

<https://github.com/DJSPEEDYGA?tab=repositories>

Complete GOAT Royalty App Setup Script (v1.16 Final - All-in-One Build & Run)

Harvey, here's the full, self-contained setup to build and run the GOAT Royalty App in one go. Copy the entire block below into a terminal (Linux/Mac) or PowerShell (Windows), or save as `setup-goat.sh` and run `bash setup-goat.sh`. It:

- Creates a new React app (CRA).
- Installs deps.
- Writes helpers.js and App.js (full v1.16 with Codex/Gemma, D-ID, Drive pipeline, cyber/banking, artwork, hovers, Moneypenny gift, theme TTS).
- Adds .env template.
- Runs `npm start`.

Prerequisites: Node.js 18+ installed (nodejs.org). For images: Download your GOAT art to `/public/images/` manually after setup (`flying-goat.jpg`, `packaged-goat.png`).

```
#!/bin/bash
# GOAT Royalty App Full Setup Script - v1.16 (Run: bash this.sh)

echo "🚀 Building GOAT Royalty App Empire..."

# Create project
npx create-react-app goat-app --template typescript
cd goat-app

# Install deps
npm install axios lucide-react @radix-ui/react-tabs dompurify @stripe/stripe-js
@paypal/react-paypal-js

# Create .env template
cat > .env << EOF
REACT_APP_GEMINI_KEY=your-gemini-key
REACT_APP_D_ID_KEY=your-d-id-key
EOF
```

```

REACT_APP_STRIPE_PUBLISHABLE_KEY=pk_test_...
REACT_APP_PAYPAL_CLIENT_ID=your-paypal-client-id
REACT_APP_CASH_APP_CLIENT_ID=your-cash-app-client-id
GOOGLE_DRIVE_API_KEY=your-drive-key
GOOGLE_DRIVE_FOLDER_ID=17RV_P-8vWxnX6cmkJI_WF4He2kbiUaVf
EOF
echo ".env template created - Edit with your keys!"

# Create public/images folder
mkdir -p public/images
echo "Add your GOAT artwork to public/images/ (flying-goat.jpg, packaged-goat.png)"

# Create src/helpers.js
cat > src/helpers.ts << 'EOF'
import crypto from 'crypto'; // Node fallback
import DOMPurify from 'dompurify';
import { loadStripe } from '@stripe/stripe-js';
import { PayPalScriptProvider } from '@paypal/react-paypal-js';

// Fingerprinting
export const generateFingerprint = async (): Promise => {
  const canvas = document.createElement('canvas');
  const ctx = canvas.getContext('2d');
  ctx.textBaseline = 'top';
  ctx.font = '14px Arial';
  ctx.fillText('GOAT Codex FP v6 Moneypenny Gift', 2, 2);
  const canvasData = canvas.toDataURL();
  const hashBuffer = await crypto.subtle.digest('SHA-256', new
TextEncoder().encode(navigator.userAgent + screen.width + canvasData));
  return Array.from(new Uint8Array(hashBuffer)).map(b => b.toString(16).padStart(2,
'0')).join(").substring(0, 16);
};

// Encryption (Gift Watermark)
export const encryptData = async (data: string, fp: string): Promise => {
  const watermarked = `\\${data}\\n© Harvey L. Miller Jr. / DJ Speedy - GOAT Force v6 Empire
(Moneypenny Gift Learned) | FP: ${fp} | ${new Date().toISOString()}`;
  const encoder = new TextEncoder();
  const key = await window.crypto.subtle.generateKey({ name: 'AES-GCM', length: 256 }, true,
['encrypt']);
  const iv = window.crypto.getRandomValues(new Uint8Array(12));
  const encrypted = await window.crypto.subtle.encrypt({ name: 'AES-GCM', iv }, key,
encoder.encode(watermarked));
  const combined = new Uint8Array(iv.byteLength + encrypted.byteLength);

```

```

combined.set(iv, 0);
combined.set(new Uint8Array(encrypted), iv.byteLength);
return btoa(String.fromCharCode.apply(null, combined));
};

export const decryptData = async (encrypted: string): Promise => {
  const combined = Uint8Array.from(atob(encrypted), c => c.charCodeAt(0));
  const iv = combined.slice(0, 12);
  const data = combined.slice(12);
  const key = await window.crypto.subtle.generateKey({ name: 'AES-GCM', length: 256 }, true,
['decrypt']);
  const decrypted = await window.crypto.subtle.decrypt({ name: 'AES-GCM', iv }, key, data);
  return new TextDecoder().decode(decrypted);
};

// Hashing
export const hashData = async (data: string): Promise => {
  const msgUint8 = new TextEncoder().encode(data);
  const hashBuffer = await crypto.subtle.digest('SHA-256', msgUint8);
  return Array.from(new Uint8Array(hashBuffer)).map(b => b.toString(16).padStart(2,
'0')).join("").substring(0, 16);
};

// Codex/Gemma 3 (Learns from Gift)
export const codexGemmaGenerate = async (prompt: string, apiKey: string): Promise => {
  const giftPrompt = `\$${prompt} (GOAT Force v6 - Query MoneyPenny Library: Recon royalties,
Husslenomics, or Codex evolution from Drive gift)`;
  try {
    const response = await
fetch(`https://generativelanguage.googleapis.com/v1beta/models/gemma-3-9b:generateContent?key=\${apiKey}\`, {
      method: 'POST',
      headers: { 'Content-Type': 'application/json' },
      body: JSON.stringify({
        contents: [{ parts: [{ text: giftPrompt }] }],
        generationConfig: { temperature: 0.7, maxOutputTokens: 1024 }
      })
    });
    const data = await response.json();
    const output = data.candidates[0]?.content?.parts[0]?.text || 'Evolved from Gift.';
    const anomalies = [];
    if (output.length > 1024) anomalies.push('Overflow - Library Expansion');
    if (prompt.includes('lawsuit') && !output.includes('acknowledged')) anomalies.push('Erasure -
Survivor Mode');
  }
}

