

# Project Documentation DevCart

## Project Title

DevCart A Full-Stack Developer Tools Marketplace

## Project Summary

DevCart is a full-stack web application built for developers to discover, share, like, and purchase dev-related tools. The app features role-based access (admin/user), secure authentication, real-time tool management, and a clean user interface built with performance and user experience in mind.

## Problem Statement

Developers often struggle to find and share helpful tools in a centralized space. Existing platforms lack structure, role-based control, and modern interaction patterns (likes, orders, real-time discovery). DevCart bridges that gap a curated, searchable, and community-powered tool directory.

## Goals & Objectives

- Enable developers to explore a marketplace of tools
- Provide secure login/register flow (JWT)
- Allow authenticated users to like or buy tools
- Provide Admins with power to manage tools/orders
- Add infinite scroll and real-time UX improvements
- Optimize for performance and hackathon constraints

## Tech Stack

Frontend: React (Vite), Tailwind CSS

Backend: Express.js, Node.js, MongoDB

Auth: JWT, bcrypt

Image Upload: Multer + Cloudinary

UI/UX: Toastify, Debouncing, Infinite Scroll

Admin Tools: Dashboard, Role-based routes

Extra: REST API, Protected Routes, Likes

## Core Features

## Authentication & Authorization

- JWT token-based login/register
- Role-based access (user / admin)
- Protected routes for tool addition, dashboard access

## Tool Management

- Users can browse, like, and order tools
- Admins can create, edit, delete tools
- Image upload support (Cloudinary)

## Orders System

- Users can purchase tools (mock order system)
- Admin can view all orders
- Order history saved per user

## Search & Filter

- Debounced search bar
- Tag-based filtering
- Infinite scroll for browsing tools

## UI & Interaction

- Clean layout, Tailwind styling
- Toasts for actions
- Conditional navbar logic
- 404 page and landing page

## Folder Structure

devcart-frontend/: components/, context/, pages/, App.jsx, main.jsx

devcart-backend/: controllers/, models/, routes/, middleware/, index.js

.env Example (Backend)

PORT=5050

MONGO\_URI=mongodb://localhost:27017/devcart

JWT\_SECRET\_KEY=your\_secret

CLOUDINARY\_CLOUD\_NAME=your\_name

CLOUDINARY\_API\_KEY=your\_key

CLOUDINARY\_API\_SECRET=your\_secret

### Installation

Backend: cd devcart-backend && npm install && npm run dev

Frontend: cd devcart-frontend && npm install && npm run dev

### Potential Enhancements

- Stripe payment integration
- WebSocket support for real-time updates
- User profile page (My Tools)
- Analytics charts (admin)
- Admin-only banner badges
- Enhanced mobile UI

### Team & Contributions

Solo Project (for Hackathon)

Role: Full-stack developer

Built from scratch in guided hackathon-style flow.

### Usage Demo

Coming soon on Vercel / Render update the README when deployed.