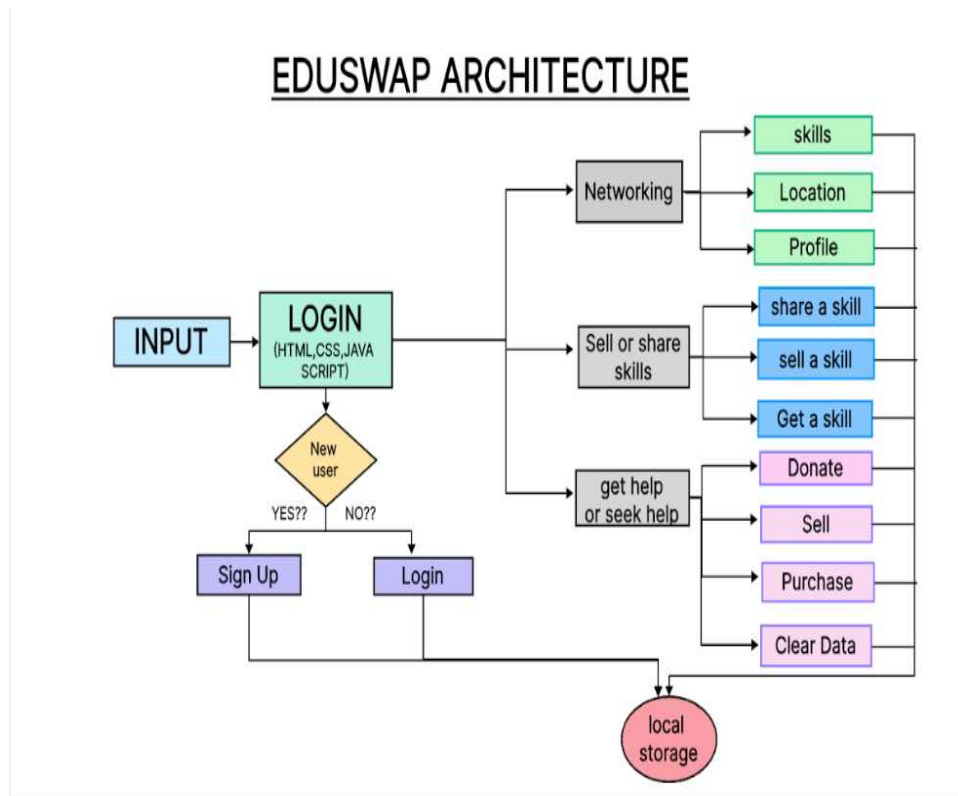


Figure:4.0.1-System Architecture for Eduswap

Figure 4.0.1 represents the architecture of Eduswap, a web-based platform where users can login or sign up, then engage in networking, skill exchange, or help-related activities. All interactions, including skills, donations, sales, and purchases,

are managed through HTML/CSS/JavaScript and stored in local storage.

## **4.1 Proposed Algorithm**

### **1. User Registration & Login**

The **registration** process involves the user entering their email and password to create an account. Once registered, the user can log in using the same email and password, and the system authenticates their credentials to grant access.

### **2. User Interaction and Data Accessibility Across Modules**

In different modules of the platform, users interact with data in various ways. In the Networking module, users can view profiles of people who have registered, including their shared information. In the Get Help or Seek Help modules, users can browse through uploaded products available for donation or sale.

Additionally, these modules also allow users to view registered user data to facilitate support and connection within the community.

### **3. Searching for a Resource**

The user can search for courses, items in the donated column, items available for sale, or skills shared by others. Based on the chosen criteria—such as category, location, or keywords—the system fetches the relevant results from the database and presents them to the user for easy browsing and interaction.

### **4. Resource Transaction**

In the platform's modules like "Get Help," "Seek Help," "Networking," and "Sell or Share Skills," users will be able to access the relevant social media links of others. These links facilitate communication between individuals, allowing them to connect directly for support or collaboration. However, no transactions or exchanges take place within the platform itself—communication is the primary means for users to engage and connect.

### **5. Messaging**

The platform does not facilitate direct transactions or exchanges. Instead, it provides users with the social media links of donors, sellers, or others within the

community. Users can then contact each other through these links, either directly or via the messaging features of the respective social media platforms.

## **6. Skill Marketplace**

Users can offer their skills, such as web development, by submitting them to the platform, where they are stored for others to view. Additionally, users in need of specific skills can search for the required expertise on the platform and connect directly with the skill providers, fostering collaboration and support within the community.



