**High-Level Technical Requirement (HL-TR) – Patient Enrollment Application**

**Frontend**:

* HTML5 + JavaScript (responsive, mobile-friendly UI).

**Backend**:

* Python (FastAPI or Flask) for APIs handling patient enrollment, verification, and communication.

**Database**:

* PostgreSQL for patient records, enrollment data, and application tracking.

**Storage**:

* Object store for patient documents (ID proofs, medical records, consent forms).

**Security**:

* HTTPS, Content Security Policy (CSP), rate limiting, input validation.
* Encryption of sensitive patient data at rest and in transit.
* Role-based access (patient, healthcare provider, admin).
* HIPAA/GDPR/CCPA compliance.

**Deployment**:

* Dev, Staging, Prod environments with CI/CD pipeline for automated deployment and testing.