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Project Proposal – LiveDrop
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🔨 Project Title

LiveDrop: Real-Time Product Drop Platform

🧠 Project Summary

LiveDrop is a web application that enables real-time product launches with countdown timers, limited-time purchasing, and interactive live chat. Inspired by hype drops (e.g., limited-edition sneakers or exclusive tech gadgets), this platform is built using **Next.js** and **Firebase**, with a strong focus on scalability, user authentication, and real-time experience.

The project showcases a modern web stack with real-world business logic — perfect for demonstrating technical skills in real-time applications, server-side logic, and UI/UX design.

🔧 Technologies Used

Technology	Purpose
Next.js	Frontend & backend (App Router, SSR, Server Actions)
Firebase Firestore	Real-time database for products & chat
Firebase Auth	Secure user authentication
Firebase Storage	Hosting product images
Firebase Studio	Admin interface for managing content
Tailwind CSS	Styling and responsive layout

🎯 Key Features

- ⏳ **Live Countdown Timer** synced with Firestore timestamp
- 📦 **Product Unlocking** at a specific time
- 💬 **Realtime Chat** during drops
- 🔐 **Auth System** for verified buyers
- 🛒 **Purchase Flow** using Server Actions
- 👨‍💻 **Admin Management** via Firebase Studio
- 📱 Fully responsive interface

📅 Timeline

Week 1: Setup & Core UI

- Project repo setup, Firebase config, base page routing
- Auth integration (login, register)
- Product structure design in Firestore

Week 2: Realtime Logic

- Countdown component using Firestore server time
- Real-time updates on product availability
- Implement chat system with Firestore listeners
- Server Actions for "claim product" functionality

Week 3: Admin Tools + QA

- Firebase Studio or internal admin route for managing products
- Secure Firestore rules
- Responsive layout and state polishing
- End-to-end testing

Week 4: Deployment & Presentation

- Deploy via Vercel
- Create visual demo assets and PDF documentation
- Final presentation ready with working prototype

📂 Deliverables

- 🔗 Hosted project on **Vercel**
- 📁 GitHub repository
- 🖼️ Demo screenshots & video
- 📄 Final project report & presentation PDF

👤 Developer Info

- **Name**: Khushan Kanakrai
- **Institution**: Epitech Barcelona
- **Team**: Solo