## 4.2 Class Diagram

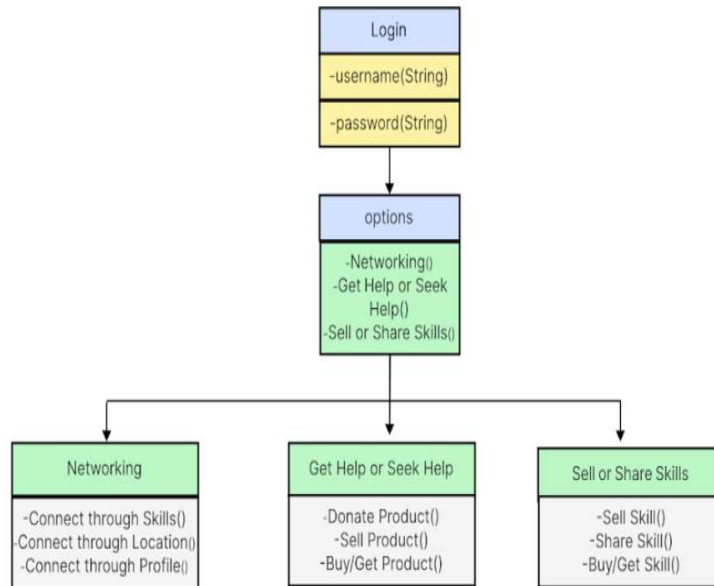


Figure 4.2.1-Class Diagram of Eduswap

The diagram labeled 4.2.1 illustrates the user interaction flow within a community-based platform. It begins with a login process where users enter their username and password. Once logged in, they are presented with three main options: Networking, Getting or Seeking Help, and Selling or Sharing Skills. Each of these options offers specific functionalities—Networking allows users to connect through skills, location, or profiles; the Help section enables users to donate, sell, or get products; and the Skills section allows users to sell, share, or acquire various skills. The overall flow promotes collaboration and mutual support among users.

## 4.2 Use Diagram

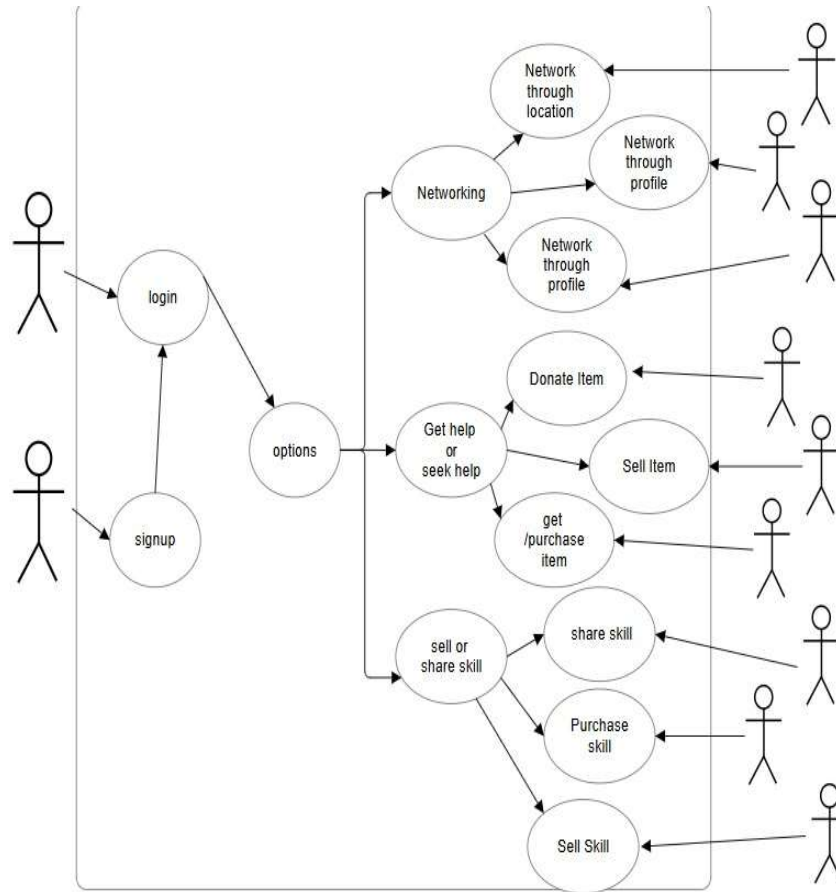


Figure 4.2.2-Use Case Diagram of Eduswap

The diagram labeled **4.2.2** represents a use case flow of a skill and resource-sharing platform. It begins with users signing up or logging in, after which they can access various options. These options include Networking, Getting or Seeking Help, and Selling or Sharing Skills. Each of these main features leads to more specific actions—for instance, users can network through location or profile, donate or sell items, and share, purchase, or sell skills. The diagram also shows interaction with multiple users at different stages, emphasizing community involvement and peer-to-peer engagement within the platform.

