

NEXT GEN EMPLOYABILITY PROGRAM

CREATING A
FUTURE-READY
WORKFORCE

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CAPSTONE PROJECT SHOWCASE

Project Title

Crowdfunding Platform with React and ExpressJS Framework (P1)

Abstract | Problem Statement | Project Overview | Proposed Solution |
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Abstract

1

Crowdfunding Platform with React and ExpressJS is a web-based solution designed to facilitate secure and transparent fundraising for various causes, enabling users to create and manage campaigns seamlessly.

2

The platform features a **React.js frontend** for an intuitive user experience, while the **Express.js and MongoDB backend** ensures secure data handling and efficient campaign management.

3

Key functionalities include campaign creation, donation processing, real-time updates, admin dashboard for managing funds, and user authentication for secure transactions.

4

This project aims to **enhance accessibility, trust, and efficiency** in online fundraising by providing a robust and scalable solution for individuals and organizations.

Problem Statement

- Crowdfunding is a vital tool for individuals, startups, and organizations to raise funds for various causes, yet existing platforms often suffer from high transaction fees, lack of transparency, and limited accessibility.
- This project aims to address these challenges by developing a **secure, transparent, and user-friendly crowdfunding platform** that enables users to:
 - ✓ **Create and manage campaigns** easily.
 - ✓ **Track donations in real-time** for transparency.
 - ✓ **Ensure secure payments with Paytm integration.**
 - ✓ **Use a modern tech stack** with **React, ExpressJS, and MongoDB** for scalability.



Project Overview

- A **crowdfunding platform** built with **React (Frontend)** and **ExpressJS (Backend)**, using **MongoDB** for data storage.
- Users can **create, manage, and contribute** to campaigns securely.
- **Admin dashboard** for monitoring campaigns and donations.
- **Real-time tracking** of funds raised for transparency.
- **Paytm integration** for seamless payment processing.
- **Secure authentication** with JWT for admin login.
- **User-friendly interface** with responsive design.



Proposed Solution

□ Frontend Implementation (React.js)

- Built using **React.js** for a dynamic and responsive user interface.
- Utilized **React Router** for seamless navigation between pages.
- Integrated **state management** for handling user interactions and campaign data.

□ Backend Development (Express.js & Node.js)

- Developed with **Express.js and Node.js** to handle API requests efficiently.
- Implemented **RESTful APIs** for campaign management, user authentication, and donation processing.
- Used **JWT-based authentication** to secure admin and user logins.

□ Database (MongoDB Atlas)

- Hosted on **MongoDB Atlas** for scalable and cloud-based data storage.
- Structured data using **Mongoose models** for campaigns, users, and transactions.

□ Payment Gateway Integration

- **Paytm integration** for seamless and secure online payments.
- Transaction details stored and managed for transparency and accountability.

□ Additional Features

- **Admin Dashboard** for monitoring donations and managing campaigns.
- **Real-time donation tracking** to show the latest contributions.
- **Secure and scalable** system designed to handle large user interactions efficiently.

Technology used

- **Frontend:** Built using **React.js** for a dynamic user interface, **React Router** for navigation, and **CSS Modules** for styling.
- **Backend:** Developed with **Node.js** and **Express.js** to handle API requests efficiently. **JWT (JSON Web Token)** is used for secure authentication and session management.
- **Database:** **MongoDB Atlas** is used as a cloud database, with **Mongoose** to define and manage data models.
- **API & Security:** **CORS** is enabled for cross-origin requests, **Body-parser** processes incoming requests, and **Bcrypt.js** ensures encrypted password storage.
- **Payment Integration:** Integrate **Paytm Payment Gateway** for secure and seamless donation transactions.
- **Development & Deployment:** APIs tested using **Postman**, version control managed through **GitHub**, frontend planned to host on **Vercel**, and backend deployment planned on **Railway/Render**.



Modelling & Result

Home Page

localhost:3000

ABOUT US CONTACT US Admin-Dashboard ADMIN LOGIN

CHANDAN CORPORATION
Empowering Changes Together ✨

DONATE NOW

Show desktop

Admin Login Page

localhost:3000/admin/login

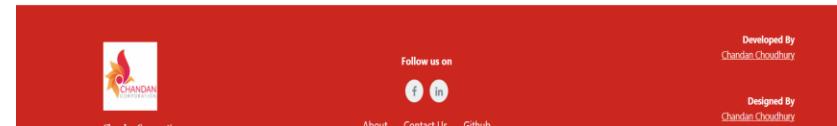
ABOUT US CONTACT US ADMIN LOGIN

Login Admin

Email address
chandanchohdury727@gmail.com

Password

Submit



Modelling & Result

Admin Dashboard & New Campaign Creation Page

The screenshot shows the Admin Dashboard interface. At the top, there's a header with the Chandan Crowdfunder logo, a navigation bar with links to ABOUT US, CONTACT US, Admin-Dashboard, and ADMIN LOGIN, and a large user profile placeholder. Below the header, the title "Admin Dashboard" is displayed, along with the email address "chandanchoudhury772@gmail.com". There are four buttons at the bottom: "New Admin", "New Campaign", "All Campaigns", and "Logout".

The screenshot shows the "New Campaign" creation page. It features a map of Odisha Technology Centre in Bhubaneswar with a red pin indicating the location. Below the map, the title "New Campaign" is shown, followed by several input fields: "Campaign Name" (with placeholder "Enter Campaign Name"), "Campaign Sub Heading" (with placeholder "Enter Campaign Sub Heading"), "Image" (with placeholder "Enter Image URL"), "Campaign Description" (with placeholder "Enter description..."), "Amount" (with placeholder "Enter amount to be raised (in Rs)"), and an "Activate" checkbox. At the bottom right is a "Submit" button.

