

Job Description - Backend Developer

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Job Title:	Backend Developer
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Job Purpose

The Backend Developer is responsible for designing, developing, and maintaining secure, reliable, and scalable backend services supporting Happitech's digital health products — including the Heart Rhythm SDK, Medical Demo App, and clinical integrations. This role ensures data integrity, performance, and compliance with medical device software standards and information-security requirements.

Duties and Responsibilities

Happitech's Backend Developer Responsibilities are stated in all SOPs and include, but are not limited to:

1. Software Development & Architecture

- Design, implement, and maintain backend APIs, databases, and microservices for Happitech's mobile and web solutions.
- Ensure software is developed in accordance with IEC 62304 life-cycle processes and internal SOP QP-730 (Design & Development).
- Participate in design reviews, code reviews, and risk analyses to maintain software safety and performance.
- Support integration of SDKs, hospital systems, and third-party platforms (FHIR/HL7, REST APIs, secure authentication).

2. Data Management & Security

- Implement robust data handling aligned with ISO 27001 and IEC 81001-5-1 security controls.
- Manage database structures, encryption, and secure data transfer between client apps and backend services.
- Contribute to cybersecurity risk assessments and incident response processes (QP-ISMS / QP-14971).

3. Testing & Validation

- Develop and maintain automated tests, CI/CD pipelines, and performance monitoring tools.
- Support software verification and validation documentation as required by IEC 62304 and MDR.
- Contribute to defect tracking, CAPA, and change control (QP-739, QP-850).

4. Collaboration & Documentation

- Work closely with frontend, mobile, and algorithm teams to ensure seamless data flow and API consistency.
- Document software requirements, architecture, and changes in the Design History File (DHF).
- Participate in technical reviews, audits, and regulatory submissions (FDA 510(k), MDR Annex II / III).

5. Continuous Improvement

- Optimize backend performance, reliability, and scalability for production systems.
- Evaluate and implement new tools or frameworks to improve development efficiency.
- Contribute to internal knowledge-base and best-practice documentation.

Qualifications

Education & Experience

- Bachelor's or Master's degree in Computer Science, Software Engineering, or related field.
- 3–6 years of backend development experience .
- Experience building APIs, cloud services, or distributed systems (preferably in AWS / GCP / Azure).
- Previous work on medical, regulated, or high-security software is a strong plus.

Skills & Competencies

Technical Skills

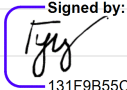
- Familiarity with **CI/CD pipelines**.
- Understanding of **secure coding, authentication / authorization (OAuth 2.0, JWT), and encryption**.
- Experience with **logging, monitoring, and incident management** tools.

Soft Skills & Competencies

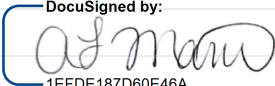
- Detail-oriented with strong documentation discipline.
- Excellent communication and collaboration across cross-functional teams.
- Ability to translate regulatory and security requirements into practical engineering solutions.
- Strong analytical and problem-solving mindset.

Signatures

Person

Name:	Mikhail Guschin
Competences & Experience:	Bachelor of Science
Date:	01.06.2025
Signature:	 Signed by: 131F9B55C11341A...

Approved by

Name:	Amanda Marinov
Function:	MR
Date:	01.06.2025
Signature:	 DocuSigned by: 1EFDE187D60E46A...