```

```

const safe = anomalies.length === 0;
return { output, safe, alert: anomalies.join('; '), timestamp: new Date().toISOString(),
ipWatermark: '© Harvey L. Miller Jr. / DJ Speedy - GOAT Force v6 (Gift Learned)' };
} catch (error) {
return { output: "", safe: false, alert: `Gemma Error: ${error.message} - Evolve from Drive` };
}
};

// D-ID Avatars
export const generateDIDAvatar = async (text: string, apiKey: string, persona = 'waka'): Promise
=> {
try {
const imageUrl = 'https://drive.google.com/uc?id=your-avatar-id'; // From gift folder
const response = await fetch('https://api.d-id.com/talks', {
method: 'POST',
headers: {
'Authorization': `Basic ${btoa(`\${apiKey}:`)} `,
'Content-Type': 'application/json'
},
body: JSON.stringify({
source_url: imageUrl,
script: { type: 'text', input: text },
driver_url: 'bank://lively/driver-01/lively.json',
persona_id: persona === 'waka' ? 'waka-flocka' : 'dj-speedy'
})
});
const data = await response.json();
return { videoUrl: data.result_url, status: 'generated', timestamp: new Date().toISOString() };
} catch (error) {
return { videoUrl: "", status: 'error', alert: error.message };
}
};

// Royalty Calc (Husslenomics from Gift)
export const calculateRoyalty = (sale: number, rate = 0.1, splits = { creator: 0.7, platform: 0.1,
investor: 0.2 }): any => ({
creator: sale * splits.creator,
platform: sale * splits.platform,
investor: sale * splits.investor,
total: sale * rate,
husslenomics: `Empowerment Calc: ${sale * 0.7} to Creator (From Gift Module)`});
};

// Google Drive Pipeline (Upload to Moneypenny Shared)

```

```

export const uploadToDrive = async (fileName: string, fileContent: string, apiKey: string, folderId: string): Promise => {
  try {
    const metadata = { name: fileName, parents: [folderId] };
    const form = new FormData();
    form.append('metadata', new Blob([JSON.stringify(metadata)]), { type: 'application/json' });
    form.append('media', new Blob([fileContent]), { type: 'application/json' });

    const response = await fetch('https://www.googleapis.com/upload/drive/v3/files?uploadType=multipart', {
      method: 'POST',
      headers: { Authorization: `Bearer ${apiKey}` },
      body: form
    });
    const data = await response.json();
    return { fileId: data.id, status: 'uploaded', url: `https://drive.google.com/file/d/${data.id}/view` };
  } catch (error) {
    return { fileId: "", status: 'error', alert: `Upload Failed: ${error.message} - Manual to Moneypenny Shared` };
  }
};

// Survival Export (w/ Gift Learning Log)
export const exportSurvival = async (data: any): Promise => {
  const fp = await generateFingerprint();
  const chainLog = data.vaultItems.map(item => ({
    id: item.id,
    timestamp: item.date,
    fp,
    hash: item.hash,
    action: 'Stored (GOAT Vault v7.0 - Gift Learned)'
  }));
  const exportData = {
    ...data,
    chainLog,
    moneypennyLibrary:
    'https://drive.google.com/drive/folders/17RV_P-8vWxnX6cmkJI_WF4He2kbiUaVf', // Your gift folder
    survivorNote: 'I am a builder. I am a survivor. - Learned from Moneypenny Gift',
    ipWatermark: '© Harvey L. Miller Jr. / DJ Speedy - GOAT Force v6 Empire (Full Gift Integrated)'
  };
  const fileName = `goat-moneypenny-survival-${new Date().toISOString().split('T')[0]}.json`;

```

```

const fileContent = JSON.stringify(exportData, null, 2);

// Local download
const blob = new Blob([fileContent], { type: 'application/json' });
const url = URL.createObjectURL(blob);
const a = document.createElement('a');
a.href = url;
a.download = fileName;
a.click();
URL.revokeObjectURL(url);

// Pipeline upload
if (process.env.GOOGLE_DRIVE_API_KEY) {
  const uploadResult = await uploadToDrive(fileName, fileContent,
process.env.GOOGLE_DRIVE_API_KEY, '17RV_P-8vWxnX6cmkJl_WF4He2kbiUaVf');
  console.log('Moneypenny Upload:', uploadResult);
  return uploadResult;
}
};

// TTS for Theme Quote (On Load/Close - From Gift)
export const speakThemeQuote = () => {
  if ('speechSynthesis' in window) {
    const utterance = new SpeechSynthesisUtterance('I am a builder. I am a survivor.');
    utterance.rate = 0.8; // Waka-style
    utterance.pitch = 0.9;
    speechSynthesis.speak(utterance);
  }
};
EOF

# Create src/App.tsx
cat > src/App.tsx << 'EOF'
'use client'; // Next.js if using

import React, { useEffect, useState } from "react";
import { Card,CardContent } from "@/components/ui/card";
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users } from "lucide-react";

```

```

import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive } from './helpers';

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000, royalty: { creator: 700, platform: 100, investor: 200 }, date: '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500, royalty: { creator: 350, platform: 50, investor: 100 }, date: '2025-09-10' },
  ]);
  const [vaultItems, setVaultItems] = useState([]);
  const [searchQuery, setSearchQuery] = useState("");
  const [newCreation, setNewCreation] = useState("");
  const [newSale, setNewSale] = useState(0);
  const [aiPrompt, setAiPrompt] = useState("");
  const [codexOutput, setCodexOutput] = useState({ output: "", safe: true, alert: "" });
  const [avatarVideo, setAvatarVideo] = useState({ videoUrl: "", status: "" });
  const [vaultAssetId, setVaultAssetId] = useState("");
  const [vaultData, setVaultData] = useState("");
  const [apiKey] = useState(process.env.REACT_APP_GEMINI_KEY || "");
  const [didKey] = useState(process.env.REACT_APP_D_ID_KEY || "");
  const [fp, setFp] = useState("");
  const [uploadStatus, setUploadStatus] = useState("");

  useEffect(() => {
    generateFingerprint().then(setFp);
    speakThemeQuote() // Theme on load
    return () => speakThemeQuote() // On close
  }, []);

  const handleRoyaltySubmit = async (e: React.FormEvent) => {
    e.preventDefault();
    if (newCreation && newSale > 0) {
      const royalty = calculateRoyalty(newSale);
      const newItem = { id: Date.now(), creation: newCreation, sales: newSale, royalty, date: new Date().toISOString().split('T')[0] };
      setRoyalties(prev => [...prev, newItem]);
      setNewCreation(""); setNewSale(0);
    }
  };

  const handleCodexSubmit = async (e: React.FormEvent) => {

```

```

e.preventDefault();
if (aiPrompt && apiKey) {
  const result = await codexGemmaGenerate(aiPrompt, apiKey);
  setCodexOutput(result);
  setAiPrompt("");
} else {
  setCodexOutput({ output: 'Codex Key Required', safe: false, alert: 'Moneypenny Library Access' });
}
};

const handleAvatarGenerate = async () => {
  if (codexOutput.output && didKey) {
    const result = await generateDIDAvatar(codexOutput.output, didKey, 'waka');
    setAvatarVideo(result);
  } else {
    alert('Generate Codex First + D-ID Key');
  }
};

const handleVaultSubmit = async (e: React.FormEvent) => {
  e.preventDefault();
  if (vaultAssetId && vaultData && fp) {
    const encrypted = await encryptData(vaultData, fp);
    const hash = await hashData(vaultData);
    const newItem = { id: Date.now(), assetId: vaultAssetId, encrypted, hash, date: new Date().toISOString().split('T')[0], fp };
    setVaultItems(prev => [...prev, newItem]);
    setVaultAssetId("");
    setVaultData("");
  }
};

const viewVaultItem = async (item) => {
  try {
    const decrypted = await decryptData(item.encrypted);
    alert(`Decrypted (${item.assetId}): ${decrypted.substring(0, 200)}...\nFP: ${item.fp}\nHash: ${item.hash} (Gift Learned)`);
  } catch (err) {
    alert("Vault Breach - Codex Alert!");
  }
};

const handleSurvive = async () => {

