**🚀 How to Import and Run the Project Locally (ERC-3643 Tokenization)**

**✅ Step 1: Extract the ZIP**

* Extract the file erc3643-tokenization-starter.zip.
* Open the **extracted folder** in **VS Code**.
  + In VS Code → **File → Open Folder → Select the extracted folder**.

**✅ Step 2: Install Node.js and npm (if not installed)**

* Check by running:

bash

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node -v

npm -v

* If **not installed**, download and install **Node.js LTS version** from [nodejs.org](https://nodejs.org/).

**✅ Step 3: Install Dependencies**

* Open a **terminal** inside VS Code (Terminal → New Terminal).
* Run:

bash

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npm install

* This will install:
  + Hardhat (for smart contract development)
  + OpenZeppelin (security libraries)
  + dotenv (for environment variables)

**✅ Step 4: Initialize Hardhat**

* If not already inside the project, initialize Hardhat:

bash

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npx hardhat

* Choose:
  + **Create a basic sample project**
  + **Y** for installing dependencies
  + **Enter** for default folder.

**✅ Step 5: Compile Smart Contracts**

* Run:

bash

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npx hardhat compile

* This will compile all ERC-3643 contracts.

**✅ Step 6: Setup Environment Variables**

* Create a .env file inside the project:

ini

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PRIVATE\_KEY=your\_ethereum\_private\_key

INFURA\_API\_KEY=your\_infura\_or\_alchemy\_project\_key

**✅ Step 7: Deploy Locally**

* Start a local blockchain network:

bash

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npx hardhat node

* Deploy your smart contracts:

bash

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npx hardhat run scripts/deploy.js --network localhost

**✅ Step 8: Build Frontend (Optional)**

* Later you can add a simple **React** or **Next.js** app to interact with your deployed smart contracts!

**📦 Folder Structure After Import**

kotlin

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erc3643-tokenization-starter/

├── contracts/

│ ├── IdentityRegistry.sol

│ ├── Compliance.sol

│ ├── T-REXToken.sol

│ └── (More ERC-3643 contracts)

├── scripts/

│ └── deploy.js

├── test/

│ └── (basic tests)

├── hardhat.config.js

├── package.json

├── .env (you create this)

└── README.md

**🚀 Summary:**

| **Step** | **Command** |
| --- | --- |
| Install packages | npm install |
| Compile contracts | npx hardhat compile |
| Start blockchain | npx hardhat node |
| Deploy contracts | npx hardhat run scripts/deploy.js --network localhost |

Would you like me to also generate a **basic frontend Dapp** template (React + ethers.js) next so you can **see your tokenized assets** on a webpage? 🎨✨  
(It's very simple!)