

# **Proposal for the Development of Lost and Found Application**

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## Introduction

We are pleased to present this proposal for the development of a high-performance web application designed to facilitate the process of reporting, tracking, and retrieving lost items. This solution will provide a seamless, user-friendly experience, integrating secure payments and advanced tracking features, ensuring reliability and efficiency for all users.

## 2. Our Team


We are a team of Mauritanian software engineers with extensive expertise in developing scalable and secure web applications. Our experience in backend and frontend technologies ensures that we deliver efficient, high-quality, and modern digital solutions. Our approach focuses on performance, security, and user experience, making us the ideal partner for this project.

## 3. Application Specifications

The application will be developed using cutting-edge technologies, including React for the frontend and Django for the backend. It will be hosted on AWS to ensure scalability and security. PostgreSQL will serve as the primary database, with Supabase Storage managing files efficiently.

### Key Features:

- Secure user authentication (JWT, OAuth2, MFA optional).
- Role-based access control (user, admin).
- Integrated payment system supporting PayPal and Visa.
- Status tracking system for lost and found items.

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- Real-time notifications and alerts.
  - Optimized architecture for high performance with 10,000+ users.
  - Robust security including SSL encryption, AWS Shield, and Cloudflare.

## 4. UI & UX Design

Our user interface (UI) and user experience (UX) design will focus on modern aesthetics and seamless functionality, ensuring an intuitive and engaging experience.

### User Interface (UI):

- Elegant and professional design (Material UI / Tailwind CSS).
- Light and dark theme options.- Fully responsive design for mobile and desktop.

### User Experience (UX)

- Smooth and intuitive navigation.
- Streamlined process for transactions and status updates
- .- Real-time notifications for enhanced user engagement.

## 5. Technology Stack

- Frontend: React.js, Tailwind CSS / Material UI

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- Backend: Django, Django REST Framework
  - Database: PostgreSQL
  - Storage: Supabase Storage
  - Hosting: AWS (EC2, Lambda, RDS, S3, CloudFront)
  - Payments: PayPal, Visa (Stripe optional)
  - Security: SSL, JWT, OAuth2, AWS Shield, Cloudflare
  - Deployment: Docker, CI/CD with GitHub Actions

## 6. Project Timeline

The project will be completed within three months, following a structured and agile development process to ensure timely delivery and quality execution

## 7. Financial Proposal

The total cost for the development of the Lost and Found application, including all technical, UI/UX, security, and deployment aspects,

is: **Total Cost: \$5000**



## 8. Conclusion

This proposal outlines a robust, scalable, and high-performance solution tailored to meet the specific requirements of the Lost and Found application. With a strong focus on security, user experience, and efficiency, we are confident that our solution will provide a seamless and valuable service to users. We are ready to initiate the development process upon project approval and look forward to collaborating on this innovative solution

