

Freedom And Struggle: A Web Based Educational Platform

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ABSTRACT

As we move further into the digital age, educational platforms such as this one aid learners in grasping modern social issues through more concrete forms. This particular platform exemplifies how technology can be harnessed to provide immersive learning experiences that delve into the intricacies of freedom and struggle. The platform encourages users to analyze historical and contemporary issues related to justice and human rights by offering interactive modules, video materials, and other relevant case studies. This not only improves their ability to think critically but also fosters the understanding of the systemic hurdles faced by underprivileged people. In addition, the platform helps users understand the interconnection between past social movements and present realities. This deeper understanding enhances their learning on the ceaseless struggle for equality and freedom. The use of digital technologies in educational frameworks has transformed the approach to teaching shaping learners' understanding of children as complex social issues. This platform exemplifies how one can use digital tools to facilitate immersive learning on freedom and struggle.

Key words: Human Rights Education, Freedom and Struggle, Social Justice, Equality, Civil Rights Movements, Digital.

1.INTRODUCTION

India's freedom struggle is an integral part of the country's identity as it showcases years of perseverance, struggle, and socio-political evolution. However, considering the pace of the current digitally inclined world, conventional methods teaching history do not adequately capture the interest of the youth. There's a pressing need to engage in better advanced innovative depth teaching tools to help India's youths better understand India's glorious history of revolt and revolution. A foremost solution is in the form of a web-based educational platform that transforms the way historical knowledge is taught, making it engaging, easy to understand, and useful.

This research paper looks into the possible consequences concerning the Indian Freedom Movement and the design features of the platform. Multimedia content comprising archival documents, important characters' biographies, timelines, interactive learning modules, and multimedia content can preserve the historical information while instilling patriotism and nurturing critical analysis among students and researchers. The objective is to revolve towards creating advanced scholarly materials which portray history in a manner which captures the interest of learners while aiding public interests and academic research.

Key Features of the Platform: Interactive Timeline, Biographies and Contributions of Archives, Scholarly Resources, Community Forum

II. RELATED WORKS

Over the last few years, the adoption of digital technologies within the education sector has greatly altered the manner in which historical material is presented and consumed. A number of initiatives and platforms, both governmental and non-governmental, have attempted to digitize and share knowledge about India's struggle for independence. This section summarizes key works that inform the design of the proposed platform.

National Digital Library of India (NDLI): Initiated by the Indian Institute of Technology, Kharagpur, NDLI offers access to a large collection of digital content such as historical texts, biographies, and textbooks. Although extensive, the site is more generic and devoid of a specific narrative or interactivity related to the freedom movement.

Azadi Ka Amrit Mahotsav Portal: Initiated by the Government of India, this portal celebrates 75 years of Indian independence. It includes tales of unsung heroes, timelines of events, and multimedia materials. It is more of a commemorative website than an academic or interactive educational website[2].

Gandhi Heritage Portal: This niche platform provides digitized works, letters, and publications

of Mahatma Gandhi. Though full of primary sources, its scope is Gandhian literature only and not the larger gamut of freedom fighters and movements.

NCERT e- Pathshala & DIKSHA: Both platforms offer curriculum-linked education material including modern Indian history chapters. Both websites lack much interactivity in a linear form that discourages people to explore anything more beyond text-books like learning.

Crowdsourced Projects: These projects gather and disseminate personal and family histories about India's past. Although they provide interesting insights, they are not academically rigorous and lack the formal learning environment appropriate for formal education or research added change

III. PROPOSED SYSTEMS

The intended system is an online educational site meant to act as an interactive, and research-based tool for students, teachers, and history buffs alike. Its core purpose is to strengthen the comprehension of India's struggle for independence through a friendly, multimedia, endowed virtual space that merges historical precision with compelling content presentation. This suggested system is intended not only to sustain the wealth of history of India's liberation movement but also ensure ongoing learning, technologically.

