

## **EXMDirect — System Analysis Portfolio**

Author: Baldruev Sergei

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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](https://github.com/BaldruevSergei/Exmdirect_back) - --
- Frontend: [github.com/BaldruevSergei/Testing\\_site\\_Front](https://github.com/BaldruevSergei/Testing_site_Front)

### **Contact**

Baldruev Sergei

Telegram: @Baldruev\_Sergei

Email: [baldruev.sergey@email.com](mailto:baldruev.sergey@email.com)