How to run — University-ERP (quick guide)

Prerequisites

- Java: OpenJDK / Oracle JDK 21
- MySQL / MariaDB server (10.4+ recommended)
- A terminal with `mysql` client installed (for loading SQL files)
- Project root: the repository root containing `src/` and `lib/`

Database setup (development)

1. Start MySQL/MariaDB server.
2. The project includes a single `seed_data.sql` that creates both the authentication and ERP databases, all tables, and inserts sample data. From the project root run this to create everything in one step:

```
# Run the single seed script (it creates DBs, tables, and inserts sample data)
mysql -u root -p < src/edu/univ/erp/data/seed_data.sql
```

3. After the script runs you will have both `auth_db` and `erp_db` populated with sample accounts (including at least two students).

DB connection settings (two examples)

- Development (local, insecure but convenient):

```
jdbc:mysql://localhost:3306/erp_db?allowPublicKeyRetrieval=true&useSSL=false&serverTimezone=UTC&allowMultiQueries=true
user=root
password=erp
```

- Production (recommended secure settings):

```
jdbc:mysql://db-host:3306/erp_db?useSSL=true&serverTimezone=UTC
user=erp_app_user
password=<secure-password>
Note: configure TLS or `serverRsaPublicKeyFile` for secure authentication.
```

Where to put connection info

- The app reads DB properties from `resources/erp_db.properties` and `resources/auth_db.properties` (or via environment variable `DB_PASS`).
- For local testing you can export the password into the environment so local runs don't store secrets in files:

```
export DB_PASS=erp
```

Compile & run (simple, from project root)

1. Compile (all source files):

```
mkdir -p out
javac -cp "lib/*:src" -d out $(find src -name "*.java")
```

2. Run the login UI (example):

```
export DB_PASS=erp
java -cp "out:lib/*" edu.univ.erp.ui.auth.loginPage
```

Notes

- If you run into MariaDB authentication issues locally, use the development JDBC parameter `allowPublicKeyRetrieval=true&useSSL=false` (only for dev). For production, use TLS and a dedicated DB user.
- If you prefer to run from an IDE (IntelliJ/VSCode), import the project, add `lib/*.jar` to the classpath, set the `DB_PASS` environment variable to `erp`, and run `edu.univ.erp.ui.auth.loginPage`.

Default test accounts (password for each account is `erp`)

- Admin: username `admin` | password: `erp`
- Instructor: username `instructor1` | password: `erp`
- Student 1: username `student1` | password: `erp`
- Student 2: username `student2` | password: `erp`

Quick acceptance test (login)

1. Start app and open the login screen.
2. Use one of the above credentials to sign in.
3. Verify role-specific dashboard loads (admin / instructor / student).

Where to find seed scripts and schema

- `src/edu/univ/erp/data/seed_data.sql` (this single file creates databases, tables and inserts sample data)

- Admin: username `admin` | password: `erp`
- Instructor: username `instructor1` | password: `erp`
- Student 1: username `student1` | password: `erp`
- Student 2: username `student2` | password: `erp`