IV. SYSTEM ARCHITECTURE

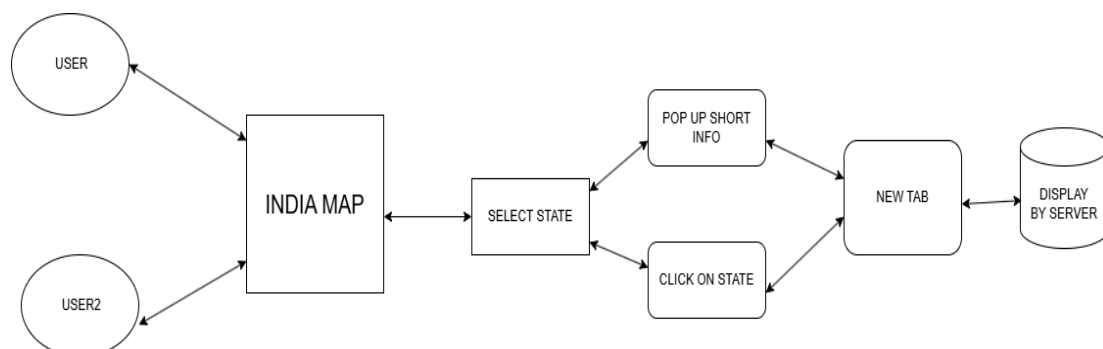


Fig: System Architecture

The Fig1: System Architecture design shows the user interaction with a web-based geographic educational system focused on investigating India's freedom struggle. The overall aim of this system is to give users an easy-to-use, map-based interface that allows dynamic investigation of historical events, leaders, movements, and significant places related to India's independence.

By clicking on states on an interactive map of India, users are able to browse contextual historical content delivered from a centralized database. This multiple-step user-friendly interaction is intended to assist educational research and provide greater understanding for students, historians, and instructors.

Workflow Description:

1. User Access: Multiple users (i.e., students, researchers, educators) are able to access the web site concurrently using standard web browsers.
2. Interactive India Map: As soon as the platform is accessed, the user is greeted with an interactive map of India. Users can browse localized historical content and click on each state.
3. State Selection: Users choose a state to browse its contribution and importance during India's freedom struggle.
4. Pop-up Short Info: A brief summary or highlight in a pop-up window provides users with a quick overview of significant events or individuals of that state.
5. Click for Details: Clicking the pop-up or state results in the opening of a new tab or content window with comprehensive historical records, images, documents, timelines, and biographies.
6. Server-side Display: All the detailed information is fetched dynamically from the server, providing the latest and rich historic content. The server stores

curated study material, which is sourced from authoritative historical records and academic sources.

Components Description

1. Users (Students, Researchers, Educators): Can simultaneously access the platform. Interact with the map-based interface to fetch region-level historical information.
2. India Map Interface: The core navigation tool. Facilitates geographic discovery of history.
3. State Selection and Info Pop-up: Provides instant insight into a region's historical contributions. Acts as an entry point for further exploration.
4. Detailed Content View (New Tab): Provides detailed data like movement timelines (e.g., Non-Cooperation, Quit India), biographies (e.g., Mahatma Gandhi, Subhas Chandra Bose), and scanned historical documents.
5. Server and Database: Stores all educational content and enables quick retrieval. Guarantees the authenticity and organization of historical data.

V. IMPLEMENTATION DETAILS

Implementation of the suggested web-based learning platform involves a step-by-step method that incorporates user-focused design, scalable technology stacks, and modular development to guarantee accessibility, performance, and long-term maintenance.

Hosting & Deployment:

AWS EC2 / Heroku / Firebase – For server deployment.

Cloudinary or AWS S3 – For storing and delivering multimedia files.

Content Development and Integration

Curated Historical Data: Content is derived from government records (e.g., National Archives of

India), history textbooks (NCERT), and authenticated open-source materials.

Content Management System (CMS): A custom-developed or open-source CMS (such as Strapi) allows for simple updates of content by educators or admin users without technical expertise.

Key Functional Modules

1. **Interactive Timeline :** Implemented with JavaScript libraries (such as TimelineJS). Event markers that include links to related videos, pictures, and articles.
2. **Learning Module:** Organized courses and micro-lessons on different stages of the independence movement.

3. **Testing and Quality Assurance Usability Testing:** Performed with students and teachers to perfect the UI/UX.

5. **Security and Data Privacy:** Regular backups and disaster recovery plans in place.

This implementation model guarantees the platform to be educational, easy to use, secure, and scalable, and hence a useful tool for the preservation and promotion of India's freedom struggle in the digital age.