## 4.2 Sequence Diagram

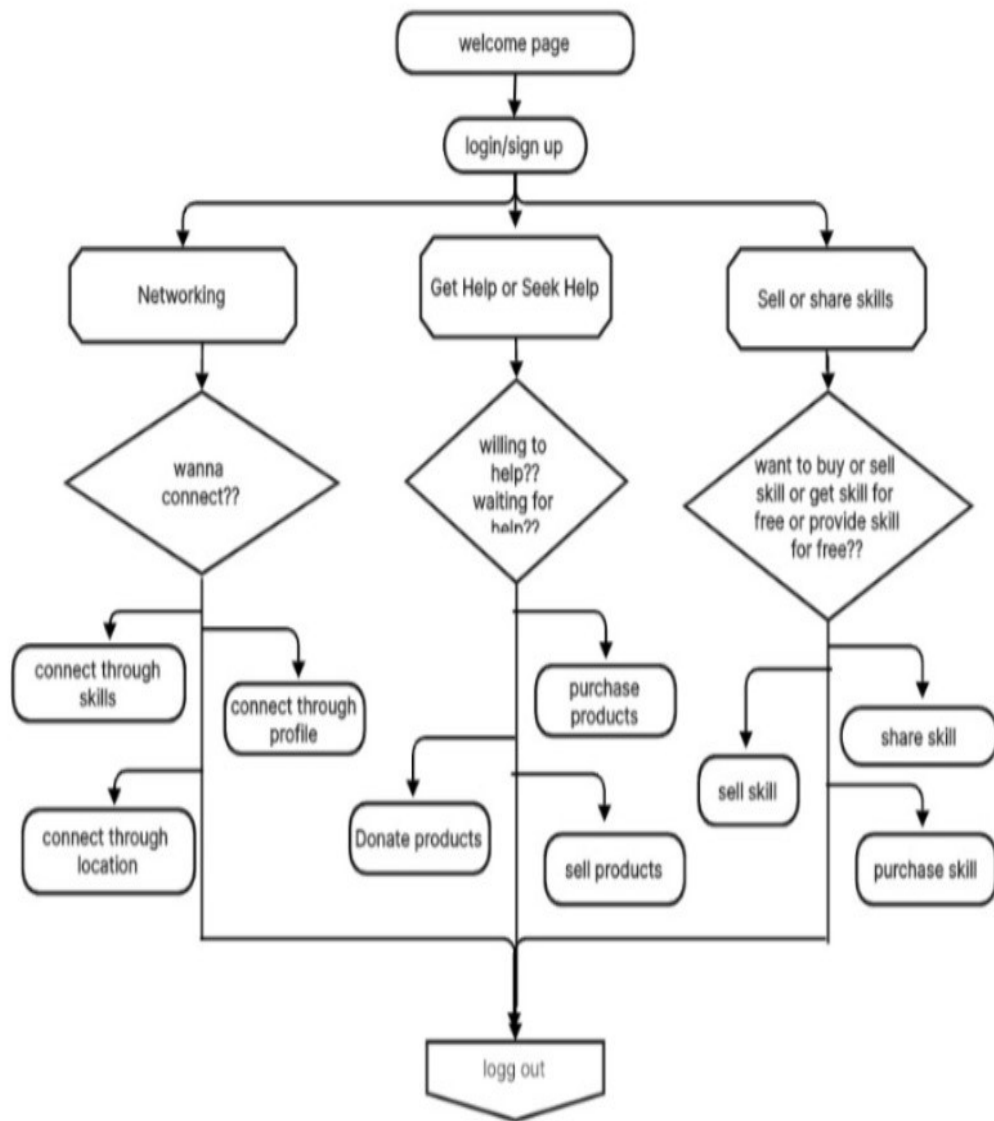


Figure 4.2.3-Sequence Diagram of Eduswap

The diagram labeled 4.2.4 is a sequence diagram that maps out the step-by-step interaction between a user and the platform. It begins at the welcome page, where the user can either log in or sign up. Upon successful authentication, the user is presented with three key options: Networking, Get Help or Seek Help, and Sell or Share Skills. Each of these paths leads to a specific sequence of actions—for example, networking involves connecting through skills, location, or profile; seeking or offering help includes donating, purchasing, or selling products; and skill

exchange allows users to share, purchase, or sell skills. The flow logically guides the user through decisions and actions, ending with a logout, illustrating a complete interaction cycle within the system.

### **4.3 Datasets and Technology Stack**

#### **Datasets**

##### **➤ Networking**

- Name, Description, upload profile photo, Twitter URL, Facebook URL, LinkedIn URL, Select Course(network\_skills)
- Name, College Name, Location, LinkedIn Profile, Twitter Profile, Profile picture(network\_location)
- Full Name, Profession, Email, Contact Number, LinkedIn Profile URL, YouTube Channel URL, Facebook profile URL, Twitter profile URL, Brief introduction, choose file for profile photo(network\_profile)

##### **➤ Get Help or Seek Help**

- Donation Items
  - Product Name, Contact, Email, Facebook Link, Instagram Link, Brand, Product Code, Condition, Location, Upload Image
- Sale Items
  - Product Name, Contact, Email, Brand, Condition, Product Code, Location, Upload Image, Price, Social Media Link
- Clear Your data
  - Product Name, Phone Number, 3-digit code

##### **➤ Sell or Share Skills**

- Learn free skills
  - Name, Skill Name, Qualification, Upload Certification, Years of Experience, Email, Contact Number, LinkedIn profile, Twitter Profile
- Sell skill

- Name ,Skill Name ,Qualification ,Upload Certification, Years of Experience,Price,Email,Contact Number, LinkedIn Profile, Twitter Profile

## **Technology Stack**

### ➤ **HTML5**

- Used for structuring the web pages (Donation, Sell, Share Skills, Get Skills, Networking, etc.)

### ➤ **CSS3**

- Used for styling the interface and making the layout responsive and attractive

### ➤ **JavaScript**

- Used for adding interactivity (form submissions, data handling, navigation between pages)

### ➤ **Local Storage**

- Used to store user data (donation items, sale items, skills, networking details) directly in the user's browser

## 5.IMPLEMENTATION

### 5.1 Front Page Screenshot



Figure 5.1.1-Opening page of Eduswap

The image labeled 5.1.1 represents the opening page of the EduSwap platform, serving as the user's entry point. It prominently displays a welcoming message, "Welcome to EduSwap" along with engaging visuals that reflect the platform's collaborative nature. At the center of the page, the user sees the "EDUSWAP" button, which they must click to proceed further. This button acts as a transition to the login or signup interface, enabling users to authenticate and access the core functionalities of the platform. The tagline at the bottom, "A Platform for Sharing, Helping, and Networking", clearly conveys the purpose and community-driven spirit of EduSwap as introduced in section 5.1.1.

