

Lab 2 - Design a CI pipeline

Goal

Research different technologies that could be used to build a CI pipeline, suitable for building and testing the system outlined further below.

Be prepared to present you findings to the rest of the group, including:

- Why you have chosen that particular product
- How you would configure the product to meet the needs of this project
- Were there any alternatives you considered, and why were they not your first choice?
- Would you build a single pipeline, or multiple pipelines?
- Could you re-use this tool, to enable developers within the project team to test any code changes they make, before committing their changes into the main branch?

Outline of system being built

The system to be built is an online quiz application, comprising the following elements:

- Single-page application (SPA) web application (React) for quiz contestants
- Microsoft ASP.NET Core MVC server-side web application for quiz authors and quiz host
- NodeJS-based API backend for quiz management and hosting
- SQL-based database (MySQL) for storing quizzes, questions, contestant answers, scores, etc.
- Android-based application for quiz contestants
- Apple iOS-based application for quiz contestants