

# Project Raksha-Child Abuse Reporting System

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## ABSTRACT

Child abuse often goes unnoticed due to its widespread and hidden nature. Delays in the reporting process further allow such incidents to continue unchecked. In order to solve this problem, this paper presents a web-based and mobile-friendly reporting system that helps people report suspected cases of child abuse quickly and safely. The system uses crowdsourcing to gather reports from the public and forwards them directly to the Child Welfare Committee (CWC), a government body responsible for child protection in India. The platform also ensures user anonymity to encourage more people to come forward and report such cases.

**Keywords:** Child Protection, Crowd sourced Reporting, Mobile App, Child Welfare, Anonymous Reporting.

## INTRODUCTION

Child abuse exists in many forms such as physical harm, emotional mistreatment, sexual exploitation, neglect, and more. Any act that puts a child's well-being, safety, dignity, or growth at risk is considered abuse. A serious challenge is that most of these cases go unnoticed due to the hidden and scattered nature of the problem. Many people are sympathetic to abused children, but often do not know how to help. This shows the need for a simple and accessible way for people to report cases without facing complicated procedures or revealing their identity.

Our child abuse [4] reporting system is built to support social welfare by using crowdsourcing to help identify and address abuse cases. It offers a secure and easy-to-use platform for anyone to report issues related to child safety [9][10]. The system collects reports from both a web-based application and a mobile app, storing them in a central online database. After checking the reports, they are sent to the Child Welfare Committee (CWC), which is a government authority responsible for child protection [7][8] in its area. The CWC then works with officials to ensure quick support and rehabilitation for the child [21]. At present, the system is working in selected areas, including parts of Karnataka, India. There are plans to expand the service to more regions through partnerships and support from social organizations. The reporting tool is available as a web application and as an Android mobile app. The online version was created with HTML, CSS, JavaScript, and jQuery, with a backend based on MySQL and PHP. The Android application was created with the Apache Cordova framework. This is how the remainder of the paper is structured. Section 2 covers associated work in software solutions for preventing child abuse [4][5]. Section 3 explain the issue, the rationale for selecting it, and the function of crowdsourcing as a possible solution. Section 4 describes how the application was developed, including design, tools, and the software lifecycle used. Section 5 goes into depth regarding how the system works and how reports are handled. Finally, the paper ends with the Conclusion, Future Work, and References.

## Related Work

In many states across the United States (US), systems are in place for anonymously reporting child abuse [6][34]. For example, in Florida, the Department of Families and Children offers both an online reporting portal and a dedicated abuse hotline [35]. Research has indicated that such digital systems significantly increase the likelihood of timely intervention in abuse cases [1][10]. India has also introduced child protection services, such as the 1098 helpline and related digital tools. However, research highlights significant gaps in the technological infrastructure for child abuse reporting in India, particularly in rural areas [2][25].

While the Childline India Foundation has made strides in outreach through telephonic services, the absence of an integrated digital platform remains a concern. Comparative analyses of abuse-reporting tools in Southeast Asia indicate that mobile applications enhance accessibility and trust, especially in underserved communities [3]. Among various vehicle thefts, offenders often steal vehicles for use in terrorism, kidnapping, armed robberies and other illegal operations [18].

Vehicle Tracking Systems (VTS) [32] have proven effective in increasing user engagement and facilitating anonymous reporting. However, there is currently no dedicated website or mobile application available in India for reporting child abuse cases [22][24]. This lack of accessible technology often makes the reporting process slow and difficult. Project Raksha is designed to address this issue by creating an easy-to-use and anonymous digital platform [26] for reporting child abuse [14] [15]. It aims to make the process quicker and more convenient by utilizing widely available technologies such as smartphones and internet access.