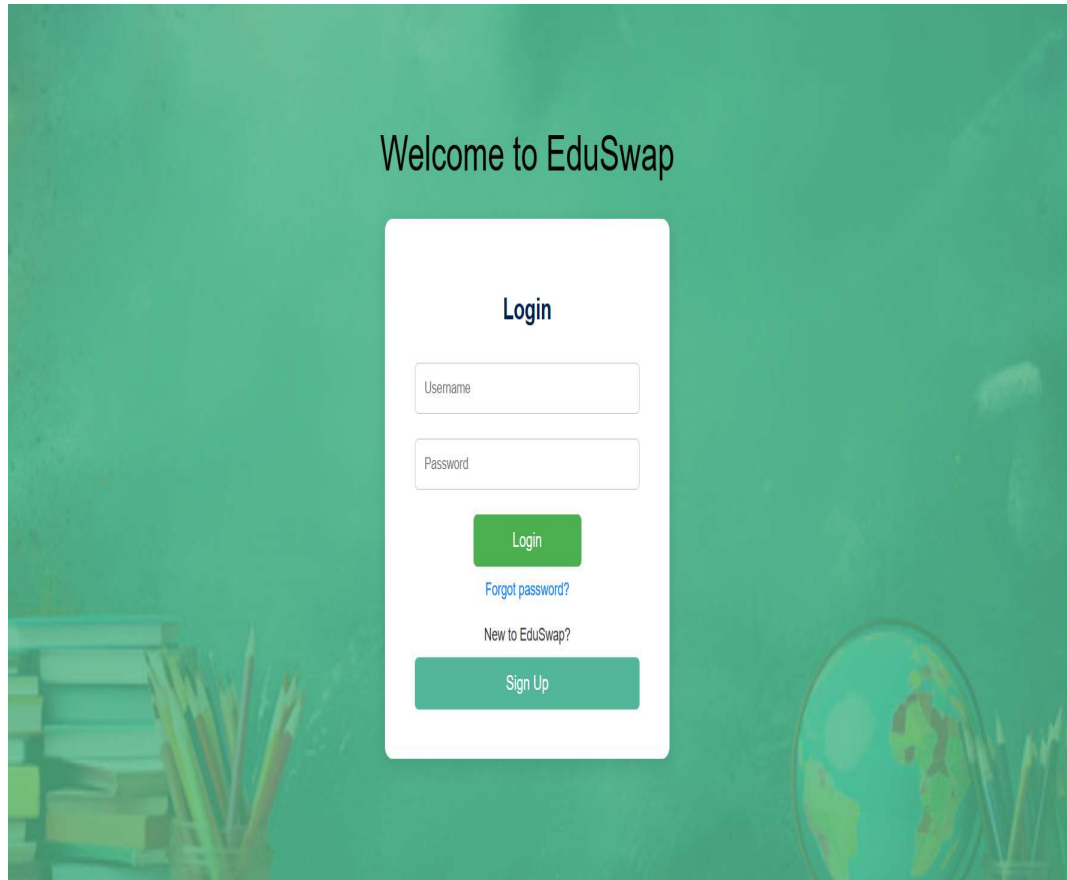


Figure 5.1.2-Login page of Eduswap

The image labeled **5.1.2** illustrates the **login interface** of the EduSwap platform. After clicking the EduSwap entry point from the welcome page (refer to 5.1.1), users arrive at this streamlined login screen. They are required to input their **email address** and **password** in the designated fields to proceed. The interface features a prominent "**Login**" button for authentication. For users who are new to EduSwap, a "**Sign Up**" button is provided below the login section to guide them through the registration process. The absence of a "Forgot Password" option simplifies the interface, emphasizing a clean and focused user experience. The background imagery, with educational elements like books and a globe, reinforces EduSwap's core mission of learning, sharing, and connecting. This version of the login page aligns with the system's functional specification outlined in **section**