Contact Us Page

The screenshot shows the "CONTACT US" page. At the top, there's a header with the Chandan Crowdfunder logo, a navigation bar with links to ABOUT US, CONTACT US, and ADMIN LOGIN, and a "CONTACT US" section title. The main content area includes a map of the Odisha Technology Centre area, a "Get In Touch" section with a "Feel free to contact us in case of any queries" message, and a contact form with fields for "Enter your email ID here...", "Enter message here...", and a "Send" button. At the bottom, there's a "Our Office" section with details about the Odisha Technology Centre in Bhubaneswar.

The screenshot shows the footer area of the website. It features the Chandan Crowdfunder logo, the text "Chandan Corporation Bhubaneswar", and links to "Follow us on" with icons for Facebook, LinkedIn, and GitHub. Below these are links to "About", "Contact Us", and "GitHub". The footer also includes a "Developed By" section with "Chandan Choudhury" and a "Designed By" section with "Chandan Choudhury". At the bottom, there's a copyright notice: "For any queries, reach out to us at email chandanchoudhury772@gmail.com".

Modelling & Result

All Campaign's Page

The screenshot shows a web application interface for managing crowdfunding campaigns. At the top, there are navigation links: ABOUT US, CONTACT US, Admin-Dashboard, and ADMIN LOGIN. Below this, the main content area is titled "All Campaigns". It displays five campaign cards, each with a thumbnail image, a title, a brief description, a required amount, and a "Donate Now" button.

Image	Title	Description	Required Amount	Action
	E-Siksha For All	E-Siksha For All is a transformative initiative aimed at making quality education accessible to every child, regardless of their background or location. Our mission is to harness the power of technology to bridge the educational divide, providing interactive learning resources, online classes, and mentorship programs. By supporting E-Siksha For All, you are contributing to a future where every child has the opportunity to learn, grow, and succeed. Join us in our journey to create a world where education knows no boundaries!	₹ 10000	Donate Now →
	test4	test description here..	₹ 50000	Donate Now →
	test1	test1 description here..	₹ 50000	Donate Now →
	test2	test2 description here..	₹ 50000	Donate Now →

**Donation Page: Clicking on Donate now → Donation Form
→ Paytm Payment Gateway**

The screenshot shows a donation page for the "E-Siksha For All" campaign. The header includes the Chandan Crowdfunder logo and navigation links: ABOUT US, CONTACT US, and ADMIN LOGIN. The main content features a large image of a person using a laptop with a "LEARNING" interface. Below the image, the campaign title "E-Siksha For All" and subtitle "- Online Education for Everyone" are displayed. A detailed description of the campaign's mission and goals is provided. At the bottom right, there is a "Donate Now >" button and social media sharing icons.

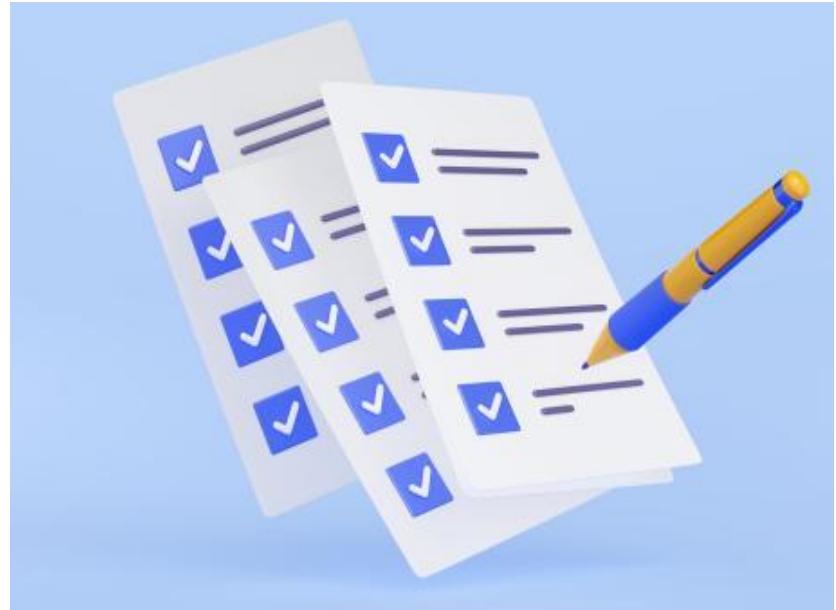
E-Siksha For All
- Online Education for Everyone

E-Siksha For All is a transformative initiative aimed at making quality education accessible to every child, regardless of their background or location. Our mission is to harness the power of technology to bridge the educational divide, providing interactive learning resources, online classes, and mentorship programs. By supporting E-Siksha For All, you are contributing to a future where every child has the opportunity to learn, grow, and succeed. Join us in our journey to create a world where education knows no boundaries!

Donate Now >

Conclusion

- This crowdfunding platform provides a seamless and secure way to support campaigns, ensuring transparency and ease of use.
- With **React.js** for frontend, **Express.js & Node.js** for backend, and **MongoDB Atlas** for data storage, the system ensures a scalable and efficient architecture.
- **Paytm payment gateway integration** for secure transactions.
- This project demonstrates the power of modern web technologies in building a user-friendly and impactful crowdfunding solution.





Thank you!

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foundation