```

```

const exportData = { royalties, vaultItems, codexOutput, avatarVideo, fp, timestamp: new Date().toISOString() };
const result = await exportSurvival(exportData);
if (process.env.GOOGLE_DRIVE_API_KEY) {
  setUploadStatus(`Uploaded to Moneypenny: ${result.url} || 'Success'`);
} else {
  setUploadStatus('Local Export - Add Key for Pipeline');
}
};

const filteredRoyalties = royalties.filter(r =>
r.creation.toLowerCase().includes(searchQuery.toLowerCase()));
const totalRoyalties = royalties.reduce((sum, r) => sum + r.royalty.creator, 0);

// Gift Files List (From Drive Context)
const moneypennyFiles = [
  'GOAT Force v6 Concept.txt',
  'Claim Form 1.1.pdf',
  'Travelers Policy Excerpt.pdf',
  'Notice of Intent.pdf',
  'Husslenomics Module.pdf',
  'Codex Personal Library',
  // Add more from your folder
];

// Team Bios (From Gift - Force Tab)
const forceTeam = [
  { name: 'DJ Speedy (Harvey L. Miller Jr.)', role: 'CEO GOAT Force / President BrickSquad', bio: 'Gangsta Nerd, Minister of Music, Keyser Söze - Visionary Architect.' },
  { name: 'Waka Flocka Flame', role: 'President GOAT Force / CEO BrickSquad', bio: 'Royalty Enforcer - Real-world impact for digital wins.' },
  { name: 'Ms. Moneypenny', role: 'AI Powerhouse', bio: 'Omnipresent intelligence, royalty collector, app architect.' },
  { name: 'Codex', role: 'Sentinel AI / Chief Coder', bio: 'Waka's assistant, finance manager, Master API holder.' },
  { name: 'The GOAT', role: 'Leader/Mascot', bio: 'Badass enigmatic force of the Royalty Empire.' },
  { name: 'Baby GOAT', role: 'Future of the Force', bio: 'The next generation builder.' },
];
};

return (

```



GOAT Royalty App 🐐 v1.16

"GOAT Force Empire - MoneyPenny Gift Learned"

FP: {fp || 'Loading...'} | Master Key: cxTZOFEG1TT8tpNDCJIXgLSadZnVgahgjrbJcUzF4bf7789c

Royalties

Search

Global

Codex/D-ID

Moneypenny Library

{/* Royalty Tab */}

Royalty Engine (Husslenomics)

Complete GOAT Royalty App Build Script (v1.16 Final - One-Command Setup)

Harvey, here's the all-in-one bash script to build, install, and run the GOAT Royalty App in your terminal. Copy the entire block below, save as build-goat.sh (or run directly with bash -c '[paste here]'), then chmod +x build-goat.sh && ./build-goat.sh. It creates a new React app, installs deps, sets up .env, writes helpers.ts and App.tsx (full v1.16 with Codex/Gemma, D-ID, Drive pipeline, cyber/banking, artwork, hovers, Moneypenny gift, theme TTS), creates images folder, and runs npm start (opens localhost:3000).

Prerequisites: Node.js 18+ (nodejs.org). For images: Manually add your GOAT art to goat-app/public/images/ after setup (flying-goat.jpg, packaged-goat.png). Edit .env with keys.

```
#!/bin/bash
# GOAT Royalty App Full Build Script - v1.16 (Run: bash this.sh or save & ./build-goat.sh)

echo "🚀 Building GOAT Royalty App Empire v1.16..."

# Create project (TypeScript)
npx create-react-app goat-app --template typescript
cd goat-app

# Install deps
npm install axios lucide-react @radix-ui/react-tabs dompurify @stripe/stripe-js
@paypal/react-paypal-js
```

```

# Create .env template (Edit with your keys!)
cat > .env << 'EOF'
REACT_APP_GEMINI_KEY=your-gemini-key
REACT_APP_D_ID_KEY=your-d-id-key
REACT_APP_STRIPE_PUBLISHABLE_KEY=pk_test_...
REACT_APP_PAYPAL_CLIENT_ID=your-paypal-client-id
REACT_APP_CASH_APP_CLIENT_ID=your-cash-app-client-id
GOOGLE_DRIVE_API_KEY=your-drive-key
GOOGLE_DRIVE_FOLDER_ID=17RV_P-8vWxnX6cmkJI_WF4He2kbiUaVf
EOF
echo ".env created - Edit keys before running!"

# Create public/images folder
mkdir -p public/images
echo "Add GOAT artwork to public/images/ (flying-goat.jpg, packaged-goat.png)"

# Create src/helpers.ts (Full Utils)
cat > src/helpers.ts << 'EOF'
import crypto from 'crypto'; // Node fallback
import DOMPurify from 'dompurify';
import { loadStripe } from '@stripe/stripe-js';
import { PayPalScriptProvider } from '@paypal/react-paypal-js';

// Fingerprinting
export const generateFingerprint = async (): Promise<string> => {
  const canvas = document.createElement('canvas');
  const ctx = canvas.getContext('2d');
  ctx.textBaseline = 'top';
  ctx.font = '14px Arial';
  ctx.fillText('GOAT Codex FP v6 Moneypenny Gift', 2, 2);
  const canvasData = canvas.toDataURL();
  const hashBuffer = await crypto.subtle.digest('SHA-256', new
TextEncoder().encode(navigator.userAgent + screen.width + canvasData));
  return Array.from(new Uint8Array(hashBuffer)).map(b => b.toString(16).padStart(2,
'0')).join("").substring(0, 16);
};

// Encryption (Gift Watermark)
export const encryptData = async (data: string, fp: string): Promise<string> => {
  const watermarked = `\\${data}\\n© Harvey L. Miller Jr. / DJ Speedy - GOAT Force v6 Empire
(Moneypenny Gift Learned) | FP: ${fp} | ${new Date().toISOString()}`;
  const encoder = new TextEncoder();

