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Projects

Ranking Simulation System (Java)
- Objective: Design and implement a Java-based ranking system to simulate competitive performance evaluation and dynamic score-based ranking.
- Description: Developed a Java application that simulates a ranking system based on player performance metrics. The system processes input data, calculates scores according to predefined rules, and dynamically updates rankings as results change. Object-oriented principles such as encapsulation and modular class design were applied to keep the logic organized and extendable. The project focuses on conditional logic, data handling, and algorithmic thinking rather than user interface complexity.
- Summary: This project improved understanding of Java fundamentals, object-oriented design, and logical problem-solving through a competitive ranking simulation.

Secure-File Encryption System (Python)
- Objective: Design and implement a Python application to securely encrypt and decrypt files using password-based access control.
- Description: Developed a Python application for file encryption and decryption using the AES algorithm. Encryption keys are derived from user-provided passwords through a password-based key derivation process, ensuring that encrypted files cannot be accessed without the correct credentials. Password data is protected using secure hashing with salting, and files are processed using stream-based file handling to support different file sizes. The project was implemented and tested in VS Code with a modular code structure for better readability and maintainability.
- Summary: This project strengthened practical understanding of applied cryptography, secure file handling, and Python-based application development.

Airline Reservation System (Django, Python)
- **Objective:** Design and implement a web-based airline reservation system to practice backend development, database modeling, and user authentication.
- **Description:** Developed a web application using Django that supports flight listing and booking functionality. Implemented user authentication features including registration, login, and logout to ensure secure access. Designed relational database models for airports, flights, passengers, and bookings, and used unique booking codes to allow users to retrieve their reservations securely. The application follows Django's MVC (MTV) architecture and includes clean URL routing and template-based views for scalability and maintainability.
- **Summary:** This project improved understanding of backend web development, relational databases, and secure user-based access control using Django.

Technical Skills

- **Programming Languages**: Java, Python, HTML, CSS, JavaScrypt
- **Concepts:** Data Structures & Algorithms, Object-Oriented Programming, Database Systems (Oracle APEX), Computer Architecture
- **Tools/Platforms:**
Visual Studio Code – used as the primary editor for Python projects, including development, debugging, and basic project organization.
IntelliJ IDEA – used as primary IDE for Java projects, debugging, and refactoring code efficiently.
Udemy – completed structured Java and algorithm courses, applying learned concepts in practice projects.
- **Mathematics:** Calculus, Linear Algebra, Probability Theory, Number Theory

Education

SDU University, Kaskelen
Bachelor of Computer Science (4th year, expected 2026)
- Faculty of Engineering and Natural Sciences
- Relevant Coursework: Fundamentals of Programming, Advanced Algorithms, Database Management Systems, Mathematics for Computer Science
- Additional Learning: Java 17 Masterclass (Udemy, Tim Buchalka), Java Data Structures & Algorithms (Udemy, Scott Barrett), The Complete 2024 Web Development Bootcamp (Udemy, Dr. Angela Yu)

Achievements

- Graduated high school with honors.
- Scored 121/140 on Unified National Testing (UNT), winning a state scholarship to SDU.
- Certificate in Turkish Language (A1 level).
- Scientific Project: Viscosity of Oil Products – Designed and built a computer-controlled viscosity measurement device, conducted oil quality experiments, and won 3rd place at the National Scientific Project Competition in Physics (Shymkent, 2022).

Languages

Kazakh (Native), Russian (Fluent), English (Professional), Turkish (Basic)