User Engagement: Time per session, content viewed

Knowledge Gain: Enhancement in historical knowledge

User Satisfaction Survey

	Feature Average Rating	Rating (out of 5)
a	Design of Interfaces	4.3
b	Easy Navigation	4.1
c	Content Relevance	4.6
d	Overall Satisfaction	4.4

Table1: Result table

VI. RESULTS

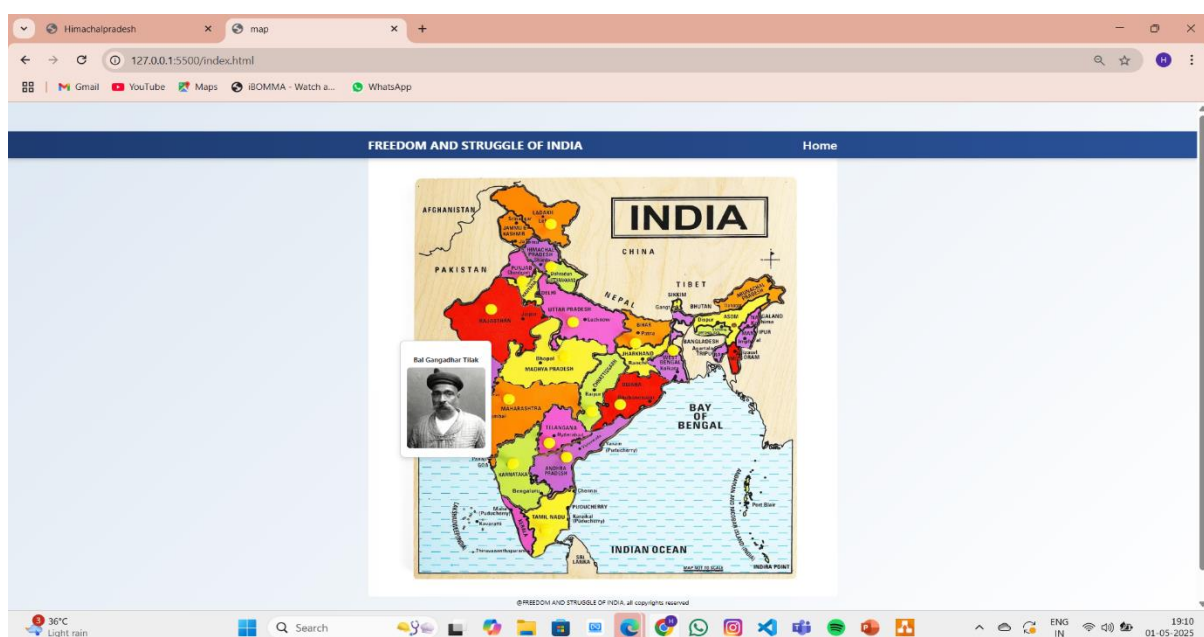


Fig 2: Visual Result

Qualitative Feedback

Students enjoyed the gamified and interactive aspects that made learning more enjoyable.

Teachers emphasized the importance of organized content and suggested integration into school curriculums.

Researchers appreciated access to digitized archives and timelines but asked for more sophisticated search and citation tools.

ANALYSIS

Experimental outcomes illustrate that the platform is efficient in enhancing historical awareness and user participation. Feedback regarding usability and value as a learning and research aid validates the potential of the platform as an education and study resource. Yet, feedback also pointed to areas for improvement:

- More mobile optimization
- Increased representation of regional content
- More sophisticated features for academic citation and resource linking

These findings will inform future developments and refinements of the platform to more effectively serve its multifaceted audience.

VII. CONCLUSION

The freedom struggle of India is an essential component of the country's shared memory, capturing centuries of struggle, resilience, and sacrifice. In the era of the internet, there is an urgent requirement to conserve this heritage through novel, accessible, and interactive ways. The envisioned web-based educational platform meets this requirement by merging interactive learning aids and digitized historical materials to provide an interactive and educational experience for diverse groups of users.

Through careful design, implementation, and testing, the platform has shown its potential to greatly increase historical understanding, user engagement, and accessibility. By exploiting modern web technologies and pedagogical approaches, it mediates the gap between traditional history education and the postulated expectation for digital natives. Initial user testing has confirmed the educational value and usability of the platform as well as provided opportunities for future enhancement. This project not only adds to the discipline of digital humanities and education technology but also fulfills a higher social function—preserving, sharing, and honoring India's independence struggle stories and values for generations to come.

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