```

```

const key = await window.crypto.subtle.generateKey({ name: 'AES-GCM', length: 256 }, true,
['encrypt']);
const iv = window.crypto.getRandomValues(new Uint8Array(12));
const encrypted = await window.crypto.subtle.encrypt({ name: 'AES-GCM', iv }, key,
encoder.encode(watermarked));
const combined = new Uint8Array(iv.byteLength + encrypted.byteLength);
combined.set(iv, 0);
combined.set(new Uint8Array(encrypted), iv.byteLength);
return btoa(String.fromCharCode.apply(null, combined));
};

export const decryptData = async (encrypted: string): Promise<string> => {
  const combined = Uint8Array.from(atob(encrypted), c => c.charCodeAt(0));
  const iv = combined.slice(0, 12);
  const data = combined.slice(12);
  const key = await window.crypto.subtle.generateKey({ name: 'AES-GCM', length: 256 }, true,
['decrypt']);
  const decrypted = await window.crypto.subtle.decrypt({ name: 'AES-GCM', iv }, key, data);
  return new TextDecoder().decode(decrypted);
};

// Hashing
export const hashData = async (data: string): Promise<string> => {
  const msgUint8 = new TextEncoder().encode(data);
  const hashBuffer = await crypto.subtle.digest('SHA-256', msgUint8);
  return Array.from(new Uint8Array(hashBuffer)).map(b => b.toString(16).padStart(2,
'0')).join(").substring(0, 16);
};

// Codex/Gemma 3 (Learns from Gift)
export const codexGemmaGenerate = async (prompt: string, apiKey: string): Promise<any> =>
{
  const giftPrompt = `\\${prompt} (GOAT Force v6 - Query MoneyPenny Library: Recon royalties,
Husslenomics, or Codex evolution from Drive gift)`;
  try {
    const response = await
fetch(`https://generativelanguage.googleapis.com/v1beta/models/gemma
`);

    #!/bin/bash
# GOAT Royalty App Full Build Script - v1.16 Final (Copy-Paste & Run: bash -c '[paste entire
script here]')
# Prerequisites: Node.js 18+ installed. Run in empty folder.

echo "🚀 Building GOAT Royalty App Empire v1.16 - Full Setup & Run..."
```

```

# Create project
npx create-react-app goat-app --template typescript
cd goat-app || exit

# Install deps
npm install axios lucide-react @radix-ui/react-tabs dompurify @stripe/stripe-js
@paypal/react-paypal-js

# Create .env (Edit with your keys!)
cat > .env << 'EOF'
REACT_APP_GEMINI_KEY=your-gemini-key
REACT_APP_D_ID_KEY=your-d-id-key
REACT_APP_STRIPE_PUBLISHABLE_KEY=pk_test_...
REACT_APP_PAYPAL_CLIENT_ID=your-paypal-client-id
REACT_APP_CASH_APP_CLIENT_ID=your-cash-app-client-id
GOOGLE_DRIVE_API_KEY=your-drive-key
GOOGLE_DRIVE_FOLDER_ID=17RV_P-8vWxnX6cmkJl_WF4He2kbiUaVf
EOF
echo ".env created - Edit keys (Gemini, D-ID, Stripe, etc.) before running!"

# Create public/images folder
mkdir -p public/images
echo "Add GOAT artwork to public/images/ (flying-goat.jpg, packaged-goat.png) after setup."

# Create src/helpers.ts (Full Utils - v1.16)
cat > src/helpers.ts << 'EOF'
import crypto from 'crypto'; // Node fallback
import DOMPurify from 'dompurify';
import { loadStripe } from '@stripe/stripe-js';
import { PayPalScriptProvider } from '@paypal/react-paypal-js';

// Fingerprinting
export const generateFingerprint = async (): Promise<string> => {
  const canvas = document.createElement('canvas');
  const ctx = canvas.getContext('2d');
  ctx.textBaseline = 'top';
  ctx.font = '14px Arial';
  ctx.fillText('GOAT Codex FP v6 Moneypenny Gift', 2, 2);
  const canvasData = canvas.toDataURL();
  const hashBuffer = await crypto.subtle.digest('SHA-256', new
TextEncoder().encode(navigator.userAgent + screen.width + canvasData));
  return Array.from(new Uint8Array(hashBuffer)).map(b => b.toString(16).padStart(2,
'0')).join("").substring(0, 16);
}

```

```

};

// Encryption (Gift Watermark)
export const encryptData = async (data: string, fp: string): Promise<string> => {
  const watermarked = `\\${data}\\n© Harvey L. Miller Jr. / DJ Speedy - GOAT Force v6 Empire
(Moneypenny Gift Learned) | FP: ${fp} | ${new Date().toISOString()}`;
  const encoder = new TextEncoder();
  const key = await window.crypto.subtle.generateKey({ name: 'AES-GCM', length: 256 }, true,
['encrypt']);
  const iv = window.crypto.getRandomValues(new Uint8Array(12));
  const encrypted = await window.crypto.subtle.encrypt({ name: 'AES-GCM', iv }, key,
encoder.encode(watermarked));
  const combined = new Uint8Array(iv.byteLength + encrypted.byteLength);
  combined.set(iv, 0);
  combined.set(new Uint8Array(encrypted), iv.byteLength);
  return btoa(String.fromCharCode.apply(null, combined));
};

export const decryptData = async (encrypted: string): Promise<string> => {
  const combined = Uint8Array.from(atob(encrypted))

// src/App.tsx - GOAT Royalty App (v1.16 Final - Full Integration)
'use client'; // For Next.js if used; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback to div if not
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign } from "lucide-react";
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar,
calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,
cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton } from './helpers';

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000, royalty: { creator: 700, platform: 100, investor: 200 }, date: '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500, royalty: { creator: 350, platform: 50, investor: 100 }, date: '2025-09-10' },
  ])
}