### 5.1.2.

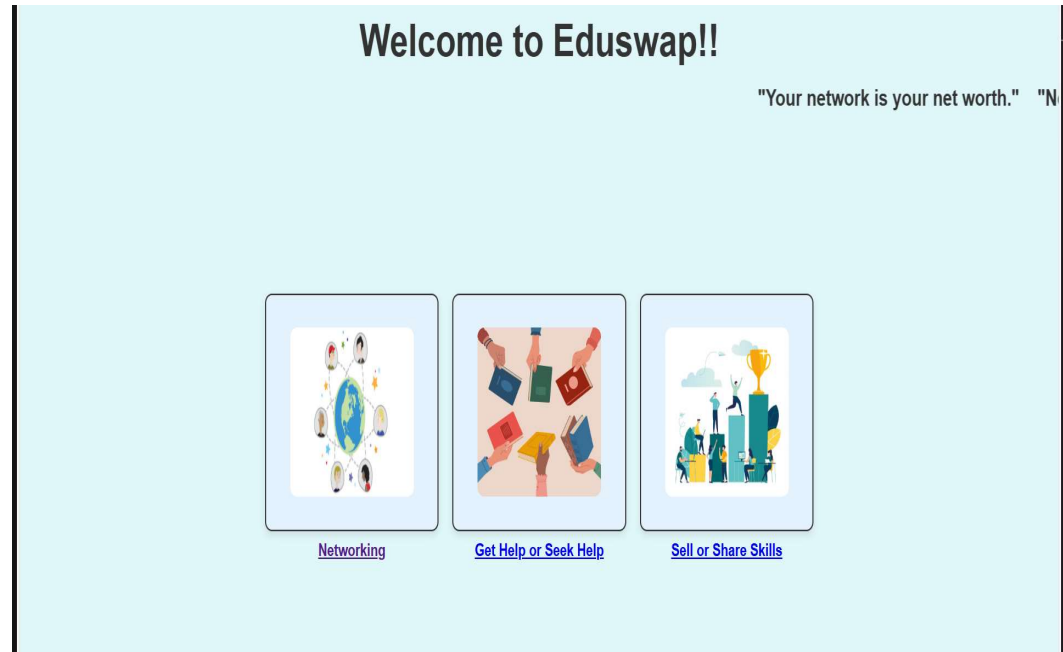


Figure 5.1.2.1-Options page of Eduswap

**Figure 5.1.2.1** represents the **Options Page** displayed to the user after a successful login or registration on the EduSwap platform. This page acts as the main dashboard, providing users with a clear and user-friendly interface to navigate the core features of the application. It welcomes users with a heading that says *"Welcome to Eduswap!!"*, accompanied by a motivational quote, *"Your network is your net worth."* The page is structured into three main options: **Networking**, **Get Help or Seek Help**, and **Sell or Share Skills**, each visually represented with distinctive icons and linked text. These options are designed to guide users toward specific functionalities based on their interests—whether they want to connect with others, offer or request help, or engage in skill exchange. This centralized interface ensures a smooth and intuitive user experience, aligning with the platform's goal of fostering collaboration, learning, and support within the community.



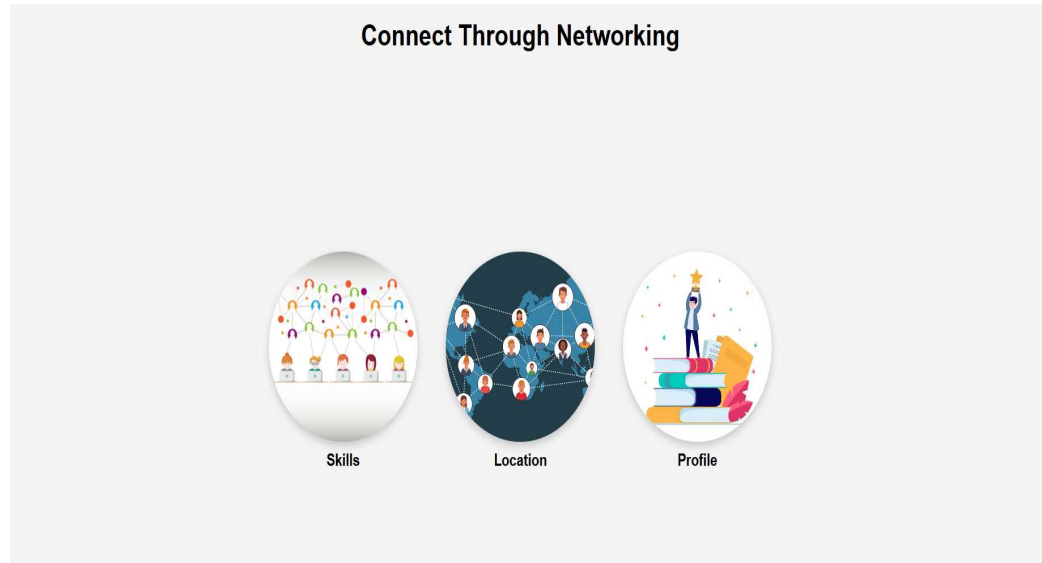


Figure 5.1.2.2-Networking.html page

**Figure 5.1.2.2** showcases a user interface section that facilitates networking through three primary options: Skills, Location, and Profile. Each icon represents a distinct method of building connections—users can engage with others who share similar skill sets, are located nearby, or have compatible profiles based on interests or achievements. This visual layout promotes intuitive navigation and encourages purposeful networking, allowing users to expand their professional or collaborative circles in a targeted and meaningful way.

