

Project Description

EduImpact is a blockchain-based platform focused on incentivizing learning and contributions to technology communities. Built on **EDU Chain**, the platform reimagines how scholarships and funding operate by integrating **Open Campus ID**, a **milestone-based funding mechanism**, and **corporate sponsorship opportunities**. EduImpact encourages users to develop technical skills, contribute to tech ecosystems, and foster a culture of continuous learning and innovation.

The platform exclusively supports **technology-related learning and contributions**, creating an ecosystem where learners can access resources, earn rewards, and build their profiles while sponsors can promote their technologies and engage with the tech community.

Key Use Cases

- 1. Technical Skill Development and Validation**
 - Students earn rewards for completing tech-focused courses, contributing to open-source projects, or participating in coding bootcamps.
 - Proof of their achievements is stored immutably on the blockchain.
 - 2. Corporate-Sponsored Scholarships for Tech Enthusiasts**
 - Companies and organizations fund scholarships to support the next generation of tech innovators.
 - In return, their technologies, courses, or tools are promoted on the platform, creating a mutually beneficial relationship.
 - 3. Community Engagement in Tech Ecosystems**
 - The platform rewards users for contributions to tech communities, such as participating in hackathons, hosting tech workshops, or contributing to coding challenges.
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Unique Features

1. Open Campus ID Integration for Profile Management

- Every user on EduImpact has a unique **Open Campus ID** that manages their profile, including:
 - Skills and certifications (verified on-chain).
 - Contributions to tech communities (e.g., open-source PRs, participation in hackathons).
 - Ongoing and completed milestones.

- This decentralized identity ensures ownership of credentials and allows seamless participation across the ecosystem.
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2. Milestone-Based Funding with Locked Rewards

- Scholarships are distributed incrementally, tied to the completion of specific milestones.
 - **How it works:**
 1. Users receive initial funds upon starting a milestone.
 2. Subsequent funds are **locked or staked** in their account until the milestone is 100% completed.
 3. Unlocking funds upon completion provides a **dopamine effect** and motivates users to finish their tasks.
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3. Corporate Sponsorship for Scholarships

- Companies can fund scholarships as part of their Corporate Social Responsibility (CSR) initiatives or to promote their technologies.
 - **Value for Companies:**
 - Sponsored scholarships can be tied to learning programs that promote their courses or tools (e.g., a cloud provider funds a scholarship for users completing their DevOps course).
 - Enhanced brand visibility in the tech ecosystem.
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4. Focus on Tech Learning and Contributions

- Unlike general-purpose platforms, EdulImpact exclusively supports **technology-related tasks and learning**, such as:
 - Completing programming courses.
 - Contributing to open-source repositories.
 - Attending tech bootcamps or workshops.
 - Participating in hackathons and other tech-related challenges.
 - Non-tech tasks are explicitly excluded, ensuring the platform remains focused on fostering technical growth.
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5. Gamified NFT Recognition

- Users earn NFTs for completing milestones, which act as proof of their technical achievements.
 - NFTs can be displayed on their profiles or used as credentials for job applications or further funding opportunities.
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How It Works

1. Profile Creation via Open Campus ID

- Users sign up and create a profile using **Open Campus ID**, linking their wallets and credentials.
- Profiles display skills, ongoing milestones, and past achievements.

2. Scholarship Application

- Students browse available scholarships funded by sponsors, each with specific milestones tied to technical tasks.
- Example: A cloud computing scholarship requires completing an online AWS certification course.

3. Milestone Progress and Rewards

- Upon starting a milestone, initial funds are disbursed to the user's account.
- The remaining funds are **staked/locked** and can only be unlocked upon full completion of the milestone.
- Users receive a notification and NFT reward upon milestone completion.

4. Corporate Sponsorship

- Companies fund scholarships and provide free or discounted access to their courses, certifications, or tools.
- Example: A company offering cybersecurity tools sponsors a scholarship for students learning penetration testing.