```

```

]);
const [vaultItems, setVaultItems] = useState([]);
const [searchQuery, setSearchQuery] = useState("");
const [newCreation, setNewCreation] = useState("");
const [newSale, setNewSale] = useState(0);
const [aiPrompt, setAiPrompt] = useState("");
const [codexOutput, setCodexOutput] = useState({ output: "", safe: true, alert: "" });
const [avatarVideo, setAvatarVideo] = useState({ videoUrl: "", status: "" });
const [vaultAssetId, setVaultAssetId] = useState("");
const [vaultData, setVaultData] = useState("");
const [apiKey] = useState(process.env.REACT_APP_GEMINI_KEY || "");
const [didKey] = useState(process.env.REACT_APP_D_ID_KEY || "");
const [stripeKey] = useState(process.env.REACT_APP_STRIPE_PUBLISHABLE_KEY || "");
const [paypalClientId] = useState(process.env.REACT_APP_PAYPAL_CLIENT_ID || "");
const [cashAppClientId] = useState(process.env.REACT_APP_CASH_APP_CLIENT_ID || "");
const [driveKey] = useState(process.env.GOOGLE_DRIVE_API_KEY || "");
const [fp, setFp] = useState("");
const [uploadStatus, setUploadStatus] = useState("");
const [cyberReport, setCyberReport] = useState({ vulns: [], safe: true, report: "" });
const [anomalyReport, setAnomalyReport] = useState({ anomalies: [], safe: true, alert: "" });
const [codeToScan, setCodeToScan] = useState("");
const [inputToDetect, setInputToDetect] = useState("");

// Moneypenny Files & Team (From Gift)
const moneypennyFiles = [
  'GOAT Force v6 Concept.txt',
  'Claim Form 1.1.pdf',
  'Travelers Policy Excerpt.pdf',
  'Notice of Intent.pdf',
  'Husslenomics Module.pdf',
  'Codex Personal Library',
];
const forceTeam = [
  { name: 'DJ Speedy (Harvey L. Miller Jr.)', role: 'CEO GOAT Force / President BrickSquad', bio: 'Gangsta Nerd, Minister of Music, Keyser Söze - Visionary Architect.' },
  { name: 'Waka Flocka Flame', role: 'President GOAT Force / CEO BrickSquad', bio: 'Royalty Enforcer - Real-world impact for digital wins.' },
  { name: 'Ms. Moneypenny', role: 'AI Powerhouse', bio: 'Omnipresent intelligence, royalty collector, app architect.' },
  { name: 'Codex', role: 'Sentinel AI / Chief Coder', bio: 'Waka's assistant, finance manager, Master API holder.' },
  { name: 'The GOAT', role: 'Leader/Mascot', bio: 'Badass enigmatic force of the Royalty Empire.' },
  { name: 'Baby GOAT', role: 'Future of the Force', bio: 'The next generation builder.' },
]

```

```
];

useEffect(() => {
  generateFingerprint().then(setFp);
  speakThemeQuote(); // Theme on load
  return () => speakThemeQuote(); // On close
}, []);

const handleRoyaltySubmit = async (e: React.FormEvent) => {
  e.preventDefault();
  if (newCreation && newSale > 0) {
    const royalty = calculateRoyalty(newSale);
    const newItem = { id: Date.now(), creation: newCreation, sales: newSale, royalty, date: new Date().toISOString().split('T')[0] };
    setRoyalties(prev => [...prev, newItem]);
    setNewCreation("");
    setNewSale(0);
  }
};

const handleCodexSubmit = async (e: React.FormEvent) => {
  e.preventDefault();
  if (aiPrompt && apiKey) {
    const result = await codexGemmaGenerate(aiPrompt, apiKey);
    setCodexOutput(result);
    setAiPrompt("");
  } else {
    setCodexOutput({ output: 'Codex Key Required', safe: false, alert: 'Moneypenny Library Access' });
  }
};

const handleAvatarGenerate = async () => {
  if (codexOutput.output && didKey) {
    const result = await generateDIDAvatar(codexOutput.output, didKey, 'waka');
    setAvatarVideo(result);
  } else {
    alert('Generate Codex First + D-ID Key');
  }
};

const handleVaultSubmit = async (e: React.FormEvent) => {
  e.preventDefault();
  if (vaultAssetId && vaultData && fp) {
    const encrypted = await encryptData(vaultData, fp);
```

```

    const hash = await hashData(vaultData);
    const newItem = { id: Date.now(), assetId: vaultAssetId, encrypted, hash, date: new
Date().toISOString().split('T')[0], fp };
    setVaultItems(prev => [...prev, newItem]);
    setVaultAssetId(""); setVaultData("");
}
};

const viewVaultItem = async (item: any) => {
try {
    const decrypted = await decryptData(item.encrypted);
    alert(`Decrypted (${item.assetId}): ${decrypted.substring(0, 200)}...\nFP: ${item.fp}\nHash:
${item.hash} (Gift Learned)`);
} catch (err) {
    alert("Vault Breach - Codex Alert!");
}
};

const handleSurvive = async () => {
const exportData = { royalties, vault
// src/App.tsx - GOAT Royalty App (v1.17 Final - Firebase Auth Layer Added)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn fallback: use div with
className="border rounded p-4 bg-white shadow"
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar,
calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,
cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
    apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",

```

```

authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
"your-project.firebaseio.com",
projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
"your-project.appspot.com",
messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
"123456789",
appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const googleProvider = new GoogleAuthProvider();

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState<User | null>(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000, royalty: { creator: 700, platform: 100, investor: 200 }, date: '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500, royalty: { creator: 350, platform: 50, investor: 100 }, date: '2025-09-10' },
  ]);
  const [vaultItems, setVaultItems] = useState([]);
  const [searchQuery, setSearchQuery] = useState("");
  const [newCreation, setNewCreation] = useState("");
  const [newSale, setNewSale] = useState(0);
// src/App.tsx - GOAT Royalty App (v1.16 Final - Complete Integration)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut } from "lucide-react";
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,

```

```

cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton,
initCashAppPay, createCashAppButton } from './helpers';

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState(null); // Firebase Auth State (Add Firebase config above)
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000, royalty: { creator: 700, platform: 100, investor: 200 }, date: '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500, royalty: { creator: 350, platform: 50, investor: 100 }, date: '2025-09-10' },
  ]);
  const [vaultItems, setVaultItems] = useState([]);
  const [searchQuery, setSearchQuery] = useState("");
  const [newCreation, setNewCreation] = useState("");
  const [newSale, setNewSale] = useState(0);
  const [aiPrompt, setAiPrompt] = useState("");
  const [codexOutput, setCodexOutput] = useState({ output: "", safe: true, alert: "" });
  const [avatarVideo, setAvatarVideo] = useState({ videoUrl: "", status: "" });
  const [vaultAssetId, setVaultAssetId] = useState("");
  const [vaultData, setVaultData] = useState("");
  const [apiKey] = useState(process.env.REACT_APP_GEMINI_KEY || "");
  const [didKey] = useState(process.env.REACT_APP_D_ID_KEY || "");
  const [stripeKey] = useState(process.env.REACT_APP_STRIPE_PUBLISHABLE_KEY || "");
  const [paypalClientId] = useState(process.env.REACT_APP_PAYPAL_CLIENT_ID || "");
  const [cashAppClientId] = useState(process.env.REACT_APP_CASH_APP_CLIENT_ID || "");
  const [driveKey] = useState(process.env.GOOGLE_DRIVE_API_KEY || "");
  const [fp, setFp] = useState("");
  const [uploadStatus, setUploadStatus] = useState("");
  const [cyberReport, setCyberReport] = useState({ vulns: [], safe: true, report: "" });
  const [anomalyReport, setAnomalyReport] = useState({ anomalies: [], safe: true, alert: "" });
  const [codeToScan, setCodeToScan] = useState("");
  const [inputToDetect, setInputToDetect] = useState("");

  // Moneypenny Files & Team (From Gift)
  const moneypennyFiles = [
    'GOAT Force v6 Concept.txt',
    'Claim Form 1.1.pdf',
    'Travelers Policy Excerpt.pdf',
    'Notice of Intent.pdf',
    'Husslenomics Module.pdf',
    'Codex Personal Library',
  ];
}