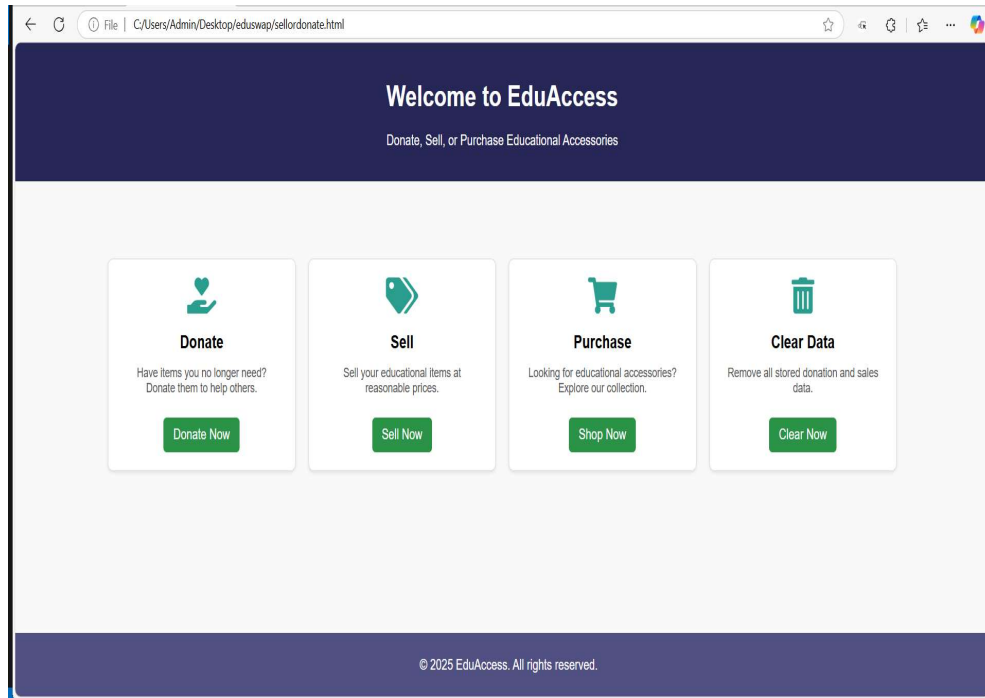


Figure 5.1.2.3-SellerDonate.html page

Figure 5.1.3.1 displays the "Get Help or Seek Help" interface of EduAccess, which provides users with options to Donate, Sell, or Purchase educational accessories. The interface is clearly segmented into four functional blocks—each with a distinct call-to-action. Users can donate unused items, sell educational materials at fair prices, or shop for needed accessories. Additionally, a "Clear Data" feature is available to remove stored donation and sales data, ensuring a clean and secure user experience.

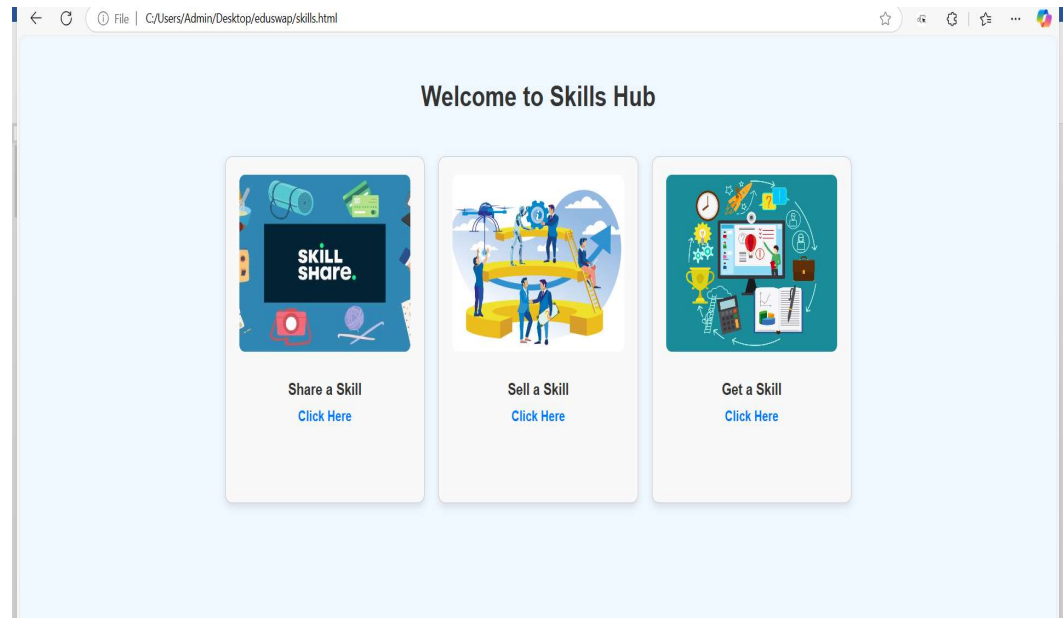


Figure 5.1.2.4-Skills.html Page

**Figure 5.1.3.2** presents the "Skills Hub" interface, which appears when a user selects either "Sell" or "Share Skills" from the options page. The interface offers three clearly defined pathways: *Share a Skill*, *Sell a Skill*, and *Get a Skill*. Each option is visually represented to guide users toward either contributing their expertise, monetizing their knowledge, or learning a new skill. This structured layout encourages skill exchange and learning within the platform's collaborative environment.

## **5.2 Results and Discussion**

### **Results**

The project successfully enhanced interaction between senior and junior students by creating a platform where they could exchange resources and collaborate based on their skills. It enabled students to donate or sell unused products, helping those in financial need access essential items at no or low cost. Through the Sell, Share, and Get skill features, students were able to offer their talents—like website development or presentation making—either for free or for a fee, promoting mutual growth. Networking was made easy by allowing students to connect through skills, college, or profiles using their social media links. Optional contact details like phone numbers helped streamline direct communication. The platform also built a wider student network that transcended college, branch, and location boundaries. All data was efficiently managed using browser local storage, allowing for smooth and server-independent performance.

### **Discussions**

Throughout the development of this platform, various important ideas were discussed to shape a student-friendly environment that encourages interaction, sharing, and support among students from different colleges, branches, and backgrounds. One major discussion focused on how to organize the platform's multiple features in a way that's easy to use. As a result, we decided to separate key services into individual web pages — such as donation, selling, skill-sharing, and networking. This structure allows users to directly access what they need without confusion. We also had meaningful discussions about privacy and user choice. Since the platform involves direct student-to-student contact, we gave donors and skill-sharers the option to provide their phone numbers only if they're comfortable. Borrowers or interested students can then contact them through those details. Additionally, social media links (LinkedIn, Facebook, Twitter) are used as a safe way to connect while protecting personal data. Another important point of discussion was how to facilitate skill exchange. We structured it into three web pages: one for selling skills, one for sharing skills freely, and one for getting skills — where students who need help can view available services. Once a student

registers a skill, the information is automatically reflected in the "Get Skills" section, making it easier for others to discover and connect. We also discussed how to build a meaningful networking system. Instead of simply listing students, we divided networking into three meaningful categories: by skills, by college, and by profile. In each category, students who want to connect with others can register, and those who are seeking help or collaboration can view profiles and contact them through their social links. Finally, we discussed the choice of technology. We chose HTML, CSS, and JavaScript for development and used Local Storage to manage and retain user data on the client side without requiring a backend server. This approach was simple, effective, and suitable for the scope of our platform.

