**Project Command Reference Guide**

This document contains a structured list of commands used in the project, categorized by functionality.

**🛠 Virtual Environment & Dependencies**

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| Command | Description |
| python --version | Check the installed Python version. |
| python -m venv venv | Create a virtual environment named venv. |
| venv\Scripts\activate | Activate the virtual environment (Windows). |
| source venv/bin/activate | Activate the virtual environment (Mac/Linux). |
| deactivate | Deactivate the virtual environment. |
| pip install fastapi uvicorn sqlalchemy sqlite3 | Install required dependencies. |
| pip list | Display installed Python packages. |
| pip install --upgrade pip | Upgrade pip to the latest version. |
| `pip list | findstr "uvicorn"` |
| pip freeze > requirements.txt | Save installed dependencies. |
| pip install -r requirements.txt | Install dependencies from requirements.txt. |
| C+c to kill the uvicon session |  |

**🚀 Running the FastAPI App**

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| Command | Description |
| uvicorn main:app --reload | Start the FastAPI server with live reloading. |
| python main.py | Run the Python script manually. |

**🔄 Loading & Testing APIs**

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| Command | Description |
| curl -X GET http://127.0.0.1:8000/ | Test a GET request to the API. |
| http://127.0.0.1:8000/docs | Open FastAPI interactive Swagger docs. |
| http://127.0.0.1:8000/redoc | Open FastAPI Redoc API documentation. |

**🐛 Debugging & Troubleshooting**

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| Command | Description |
| Set-ExecutionPolicy Unrestricted -Scope Process | Temporarily allow PowerShell scripts. |
| python -m pip install <package\_name> | Install a package using pip. |
| python -m venv venv | Recreate virtual environment if needed. |
| where python | Find the Python installation path (Windows). |
| which python | Find the Python installation path (Mac/Linux). |
| python -m uvicorn main:app --reload | Run Uvicorn directly. |

**🔧 Git Commands (if using Git)**

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| Command | Description |
| git init | Initialize a new Git repository. |
| git add . | Stage all changes for commit. |
| git commit -m "Initial commit" | Commit changes with a message. |
| git status | Check the status of Git changes. |
| git log | View commit history. |
| git push origin main | Push changes to the remote repository. |

This document serves as a quick reference for commands frequently used in this project.