WalsoftAI-Genealogy: Environment Setup & Configuration Appendix

Document Type: Technical Appendix
Related To: MVP Implementation Blueprint
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📌 Purpose

This appendix captures all environmental, infrastructure, and setup-specific decisions made during the MVP development of WalsoftAI-Genealogy. It is meant to:

- Serve as a deployment and onboarding guide
- Ensure reproducibility across dev, test, and prod environments
- Preserve configuration decisions that may affect scaling, debugging, or upgrades

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🖥️ 1. Local and Server Directory Structure

Context	Base Path
Local Dev	`C:/apps/genealogy/`
Remote Prod	`/home/philip/apps/genealogy/`

🐍 2. Python Environment

- **Virtual environment name:** `genealogy_venv`
- **Python version used:** Matches system Python 3.12+

✅ Activation Example:

```
cd C:/apps/genealogy
.\genealogy_venv\Scripts\activate
```

🔑 3. Environment Variables (.env)

A `.env` file is used for development. It is **excluded from Git** via `.gitignore`.

📄 Example `.env` contents:

```
SECRET_KEY=_fjy_lga_bz5a=-m24u(f&j=!=3_x2tmotd5w=_n#ni9%)sh^n
DEBUG=True

DATABASE_NAME=genealogy_db
DATABASE_USER=postgres
DATABASE_PASSWORD=@0BusiaKenya
DATABASE_HOST=localhost
DATABASE_PORT=5432
```

🐘 4. PostgreSQL Setup (Windows)

- **Version Installed:** PostgreSQL 17.5
- **Installation Path:** `C:\Program Files\PostgreSQL\17\bin`
- **psql added to PATH** for CLI access
- **Database created:** `genealogy_db`
- **User:** `postgres`
- **Password:** `@0BusiaKenya`

✅ Database Creation:

```
CREATE DATABASE genealogy_db;
```

🔐 5. Django Superuser

Created using:

```
python manage.py createsuperuser
```

✅ Credentials:

- **Username / Email:** `sales@walsoftcomputers.com`
- **Role:** Full Superuser Access

🧠 6. Git & Ignore Rules

📄 Custom `.gitignore` includes:

```
# Secrets & environments
.env
```

```
genealogy_venv/

# Compiled files
__pycache__/
*.py[cod]

# IDEs
.vscode/
.idea/

# Static & media (optional)
static/
media/

# Migrations (if regenerating often)
*/migrations/
```

🛠️ 7. Django Settings Design

- Settings split by environment: `base.py`, `dev.py`, `prod.py`
- Environment switcher logic via `DJANGO_ENV` in `settings/__init__.py`

✅ Example logic:

```
env_mode = os.environ.get("DJANGO_ENV", "dev")
```

📚 8. Recommended Practices Being Followed

Practice	Implemented?	Notes
UUID primary keys	✅	On all core models (`Person`, `Marriage`, `Event`)
JSONFields for aliases/metadata	✅	`aliases`, `cultural_notes` in `Person`
Modular apps	✅	`people/`, `events/`, `relationships/`, etc.
AI-ready narrative design	✅	`narratives/` structured for `jinja2` and `llama-cpp`
Versioning with history	✅	`django-simple-history` installed and used

📦 9. Local AI Package Notes

Package	Status	Notes
`llama-cpp-python`	✅ Installed	For local story generation
`jinja2`	✅ Installed	Prompt templating
`fuzzywuzzy`	✅ Installed	For deduplication

Package	Status	Notes
`django-simple-history`	✅ Installed	For audit/versioning
`python-dotenv`	✅ Installed	For `.env` loading in dev

📓 10. Notes for Future Deployers

- Always regenerate `SECRET_KEY` for production
- Switch `DEBUG=False` in `prod.py`
- Configure media, static, and NGINX properly
- Do not commit `.env`, photos, or raw JSON config files unless explicitly versioned

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Document prepared to ensure full traceability of all system and environmental choices made during MVP phase of the WalsoftAI-Genealogy project.

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