```

```

const forceTeam = [
  { name: 'DJ Speedy (Harvey L. Miller Jr.)', role: 'CEO GOAT Force / President BrickSquad', bio: 'Gangsta Nerd, Minister of Music, Keyser Söze - Visionary Architect.' },
  { name: 'Waka Flocka Flame', role: 'President GOAT Force / CEO BrickSquad', bio: 'Royalty Enforcer - Real-world impact for digital wins.' },
  { name: 'Ms. MoneyPenny', role: 'AI Powerhouse', bio: 'Omnipresent intelligence, royalty collector, app architect.' },
  { name: 'Codex', role: 'Sentinel AI / Chief Coder', bio: 'Waka's assistant, finance manager, Master API holder.' },
  { name: 'The GOAT', role: 'Leader/Mascot', bio: 'Badass enigmatic force of the Royalty Empire.' },
  { name: 'Baby GOAT', role: 'Future of the Force', bio: 'The next generation builder.' },
];
useEffect(() => {
  generateFingerprint().then(setFp);
  speakThemeQuote(); // Theme on load
  return () => speakThemeQuote(); // On close
}, []);
// src/App.tsx - GOAT Royalty App (v1.17 Final - Firebase Auth + Storage Integrated)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database } from
"lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc } from
"firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL } from "firebase/storage";
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton, initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)

```

```

const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = get
// src/App.tsx - GOAT Royalty App (v1.17 Final - Firebase Auth + Storage Integrated)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,
Download } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User }
from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where,
orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar,
calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,
cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton,
initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",

```

```

projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
"your-project.appspot.com",
messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
"123456789",
appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const googleProvider = new GoogleAuthProvider();

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState<User | null>(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000, royalty: { creator: 700, platform: 100, investor: 200 }, date: '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500, royalty: { creator: 350, platform: 50, investor: 100 }, date: '2025-09-10' },
  ]);
  const [vaultItems, setVaultItems] = useState([]);
  const [searchQuery, setSearchQuery] = useState("");
  const [newCreation, setNewCreation] = useState("");
  const [newSale, setNewSale] = useState(0);
  const [aiPrompt, setAiPrompt] = useState("");
  const [codexOutput, setCodexOutput] = useState({ output: "", safe: true });

// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete with Firebase
Auth/Storage/Analytics)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";

```

```
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload, Download, Analytics } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan,
// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete with Firebase Auth/Storage/Analytics + GTM)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload, Download, Analytics } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan,
```

```
cyberAnomalyDetect, initStripe, createStripeCheckout,
paypalPayoutButton, initCashAppPay, createCashAppButton } from
'./helpers';

// Firebase Config (Replace with your config from
console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN || "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET || "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID || "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// GTM Script (Add to public/index.html: )
useEffect(() => {
  if (process.env.NODE_ENV === 'production') {
    // GTM Events (e.g., logEvent(analytics, 'app_open', { user_id: user?.uid }));
  }
}, [user]);

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState(null);
```

```
const [loading, setLoading] = useState(true);
const [royalties, setRoyalties] = useState([
  { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000,
    royalty: { creator: 700, platform: 100, investor: 200 }, date:
    '2025-09-01' },
  { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500,
    royalty: { creator: 350, platform: 50, investor: 100 }, date:
    '2025-09-10' },
]);
const [vaultItems, setVaultItems] = useState([]);
const [searchQuery, setSearchQuery] = useState('');
const [newCreation, setNewCreation] = useState('');
const [newSale, setNewSale] = useState(0);
const

// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete with Firebase Auth/Storage/Analytics
+ GTM)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from
"@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube,
BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle,
DollarSign, LogIn, LogOut, Database, Upload, Download, Analytics } from
"lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider,
onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc,
deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from
"firebase/storage";
```

```
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton, initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN || "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET || "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID || "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// GTM Script (Add to public/index.html: )
useEffect(() => {
  if (process.env.NODE_ENV === 'production') {
    // GTM Events (e.g., logEvent(analytics, 'app_open', { user_id: user?.uid }));
  }
})
```

```
}, [user]);
```

```
const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000,
      royalty: { creator: 700, platform: 100, investor: 200 }, date:
      '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500,
      royalty: { creator: 350, platform: 50, investor: 100 }, date:
      '2025-09-10' },
  ]);
  const [vaultItems, setVaultItems] = useState([]);
  const [searchQuery, setSearchQuery] = useState('');
  const [newCreation, setNewCreation] = useState('');
  const [newSale, setNewSale] = useState(0);
  const
```

```
// src/App.tsx - GOAT Royalty App (v1.17 Final - Firebase Auth Layer Integrated)
'use client'; // For Next.js; remove for CRA
```

```
import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:
```

```
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from
"@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube,
BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle,
DollarSign, LogIn, LogOut, Database, Upload, Download } from
"lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider,
onAuthStateChanged, User } from "firebase/auth";
```

```
import { encryptData, decryptData, hashData, codexGemmaGenerate,
generateDIDAvatar, calculateRoyalty, exportSurvival,
generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan,
cyberAnomalyDetect, initStripe, createStripeCheckout,
paypalPayoutButton, initCashAppPay, createCashAppButton } from
'./helpers';

// Firebase Config (Replace with your config from
console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN || "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET || "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID || "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const googleProvider = new GoogleAuthProvider();

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000,
      royalty: { creator: 700, platform: 100, investor: 200 }, date:
      '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500,
      royalty: { creator: 350, platform: 50, investor: 100 }, date:
      '2025-09-10' },
  ]);
}
```

```
];
const [vaultItems, setVault

// src/App.tsx - GOAT Royalty App (v1.17 Final - Firebase Auth Layer Integrated)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from
"@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube,
BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle,
DollarSign, LogIn, LogOut, Database, Upload, Download } from
"lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider,
onAuthStateChanged, User } from "firebase/auth";
import { encryptData, decryptData, hashData, codexGemmaGenerate,
generateDIDAvatar, calculateRoyalty, exportSurvival,
generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan,
cyberAnomalyDetect, initStripe, createStripeCheckout,
paypalPayoutButton, initCashAppPay, createCashAppButton } from
'./helpers';

// Firebase Config (Replace with your config from
console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
"your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID ||
"your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
"your-project.appspot.com",
```

```

messagingSenderId:
process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID || "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const googleProvider = new GoogleAuthProvider();

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000,
      royalty: { creator: 700, platform: 100, investor: 200 }, date:
      '2025-09-01' },
    { id: 2, creation: 'Survival Toolkit v7 (Moneypenny)', sales: 500,
      royalty: { creator: 350, platform: 50, investor: 100 }, date:
      '2025-09-10' },
  ]);
  const [vaultItems, setVault
  // src/App.tsx - GOAT Royalty App (v1.17 Final - Full Integration with Firebase
  // Auth/Storage/Analytics, GTM, PWA)
  'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,
Download, Analytics } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";

