

# 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 your 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