5. Community Voting and Validation

- Milestone completion and Proof of Impact submissions are validated by the community or sponsors to ensure authenticity.
 - Voting is recorded on the blockchain for transparency.
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Technical Stack

1. **Blockchain Layer:**
 - **EDU Chain** for decentralized identity management, smart contracts, and fund tracking.
 2. **Identity Management:**
 - **Open Campus ID** for managing user profiles and credentials.
 3. **Frontend:**
 - **React.js** and **Tailwind CSS** for a responsive and modern interface.
 4. **Smart Contracts:**
 - **Solidity** for managing milestone-based funding, staking, and corporate sponsorship agreements.
 5. **Storage:**
 - **IPFS** for decentralized storage of user credentials and Proof of Impact evidence.
 6. **Payment Integration:**
 - Crypto-based payments for disbursing scholarships and rewards.
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Benefits

For Learners:

- Access to funding for technical learning without relying on traditional education systems.
- Motivation to complete milestones through incremental rewards and NFT recognition.
- Ownership of credentials via Open Campus ID.

For Sponsors:

- Opportunity to promote their technologies and engage with the tech community.
- Transparent and measurable impact of their scholarships.
- Enhanced brand visibility in the tech ecosystem.

For the Tech Ecosystem:

- Increased participation in technical learning and contributions.
 - A community-driven approach to skill development and funding.
 - Transparent and decentralized management of scholarships and rewards.
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Impact and Vision

EduImpact aims to bridge the gap between learners, tech communities, and corporate sponsors by creating a transparent, decentralized, and tech-focused ecosystem. By rewarding technical growth and fostering collaboration, it seeks to empower individuals and drive innovation in the tech world.

EduImpact Demo Flow

The demo will showcase the core functionalities of **EduImpact**, emphasizing user interaction, milestone-based funding, and corporate-sponsored scholarships. Below is the step-by-step demo flow:

Step 1: User Registration and Profile Creation

Action:

- The user visits the platform and registers using their wallet (e.g., MetaMask).
- **Open Campus ID** is automatically generated, linking their wallet to a decentralized profile.

UI Features:

- Registration Page: Simple form with wallet connection.
 - Profile Dashboard:
 - User's name, wallet address, and profile picture.
 - Sections for skills, certifications, milestones, and NFTs.
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Step 2: Browsing Available Scholarships

Action:

- The user navigates to the **Scholarship Marketplace** to view available scholarships funded by sponsors.
- Scholarships include:
 - Milestones (tasks to be completed, such as a course or a project).
 - Rewards (total funds and NFTs upon completion).
 - Sponsor branding (company logo and brief description).

UI Features:

- Scholarship Cards:

- Task description, funding amount, and milestones.
- Sponsor logo and links to their courses or tools.

Example:

- Scholarship: "Cloud Computing Mastery by CloudCorp"
 - Milestone: Complete AWS certification.
 - Reward: \$500 (locked until completion) + NFT Badge.
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Step 3: Applying for a Scholarship

Action:

- The user selects a scholarship and clicks **"Apply."**
- A smart contract interaction occurs to allocate the scholarship amount to the user's wallet (initial funds staked/locked).

UI Features:

- Scholarship Application Modal:
 - Confirmation message with milestones and funds.
 - Smart contract hash displayed for transparency.

Example Interaction:

- User clicks **"Confirm"**, and their wallet balance updates to show the locked amount.
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Step 4: Starting a Milestone

Action:

- The user begins their milestone, such as enrolling in a course or contributing to an open-source project.
- Progress is tracked manually or automatically via integrations with platforms like GitHub or online course providers.

UI Features:

- Milestone Tracker:
 - Progress bar showing percentage completion.
 - Deadline and requirements (e.g., submit proof of completion).
 - Links to learning resources (e.g., AWS course link).

