

EXMDirect — System Analysis Portfolio

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Project Summary

EXMDirect is a digital testing platform for schools. It supports automated test generation, cheating protection, QR-b

Analyst Role & Activities

- Requirement gathering from teachers and admin
- Business process modeling (BPMN)
- Data modeling (ER)
- API design and OpenAPI documentation
- Anti-cheat and hint-system integration
- AI-assisted prototyping and endpoint validation

System Components

- User roles: Admin, Teacher, Student
- AntiCheat logging system
- Telegram bot integration
- Test generator with up to 30 variants
- Automatic result calculation and feedback

Artifacts & Deliverables

- Use Case, BPMN, and ER diagrams (see /docs/diagrams/)
- openapi.yaml — REST API specification
- GPT collaboration log (anti-cheat, API, hints) - Portfolio document in Markdown and Word

Technologies

- Java 17+, Spring Boot, PostgreSQL
- REST API with JWT auth
- React + AntiCheat frontend
- Telegram Bot API
- Markdown, YAML, PDF for documentation

Repositories

- Backend: github.com/BaldruevSergei/Exmdirect_back --
- Frontend: github.com/BaldruevSergei/Testing_site_Front

Contact

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