

I am generating the full code for your AI-powered web DAW project, including frontend (React), backend (Node.js/Express), and Python AI services. This will be a complete multi-file starter project ready for GitHub upload.

Due to file length, I will break it down per folder.

1 Frontend (React)

package.json

```
{
  "name": "ai-daw-frontend",
  "version": "1.0.0",
  "private": true,
  "dependencies": {
    "react": "^18.2.0",
    "react-dom": "^18.2.0",
    "react-scripts": "5.0.1",
    "wavesurfer.js": "^7.0.0",
    "axios": "^1.4.0"
  },
  "scripts": {
    "start": "react-scripts start",
    "build": "react-scripts build",
    "test": "react-scripts test",
    "eject": "react-scripts eject"
  }
}
```

index.html

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <title>AI DAW</title>
</head>
<body>
  <div id="root"></div>
</body>
</html>
```

index.tsx

```
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';
import './styles.css';

const root = ReactDOM.createRoot(document.getElementById('root') as
HTMLDivElement);
root.render(<App />);
```

App.tsx

```
import React from 'react';
import Timeline from './components/Timeline';
import TrackControls from './components/TrackControls';
import EffectsPanel from './components/EffectsPanel';
import TransportControls from './components/TransportControls';

const App: React.FC = () => {
  return (
    <div className="app-container">
      <header><TransportControls /></header>
      <div className="main-content">
        <aside className="left-panel"><TrackControls /></aside>
        <main className="timeline"><Timeline /></main>
        <aside className="right-panel"><EffectsPanel /></aside>
      </div>
    </div>
  );
};

export default App;
```

styles.css

```
body, html {
  margin: 0;
  padding: 0;
  font-family: Arial, sans-serif;
}
.app-container {
  display: flex;
```

```
    flex-direction: column;
    height: 100vh;
}
.main-content {
    display: flex;
    flex: 1;
}
.left-panel, .right-panel {
    width: 250px;
    background: #1a1a1a;
    color: #fff;
    padding: 10px;
    overflow-y: auto;
}
.timeline {
    flex: 1;
    background: #2c2c2c;
    padding: 10px;
}
header {
    background: #111;
    color: #fff;
    padding: 10px;
}
```