Step 5: Submitting Proof of Completion

Action:

- The user submits proof of milestone completion (e.g., course certificate or GitHub PR link).
- The platform validates the submission:
 - Automatically using APIs (e.g., AWS or GitHub).
 - Manually through community voting (DAO members verify submissions).

UI Features:

- Submission Page:
 - File upload for certificates or links for validation.
 - Status (Pending Validation/Approved/Rejected).

Example Interaction:

- User uploads an AWS certificate, which is validated by the sponsor or DAO.
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Step 6: Unlocking Funds and Rewards

Action:

- Upon milestone approval, the funds locked in the smart contract are released to the user's wallet.
- The user also receives an NFT badge as recognition.

UI Features:

- Rewards Dashboard:
 - Updated wallet balance.
 - Display of earned NFT badge with metadata (e.g., "AWS Certified Professional").
 - Notification: "Congratulations! You've unlocked \$500 and earned an NFT badge."

Example Interaction:

- User views their updated balance and NFTs in their dashboard.
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Step 7: Corporate Sponsorship and Promotion

Action:

- Sponsors fund scholarships by uploading details of their programs, milestones, and rewards.
- They can include links to their courses, tools, or certifications.

UI Features:

- Sponsor Dashboard:
 - Add New Scholarship: Form to set up tasks, rewards, and branding.
 - Analytics: View user participation and milestone completion rates.

Example Interaction:

- CloudCorp sets up a scholarship requiring users to complete their DevOps course and receives analytics on program success.
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Step 8: Gamified Recognition and Community Engagement

Action:

- Users participate in additional tech community activities like hackathons or workshops.
- They earn NFT badges, reputation points, and unlock further scholarships.

UI Features:

- Leaderboard:
 - Display top contributors to tech communities.
 - Users ranked by completed milestones, NFTs earned, and reputation points.

Example Interaction:

- The user sees their name in the leaderboard and earns bonus tokens for contributing to an open-source project.
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Demo Focus Points

1. **Simplified User Flow:**
 - Registration, browsing scholarships, and submitting milestones should feel seamless.
 - Highlight smooth integration with **Open Campus ID**.
2. **Interactive Funding Mechanism:**

- Show how funds are staked and unlocked, emphasizing transparency via smart contracts.
- 3. **Sponsor Value:**
 - Display corporate branding and highlight how their courses are promoted through scholarships.
- 4. **Gamified Experience:**
 - Demonstrate NFT rewards, the leaderboard, and user engagement features.

1. Platform Layout

Key Principles:

- Clean, minimalistic design with a focus on usability.
- Tailwind CSS for styling and responsive design.
- Accessible navigation for quick interaction.

Core Sections:

1. **Header:**
 - Logo on the left.
 - Navigation links: Home, Scholarships, Milestones, Profile.
 - Connect Wallet button on the right.
 2. **Sidebar (optional for dashboards):**
 - Quick links: Dashboard, Scholarships, Community, Notifications, Settings.
 3. **Main Content Area:**
 - Dynamic display of pages (e.g., scholarship details, user milestones, etc.).
 4. **Footer:**
 - Links to About Us, Privacy Policy, and Contact Information.
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2. Page Designs

A. Landing Page

Purpose: Introduce the platform and its features to new users.

- **Hero Section:**
 - Tagline: “Empowering Tech Innovators Through Decentralized Scholarships.”
 - CTA Buttons: “Get Started” and “Explore Scholarships.”
- **Features Section:**

- Highlight core features like Open Campus ID, milestone-based funding, and sponsor collaboration.
 - Icons and brief descriptions for each feature.
 - **Sponsor Logos:**
 - Display logos of corporate sponsors to build trust and credibility.
 - **User Testimonials:**
 - Carousel of testimonials from scholarship recipients and sponsors.
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B. Dashboard Page

Purpose: Serve as the user's control center.