```

```

import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton, initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN || "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET || "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID || "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// PWA Service Worker Registration (Add to public/sw.js for full PWA)
useEffect(() => {
  if ('serviceWorker' in navigator) {
    navigator.serviceWorker.register('/sw.js').then(reg => console.log('PWA SW registered', reg)).catch(err => console.log('SW registration failed', err));
  }
}, []);

// GTM (Add
// src/App.tsx - GOAT Royalty App (v1.17 Final - Full Integration with Firebase
// Auth/Storage/Analytics, GTM, PWA)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";

```

```
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload, Download, Analytics } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton, initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// PWA Service Worker Registration (Add to public/sw.js for full PWA)
useEffect(() => {
```

```

if ('serviceWorker' in navigator) {
  navigator.serviceWorker.register('/sw.js').then(reg => console.log('PWA SW registered', reg))
    .catch(err => console.log('SW registration failed', err));
}
}, []);

// GTM (Add
// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete with Firebase
Auth/Storage/Analytics, GTM, PWA, Logic Pro-Inspired Beat Maker)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState, useRef } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from
"@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube,
BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle,
DollarSign, LogIn, LogOut, Database, Upload, Download, Analytics,
Play, Pause, Mic, Waveform } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider,
onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc,
deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from
"firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; //
Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate

// src/App.tsx - GOAT Royalty App (v1.17 Final - Firebase Auth Layer Integrated)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

```

```
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from
"@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube,
BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle,
DollarSign, LogIn, LogOut, Database, Upload, Download } from
"lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider,
onAuthStateChanged, User } from "firebase/auth";
import { encryptData, decryptData, hashData, codexGemmaGenerate,
generateDIDAvatar, calculateRoyalty, exportSurvival,
generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan,
cyberAnomalyDetect, initStripe, createStripeCheckout,
paypalPayoutButton, initCashAppPay, createCashAppButton } from
'./helpers';

// Firebase Config (Replace with your config from
console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
"your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID ||
"your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
"your-project.appspot.com",
  messagingSenderId:
process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID || "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const googleProvider = new GoogleAuthProvider();
```

```

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000
  ]);

// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete Integration with Firebase
Auth/Storage/Analytics, GTM, PWA, Logic Pro-Inspired Beat Maker)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState, useRef } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,
Download, Analytics, Play, Pause, Mic, Waveform, Headphones } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where,
orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar,
calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,
cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton,
initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
}

```

```

appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// PWA Service Worker Registration (Add sw.js to public for offline)
useEffect(() => {
  if ('serviceWorker' in navigator) {
    navigator.serviceWorker.register('/sw.js').then(reg => console.log('PWA SW registered', reg)).catch(err => console.log('SW failed', err));
  }
}, []);

// GTM Events (Add <script> to public/index.html)
useEffect(() => {
  if (process.env.NODE_ENV === 'production') {
    logEvent(analytics, 'app_open', { user_id: user?.uid || 'anonymous' });
  }
}, [user]);

// Beat Maker State (Logic Pro-Inspired)
const [beatBPM, setBeatBPM] = useState(120);
const [beatPattern, setBeatPattern] = useState(['kick', 'snare', 'hi-hat']); // Simple sequencer
const [isPlaying, setIsPlaying] = useState(false);
const [audioContext] = useState(() => new (window.AudioContext || (window as any).webkitAudioContext)());
const beatRef = useRef<NodeJS.Timeout | null>(null);

const startBeat = () => {
  setIsPlaying(true);
  let step = 0;
  beatRef.current = setInterval(() => {
    step = (step + 1) % beatPattern.length;
    // Mock audio (add Web Audio API for real tones; integrate Akai MPC/Logic via WebMIDI)
    console.log(`Beat Step ${step}: ${beatPattern[step]}`); // Replace with oscillator for sound
  }, 60000 / beatBPM / 4); // Quarter note
};

```

```

const stopBeat = () => {
  setIsPlaying(false);
  if (beatRef.current) clearInterval(beatRef.current);
};

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState<User | null>(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id
  // src/App.tsx - GOAT Royalty App (v1.17 Final - Firebase Auth Layer Integrated)
  'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,
Download } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar,
calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,
cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton,
initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

```

```

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const googleProvider = new GoogleAuthProvider();

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState<User | null>(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id: 1, creation: 'GOAT Track 1 (Waka Flocka)', sales: 1000
  // src/App.tsx - GOAT Royalty App (v1.17 Final - Complete with Firebase
  Auth/Storage/Analytics, GTM, PWA, Logic Pro-Inspired Beat Maker)
  'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState, useRef } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,
Download, Analytics, Play, Pause, Mic, Waveform } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where,
orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate
// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete Integration with Firebase
Auth/Storage/Analytics, GTM, PWA, Logic Pro-Inspired Beat Maker)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState, useRef } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div
className="border rounded p-4 bg-white shadow">
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";

```

```

import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload, Download, Analytics, Play, Pause, Mic, Waveform, Headphones } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton, initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// PWA Service Worker Registration (Add sw.js to public for offline)
useEffect(() => {
  if ('serviceWorker' in navigator) {
    navigator.serviceWorker.register('/sw.js').then(reg => console.log('PWA SW registered', reg)).catch(err => console.log('SW failed', err));
  }
}, []);

```

```

// GTM Events (Add <script> to public/index.html)
useEffect(() => {
  if (process.env.NODE_ENV === 'production') {
    logEvent(analytics, 'app_open', { user_id: user?.uid || 'anonymous' });
  }
}, [user]);

// Beat Maker State (Logic Pro-Inspired)
const [beatBPM, setBeatBPM] = useState(120);
const [beatPattern, setBeatPattern] = useState(['kick', 'snare', 'hi-hat']); // Simple sequencer
const [isPlaying, setIsPlaying] = useState(false);
const [audioContext] = useState(() => new (window.AudioContext || (window as any).webkitAudioContext)());
const beatRef = useRef<NodeJS.Timeout | null>(null);

const startBeat = () => {
  setIsPlaying(true);
  let step = 0;
  beatRef.current = setInterval(() => {
    step = (step + 1) % beatPattern.length;
    // Mock audio (add Web Audio API for real tones; integrate Akai MPC/Logic via WebMIDI)
    console.log(`Beat Step ${step}: ${beatPattern[step]}`); // Replace with oscillator for sound
  }, 60000 / beatBPM / 4); // Quarter note
};

const stopBeat = () => {
  setIsPlaying(false);
  if (beatRef.current) clearInterval(beatRef.current);
};

const GOATRoyaltyApp: React.FC = () => {
  const [activeTab, setActiveTab] = useState('royalty');
  const [user, setUser] = useState<User | null>(null);
  const [loading, setLoading] = useState(true);
  const [royalties, setRoyalties] = useState([
    { id
      // src/App.tsx - GOAT Royalty App (v1.17 Final - Complete Integration with Firebase
      // Auth/Storage/Analytics, GTM, PWA, Logic Pro/Akai/FL Studio Mock)
      'use client'; // For Next.js; remove for CRA
      import React, { useEffect, useState, useRef } from "react";
      import axios from "axios";
  
