# Toolbatcher

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## Abstract

Toolbatcher is a web application designed to streamline developers’ workflows by allowing them to create, manage, and execute custom batches of command-line tools. It provides an intuitive interface for selecting tools, specifying versions, and generating scripts that can be easily run across different operating systems.

## Modules and Functionalities

### 1. Frontend Modules

#### Core Components

* **Navbar**: Navigation component providing access to different sections of the application
* **Hero**: Landing page component showcasing main features
* **ToolSelector**: Interactive component for selecting development tools
* **CodeEditor**: Component for displaying and copying installation commands
* **FeedbackForm**: User feedback collection interface
* **Documentation**: Comprehensive usage guidelines and documentation
* **AdminPage**: Administrative interface for managing tool data and feedback

### 2. Backend Modules

#### API Controllers

* **toolController**: Manages tool-related operations
* **feedbackController**: Handles feedback submission and retrieval

#### Data Models

* **ToolCommand**: Schema for tool installation commands
* **Feedback**: Schema for user feedback storage

#### Routes

* **/api/tools**: Tool management endpoints
* **/api/feedback**: Feedback management endpoints

## Software Stack

### Frontend

* React.js (v18)
* Vite.js
* TailwindCSS
* PostCSS

### Backend

* Node.js
* Express.js
* MongoDB
* Mongoose ODM

### Development Tools

* Git
* npm/yarn
* VS Code
* MongoDB Compass

## 3. How to Use

To use Toolbatcher, follow these steps: npm install cd frontend npm install cd backend npm install

Create a .env file in the backend directory with the following environment variables: - PORT=5000 - NODE\_ENV=development - MONGO\_URI=your\_mongodb\_uri

Run the following commands to start the frontend and backend servers: npm run dev (in the root directory)