- **Overview Cards:**
 - Total Funds Earned (Locked and Available).
 - Milestones in Progress.
 - Scholarships Applied For.
 - NFTs Earned.
 - **Quick Links:**
 - Apply for Scholarships.
 - View Milestone Progress.
 - Update Profile.
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C. Scholarship Marketplace

Purpose: Allow users to browse and apply for scholarships.

- **Filters and Search:**
 - Filters: Programming Languages, Technology Focus (e.g., Cloud, AI, Blockchain), Sponsors.
 - Search bar for specific scholarships.
 - **Scholarship Cards:**
 - Title, Sponsor Logo, Milestone Description, and Reward Amount.
 - CTA: "View Details" button.
 - **Scholarship Detail Page:**
 - Full description of milestones and rewards.
 - Sponsor information and branding.
 - Apply button with wallet integration.
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D. Milestone Tracker

Purpose: Help users track progress on their milestones.

- **Progress Bars:**
 - Show percentage completion for each milestone.
 - **Milestone Cards:**
 - Task Description.
 - Submission Deadline.
 - Reward (Locked Funds + NFT).
 - **Proof Submission Section:**
 - Upload or link proof (e.g., GitHub PR or course certificate).
 - Status: Pending Validation, Approved, or Rejected.
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E. Profile Page

Purpose: Manage user credentials and achievements.

- **Profile Overview:**
 - Avatar, Name, Open Campus ID.
 - Quick Stats: NFTs Earned, Funds Unlocked, Scholarships Completed.
 - **Achievements Section:**
 - Grid of earned NFTs with hoverable details.
 - **Skills and Credentials:**
 - List of verified skills and certifications.
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F. Sponsor Dashboard

Purpose: Enable sponsors to create and manage scholarships.

- **Create Scholarship Form:**
 - Fields: Title, Description, Milestones, Rewards, Branding.
 - **Analytics Section:**
 - Number of Applicants.
 - Completion Rates.
 - Feedback from Recipients.
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3. UI Components

Reusable Components:

1. **Cards:**

- Used for scholarships, milestones, and achievements.
 - Includes a hover effect for additional details.
 - 2. **Buttons:**
 - Primary (e.g., Apply, Submit Proof): Bold colors for emphasis.
 - Secondary (e.g., View More, Update Profile): Subtle colors for supporting actions.
 - 3. **Forms:**
 - Input fields with validation for tasks like proof submission and scholarship creation.
 - Dropdowns for selecting filters and milestones.
 - 4. **Modals:**
 - Used for confirmation messages, proof uploads, and wallet integration.
 - 5. **Progress Bars:**
 - Visual representation of milestone progress.
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4. Color Palette

- **Primary:**
 - Blue (#1E3A8A) for trust and technology focus.
 - **Secondary:**
 - Green (#10B981) for success indicators (e.g., funds unlocked).
 - **Background:**
 - White (#FFFFFF) for a clean layout.
 - Light Gray (#F3F4F6) for sections.
 - **Text:**
 - Dark Gray (#111827) for primary text.
 - Medium Gray (#6B7280) for secondary text.
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5. Typography

- **Font Family:**
 - Sans-serif (e.g., Inter, Poppins, or Roboto).
 - **Headings:**
 - Bold and larger sizes for emphasis (e.g., 24px for H1, 18px for H2).
 - **Body Text:**
 - Regular and readable (e.g., 16px for body, 14px for captions).
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6. Navigation Flow

1. **Landing Page → Dashboard (Post Login)**
Users start on the landing page, log in via wallet, and are redirected to their dashboard.
2. **Dashboard → Scholarship Marketplace**
Users explore scholarships and apply for tasks.
3. **Scholarship → Milestone Tracker**
After applying, users are redirected to their tracker to monitor progress.
4. **Milestone Completion → Profile**
Users view unlocked rewards and earned NFTs in their profile.
5. **Sponsor Dashboard → Analytics**
Sponsors create scholarships and monitor user engagement through analytics.