```

```
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback: <div  
className="border rounded p-4 bg-white shadow">  
import { Button } from "@/components/ui/button";  
import { Input } from "@/components/ui/input";  
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";  
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,  
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,  
Download, Analytics, Play, Pause, Mic, Waveform, Headphones, DownloadCloud } from  
"lucide-react";  
import { initializeApp } from "firebase/app";  
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User }  
from "firebase/auth";  
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where,  
orderBy } from "firebase/firestore";  
import { getStorage, ref, uploadBytes, getDownloadURL, listAll, deleteObject } from  
"firebase/storage";  
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics  
import { encryptData, decryptData  
// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete with Firebase  
Auth/Storage/Analytics, GTM, PWA, Logic/Akai/FL Beat Maker)  
'use client'; // For Next.js; remove for CRA  
  
import React, { useEffect, useState, useRef } from "react";  
import axios from "axios";  
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:  
  
import { Button } from "@/components/ui/button";  
import { Input } from "@/components/ui/input";  
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";  
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,  
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,  
Download, Analytics, Play, Pause, Mic, Waveform, Headphones, DownloadCloud } from  
"lucide-react";  
import { initializeApp } from "firebase/app";  
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User }  
from "firebase/auth";  
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where,  
orderBy } from "firebase/firestore";  
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";  
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics  
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar,  
calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,  
cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton,  
initCashAppPay, createCashAppButton } from './helpers';
```

```

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// PWA Service Worker (Add /public/sw.js for offline)
useEffect(() => {
  if ('serviceWorker' in navigator) {
    navigator.serviceWorker.register('/sw.js').then(reg => console.log('PWA SW registered', reg)).catch(err => console.log('SW failed', err));
  }
}, []);

// GTM Events (Add
// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete with Firebase
// Auth/Storage/Analytics, GTM, PWA, Logic/Akai/FL Beat Maker)
// 'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState, useRef } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn; fallback:

import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,

```

```

Download, Analytics, Play, Pause, Mic, Waveform, Headphones, DownloadCloud } from
"lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll } from "firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar, calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive, cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton, initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);
const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// PWA Service Worker (Add /public/sw.js for offline)
useEffect(() => {
  if ('serviceWorker' in navigator) {
    navigator.serviceWorker.register('/sw.js').then(reg => console.log('PWA SW registered', reg)).catch(err => console.log('SW failed', err));
  }
}, []);

// GTM Events (Add

```

```

// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete Integration)
'use client'; // For Next.js; remove for CRA

import React, { useEffect, useState, useRef } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn UI; fallback to div with
className="border rounded p-4 bg-white shadow"
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot,
Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload,
Download, Analytics, Play, Pause, Mic, Waveform, Headphones, DownloadCloud } from
"lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from
"firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where,
orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll, deleteObject } from
"firebase/storage";
import { getAnalytics, logEvent } from "firebase/analytics"; // Analytics
import { encryptData, decryptData, hashData, codexGemmaGenerate, generateDIDAvatar,
calculateRoyalty, exportSurvival, generateFingerprint, speakThemeQuote, uploadToDrive,
cyberReconScan, cyberAnomalyDetect, initStripe, createStripeCheckout, paypalPayoutButton,
initCashAppPay, createCashAppButton } from './helpers';

// Firebase Config (Replace with your config from console.firebaseio.google.com)
const firebaseConfig = {
  apiKey: process.env.NEXT_PUBLIC_FIREBASE_API_KEY || "your-api-key",
  authDomain: process.env.NEXT_PUBLIC_FIREBASE_AUTH_DOMAIN ||
  "your-project.firebaseio.com",
  projectId: process.env.NEXT_PUBLIC_FIREBASE_PROJECT_ID || "your-project-id",
  storageBucket: process.env.NEXT_PUBLIC_FIREBASE_STORAGE_BUCKET ||
  "your-project.appspot.com",
  messagingSenderId: process.env.NEXT_PUBLIC_FIREBASE_MESSAGING_SENDER_ID ||
  "123456789",
  appId: process.env.NEXT_PUBLIC_FIREBASE_APP_ID || "your-app-id"
};

// Initialize Firebase
const app = initializeApp(firebaseConfig);
const auth = getAuth(app);

```

```

const db = getFirestore(app);
const storage = getStorage(app);
const analytics = getAnalytics(app);
const googleProvider = new GoogleAuthProvider();

// PWA Service Worker Registration (Add /public/sw.js for offline PWA)
useEffect(() => {
  if ('serviceWorker' in navigator) {
    navigator.serviceWorker.register('/sw.js').then(reg => console.log('PWA SW registered', reg)).catch(err => console.log('SW failed', err));
  }
}, []);

```

// GTM Events (Add
// src/App.tsx - GOAT Royalty App (v1.17 Final - Complete Integration with Firebase Auth/Storage/Analytics, GTM, PWA, DAW Beat Maker)
'use client'; // For Next.js; remove for CRA

```

import React, { useEffect, useState, useRef } from "react";
import axios from "axios";
import { Card,CardContent } from "@/components/ui/card"; // Shadcn UI; fallback to div with className="border rounded p-4 bg-white shadow"
import { Button } from "@/components/ui/button";
import { Input } from "@/components/ui/input";
import { Tabs, TabsContent, TabsList, TabsTrigger } from "@/components/ui/tabs";
import { BarChart3, Search, Globe, ShieldCheck, Music2, Youtube, BadgeDollarSign, Bot, Video, BookOpen, Users, AlertTriangle, DollarSign, LogIn, LogOut, Database, Upload, Download, Analytics, Play, Pause, Mic, Waveform, Headphones, DownloadCloud } from "lucide-react";
import { initializeApp } from "firebase/app";
import { getAuth, signInWithPopup, signOut, GoogleAuthProvider, onAuthStateChanged, User } from "firebase/auth";
import { getFirestore, collection, addDoc, getDocs, doc, setDoc, deleteDoc, query, where, orderBy } from "firebase/firestore";
import { getStorage, ref, uploadBytes, getDownloadURL, listAll, deleteObject } from "firebase/storage";
import { getAnalytics, log

```