## 5.3 Testing

### Testing Test Scenario 1: User Registration

**Test Case Description:** Already registered user

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click

**Post Requisite:** logged into options.html(internal part of eduswap)

S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
1	Navigate to Eduswap.html(login page)	Email , password	Login Successful	Login Successful	Microsoft edge	pass	

Figure 5.3.1-Test Results of Login Page

Figure 5.3.1 displays the test results for the Login page functionality. The test confirms that upon entering an email and password, the user is successfully logged in and redirected to the Options page, with all expected outcomes matching the actual results in Microsoft Edge.

## Testing Test Scenario 2: SignUp

**Test Case Description:** New user registration

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click

**Post Requisite:** User account is created and active

S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
2	Navigate to Registration Page(Signup.html)	Email Password	Sign-up successful! Redirecting to login.	Sign-up successful! Redirecting to login.	Microsoft Edge	Pass	NA

Figure 5.3.2-Test Results of Signup Page

Figure 5.3.2 displays the test results for the Signup page functionality. The test confirms that upon entering an email and password, the user account is successfully created and redirected to the Login page, with all expected outcomes matching the actual results in Microsoft Edge.

## Testing Test Scenario 3: Registration in Networking Through Skills

**Test Case Description:** Registration in Networking Through Skills

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Registered information is directed as per selected course

S.No	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
3	Navigate to Registration In network_skills.html	Name, Description, Upload profile photo, Twitter URL, Facebook URL, Linked in URL Select Course	Redirected to respective course page	Redirected to respective Course Page	Microsoft Edge	Pass	NA

Figure 5.3.3-Test Results for network through skills page

Figure 5.3.3 presents the test results for the "Network Through Skills" registration page (network\_skills.html). The test validates that after entering relevant inputs—such as name, description, profile photo, social media URLs, and course

selection—the user is correctly redirected to the respective course page. The functionality was tested using Microsoft Edge and passed successfully without issues.

## **Testing Test Scenario 4: Registration in Networking Through Location**

**Test Case ID:** Registration-1A

**Test Case Description:** Registration in Networking Through Location

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Registered information is directed to college.html and place.html

S.NO	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
4	Navigate to Registration In network_location.html	Name, College Name, Location, LinkedIn Profile, Twitter profile, Profile picture	Registration Successful	Registration Successful	Microsoft Edge	Pass	NA

Figure 5.3.4-Test Results for network through Location page

**Figure 5.3.4** illustrates the test results for the registration process on the "Network Through Location" page (network\_location.html). Users provided inputs including their name, college name, location, LinkedIn and Twitter profiles, and a profile picture. The system successfully registered the user as expected, with both expected and actual outputs aligning perfectly. The test was conducted on Microsoft Edge and passed without any issues.

## **Testing Test Scenario 5: Registration in Networking Through Profile**

**Test Case Description:** Registration in Networking Through Profile

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Registered information is directed to connect.html

S.NO	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
5	Navigate To Registration In registration.html	Full Name, Profession, Email, Contact Number, Linked in Profile URL, Facebook Profile URL, YouTube Channel URL, Twitter Profile URL, Brief Introduction, File (Profile Photo)	Influencer Registered Successfully	Influencer Registered Successfully	Microsoft Edge	Pass	NA

Figure 5.3.5-Test Results for network through Profile page

**Figure 5.3.5** presents the test results for the registration process on the "Network Through Profile" page (registration.html). Users entered comprehensive personal and professional details including name, profession, email, social media links, a brief introduction, and a profile photo. The system successfully registered the influencer as expected, with the actual output matching the expected output. The test was conducted using Microsoft Edge and yielded a passing result, indicating proper functionality.

### Testing Test Scenario 6:Registration in donate.html

**Test Case Description:** Registration in donating items

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Registered information is directed to shop.html

S.NO	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
6	Navigate to donate.html	Product Name, Contact, Brand, Product Code, Condition, Location Upload Image	Redirected To shop.html	Redirected to shop.html	Microsoft Edge	Pass	NA

Figure 5.3.6-Test Results for donation page



Figure 5.3.5 displays the test results for the donation page (donate.html). Users were required to enter details such as product name, contact info, brand, product code, condition, location, and upload an image. Upon submission, the system successfully redirected to shop.html, as expected. The test was performed using Microsoft Edge, and the result was a Pass, indicating the feature is functioning as intended.

### Testing Test Scenario 7: Registration in sell.html

**Test Case Description:** Registration in selling items

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Registered information is directed to shop.html

S.NO	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
7	Navigate to sell.html	Product Name, Contact , Brand Product, Code, Condition, Location, Upload Image	Redirected To shop.html	Redirected to shop.html	Microsoft Edge	Pass	NA

Figure 5.3.7-Test Results for selling page

Figure 5.3.7 presents the test results for the selling page (sell.html). Users entered product-related details such as product name, contact, brand, code, condition, location, and uploaded an image. The system successfully redirected to shop.html as expected. The test was conducted using Microsoft Edge, and the outcome was marked as **Pass**, confirming correct page behavior.