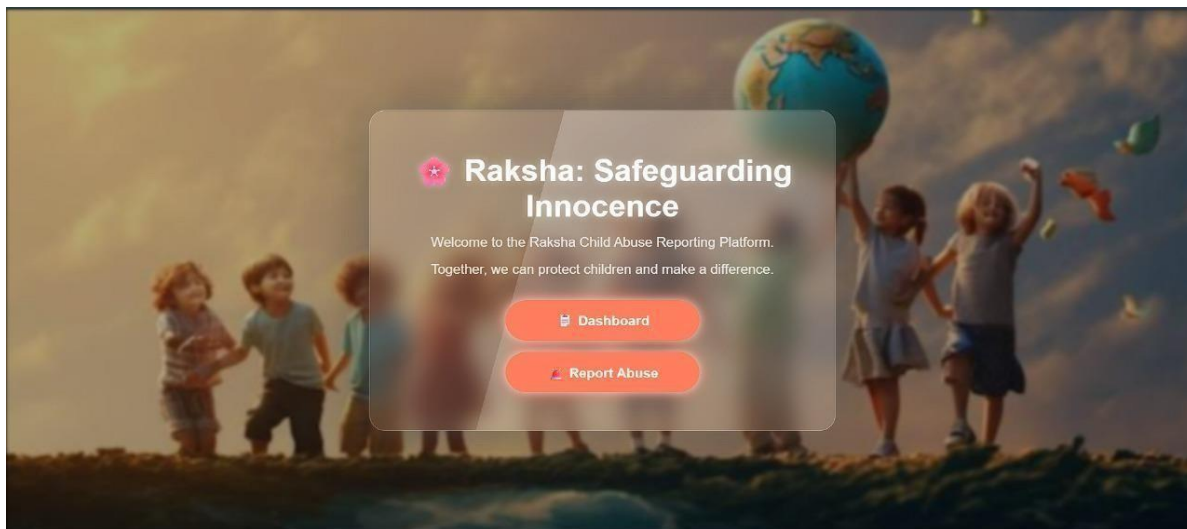


Figure 1. Raksha App GUI

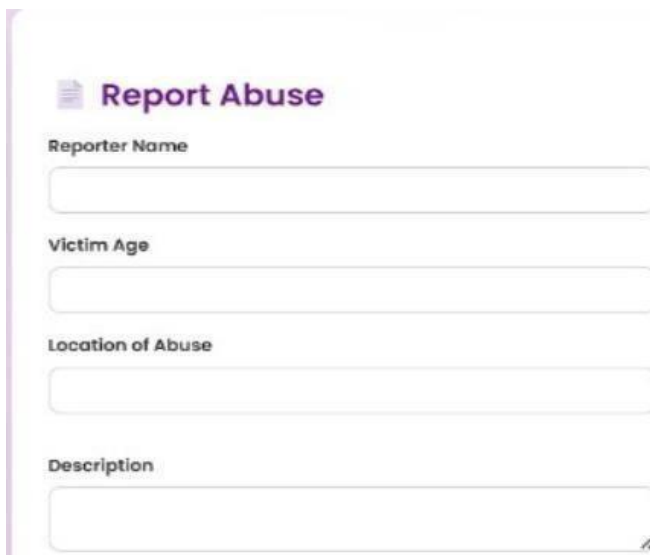


Figure 2. Report Entry

### Problem Statement and Solution Description

Therefore, the goal is to offer an application, platform or solution that is -

- Easily accessible to everyone
- Easy to use
- To protect the identity of the person reporting the abuse.

- Quick and fast response

Child abuse [11][12][13] is a widespread issue that can occur in any part of society. Because of its distributed nature, the solution must also be distributed. Crowdsourcing offers a way to gather reports from the public in real-time. By using commonly available internet-connected devices like smartphones, tablets, and computers, people can easily and anonymously report cases of child abuse through our platform. This approach helps ensure that reports are collected quickly and action can be taken without delay [19].

## **Application Development Proces**

### **Software Development Process**

An incremental prototyping model was used to create the prototype. This method divides the system into smaller components, each of which is created as a distinct prototype. Once each prototype has been tested and refined in accordance with the specifications, the components are assembled to create the entire system.

The system was divided into two main components:

- The frontend, which is the user interface that people interact with
- The backend, which handles data processing [28] and storage

### **Interface Design**

The platform's interface is designed to focus on the main task—reporting child abuse. When users visit the landing page, they are greeted with a clear "Report Now" button that takes them to a form. This form collects both required details and any additional information the user believes may help the authorities.

Additionally, users have the option to upload images [31][23] or additional context that could help them better understand the situation. To aid in organizing and prioritizing the reports [30], the form asks users to categorize the type of abuse, such as physical, sexual [16] or emotional abuse [17].

After submitting a report, if the user has entered an email address, they will receive a confirmation message. Since both a web and mobile version of the platform are available, care has been taken to ensure that the user experience remains consistent across both. This consistency has been achieved using design guidelines recommended by Nielsen's usability heuristics.

### **Technologies Used**

The platform was developed using the following technologies and tools.

- JavaScript, HTML, and CSS for the front end.
- MySQL for database administration.
- Node.js for user input validation.

### **Typical Use Scenario**

A typical Figure shows an example of a typical use case for the platform. Reports can be submitted by users via either web interface. The location of the incident, an optional description to give additional context, and the type of abuse—physical, sexual, or emotional—are all included in reports submitted online [20].

After initial verification to filter out false reports, the valid cases are sent to the Child Welfare Committee (CWC), a government body responsible for child protection and ensuring timely action for victim recovery and rehabilitation. The CWC has the authority to investigate [33], conduct searches, and support the child's rehabilitation within their jurisdiction. Positive outcomes from the platform serve as encouragement for users and help build trust in the reporting system



Figure 3. Action for Reporting Child Abuse

## CONCLUSIONS

The platform developed meets the goals outlined in the problem statement by providing an easy, anonymous, and efficient way to report child abuse cases [27][29]. It simplifies the reporting process, making it accessible to a wide range of users without compromising their privacy. We hope to integrate this platform with existing government initiatives like the Integrated Child Protection Scheme (ICPS) to create a more unified and effective system for child safety.

In the future, we plan to expand the platform's reach beyond the Mangalore district to cover more regions. As the number of reports grows, we aim to implement automated tools to identify and block false reports. This system could also be adapted to help report and manage other widespread issues such as crimes against women, consumer protection violations, and local civic problems.

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