Final Projects

Along the course, we went through the following:

- Phases of SDLC
- Collaborate
- Source control
- Branching strategies
- Building Pipelines
- Continuous Integration
- Continuous Delivery
- Security
- Docker
- Kubernetes
- Public Cloud
- Infrastructure as code
- Database changes

The final project is to build a complete automated software delivery process with pipelines using at least 7 topics above.

- The pipeline starts with a git repository
- The solution is T-shaped or E-shaped – where we have a nice working horizontal + at least one deep dive vertical
- Where possible, the solution is as code
- Documentation is part of the solution
- Mandatory components - Continuous Integration, Deploy to Kubernetes
- Use any tool you like

Example project steps:

1) Open Issue -> Create feature branch -> Unit Test -> Linter -> Style Check -> SAST -> Build Docker image -> Scan for vulnerabilities -> Test SQL deltas -> Push to central repository -> Rolling deploy to Kubernetes
   Deep dive topics:
   a. Detailed explanation in SAST

Additional information:

- Projects have to be submitted before 8 Jan 2024 23:59
- Book presentation time slot
- The **format** is a live demo - no formal presentation is needed
- **Exam format:**
  - Start with the high-level solution design
  - Move on to the low-level solution design
  - Move on to the deep dive
  - Share possible future improvements
- Mind the **time** allocated to you (12-15 minutes per person)
- Please use a **preset environment** so we don't have to wait for the pipeline
- Leave a couple of minutes available for **questions**