### Testing Test Scenario 8: Clearing data using clear.html

**Test Case Description:** Registration in selling items

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Matched data is cleared

S.NO	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
8	Navigate to clear.html	Product Name, Phone Number, 3-digit code	Data Cleared Successfully (if inputs match)	Data Cleared Successfully	Microsoft Edge	Pass	NA

Figure 5.3.8-Test Results for Clear Page

Figure 5.3.8 displays the test results for the Clear page (clear.html). The test involved submitting a product name, phone number, and a 3-digit code. When the input matched the criteria, the data was successfully cleared as expected. The functionality was verified using Microsoft Edge, and the test concluded with a Pass result, indicating correct system behavior.

### Testing Test Scenario 9: Registration in providing free skills in learn\_free\_skills.html

**Test Case Description:** Registration in learn\_free\_skills.html

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Info is directed to purchase\_skill under free skills section

S.NO	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
9	Navigate to learn_free_skills.html	Name, Skill Name, Qualification, Upload Certification, Years of Experience, Email, Contact Number (Optional), LinkedIn profile (Optional), Twitter profile (Optional)	Redirected to purchase_skill.html	Redirected to purchase_skill.html	Microsoft edge	Pass	NA

Figure 5.3.9-Test Results for Registration in learn free skills page

Figure 5.3.9 shows the test results for the Registration page on learn\_free\_skills.html. The test involved entering various inputs such as name, skill name, qualification, certifications, experience, and optional social profiles. Upon submission, the system correctly redirected the user to purchase\_skill.html, as

expected. The test was conducted using Microsoft Edge, and the result was marked as Pass, confirming the functionality works as intended.

### **Testing Test Scenario 10: Registration in providing skills for monetization isell\_skill.html**

**Test Case Description:** Registration in sell\_skill.html

**Test Priority:** High

**Pre-Requisite:** Eduswap Title Click, login

**Post Requisite:** Info is directed to purchase skill under paid skills section

S.NO	Action	Inputs	Expected Output	Actual Output	Test Browser	Test Result	Test Comments
10	Navigate to sell_skill.html	Name, Skill Name, Qualification, Upload Certification, Years of certification, Email, Contact Number (Optional), LinkedIn Profile (Optional), Twitter Profile (Optional)	Redirected to purchase_skill.html	Redirected to purchase_skill.html	Microsoft edge	Pass	NA

Figure 5.3.10-Test Results for Registration in sell skill page

Figure 5.3.10 shows the test results for the registration process on the sell\_skill.html page. The user provided details such as name, skill name, qualification, uploaded certification, years of certification, email, contact number, and optional LinkedIn and Twitter profiles. The expected outcome was a redirection to purchase\_skill.html, which matched the actual result. The test was conducted using Microsoft Edge and passed successfully, indicating the page functions as intended.

## 6.CONCLUSIONS

### 6.1 Conclusion

The goal of this project was to create a meaningful platform that promotes interaction, collaboration, and mutual support among students across different colleges, branches, and locations. Through the development of this website, we aimed to address various student needs—from donating unused items to helping others with valuable skills—thus building a student-centered ecosystem that is inclusive, resourceful, and engaging. One of the key highlights of the platform is its ability to bridge the gap between students who have and students who need. The donation and selling modules allow students to either give away or sell products they no longer use, such as books, stationery, or gadgets. This not only prevents waste but also supports financially struggling students by making useful resources accessible to them either for free or at a lower price. The platform respects student privacy by making phone number sharing optional and encourages safe communication through social media links. The skills module offers three distinct pathways—selling a skill, sharing a skill for free, and getting a skill—empowering students to monetize their talents or simply help others learn. Whether it's building a website, preparing a presentation, or offering academic guidance, the platform ensures that every student has an opportunity to either contribute or grow. All registered skills are displayed in the "Get Skill" section, allowing users to browse and connect with others easily. In terms of networking, the platform introduces an innovative approach by allowing students to connect based on skills, college, or personal profile. This segmented structure makes it easier for users to find relevant contacts and build professional or academic connections. Instead of a generic list of users, the platform creates targeted networking paths that reflect students' real needs and interests. The entire platform has been developed using HTML, CSS, JavaScript, and local storage, making it lightweight, easy to deploy, and accessible without server-side dependencies. The use of local storage, while limited, served the purpose well for the prototype, ensuring that user-submitted data could be stored and retrieved efficiently within the same browser session. Thorough testing

confirmed the stability and effectiveness of the platform. Every page, form, and connection path was tested manually to ensure that students could interact without errors, view data correctly, and transition smoothly between features. We paid special attention to user experience, ensuring that the platform is intuitive and clutter-free despite offering a wide range of features. In conclusion, this project is more than just a student website—it is a step toward building a strong, supportive, and self-sustaining student community. It not only connects students but also cultivates a sense of responsibility, sharing, and learning among them. In future versions, we can enhance the system with database integration, login authentication, and chat support to make it even more dynamic and interactive. But even in its current form, the platform stands as a functional, meaningful solution to everyday student challenges, helping turn college networks into powerful support systems.

## **6.2 Future Scope**

The future scope of this platform involves several key improvements to enhance its functionality and scalability. First, integrating a database will allow for persistent data storage, secure user authentication, and scalability for handling larger user bases. A payment interface will enable secure monetary transactions for buying and selling products or services, while also facilitating donations. Adding real-time chat will enhance communication between users, enabling instant discussions and collaboration. A rating and review system will build trust within the community, while a mobile application will make the platform more accessible and user-friendly. Future upgrades will also include geolocation-based searches, event integration for hackathons and workshops, and advanced analytics for tracking user activity. An admin panel for moderation and customizable user preferences will further improve the platform's functionality and user experience. These enhancements will transform the platform into a comprehensive, secure, and scalable solution for student interaction, collaboration, and support.

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