

# Non-Functional Requirements (NFR) Template

Category	Details
Performance	<ol style="list-style-type: none"><li>1. App startup: cold <math>\leq 2s</math>; warm <math>\leq 500ms</math>.</li><li>2. Payment flow P95 <math>\leq 1.5s</math>.</li><li>3. API latency P95 <math>\leq 300ms</math>, P99 <math>\leq 1s</math>.</li><li>4. Local wallet ops P95 <math>\leq 100ms</math>.</li><li>5. Throughput 200 RPS sustained.</li></ol>
Scalability	<ol style="list-style-type: none"><li>1. Up to 100,000 concurrent active users.</li><li>2. Horizontal autoscaling for services.</li><li>3. Storage scales to 100M wallet records.</li><li>4. Queues scale dynamically for payments.</li></ol>
Availability	<ol style="list-style-type: none"><li>1. Uptime <math>\geq 99.95\%</math> monthly.</li><li>2. Critical payments <math>\geq 99.9\%</math>.</li><li>3. DR RTO <math>\leq 1h</math>, RPO <math>\leq 15m</math>.</li><li>4. Graceful degradation keeps core payments running.</li></ol>
Security	<ol style="list-style-type: none"><li>1. MFA with biometrics + PIN.</li><li>2. RBAC for admin access.</li><li>3. TLS 1.2+ in transit, AES-256 at rest.</li><li>4. Keys via KMS/HSM with rotation.</li><li>5. Audit logs retained <math>\geq 1</math> year.</li><li>6. Fraud detection rules for suspicious activity.</li></ol>
Usability & UX Quality	<ol style="list-style-type: none"><li>1. Primary payment flow <math>\leq 3</math> steps.</li><li>2. Success/failure feedback <math>\leq 1s</math>.</li><li>3. First-time setup <math>\leq 5</math> minutes.</li><li>4. WCAG 2.1 AA compliance.</li><li>5. Localization for currency, date, time, languages.</li></ol>
Other Requirements	<ol style="list-style-type: none"><li>1. Push notifications P95 <math>\leq 5s</math>.</li><li>2. Telemetry overhead <math>&lt;1\%</math>.</li><li>3. PCI-DSS compliance for card transactions.</li><li>4. Audit/compliance reports on demand.</li></ol>