

# BIT Platform

## CodeLingo Automated Code Review

Utilising CodeLingo automated code review software, BIT Platform web services aims to provide lectures with the tools needed to review multiple instances of student code, be it checking desired code configurations for assignment requirements or reinforcing industry best practices.

Using already present services from the BIT Platform such as GitLab and applying the power of CodeLingo we can pull down student repositories and run reviews with Lingo files, written in the new CodeLingo query language or CLQL for short. To make the job of generating these Lingo files easier, a front-end user interface was implemented with a culmination of webs largest languages HTML, JavaScript, CSS and PHP.



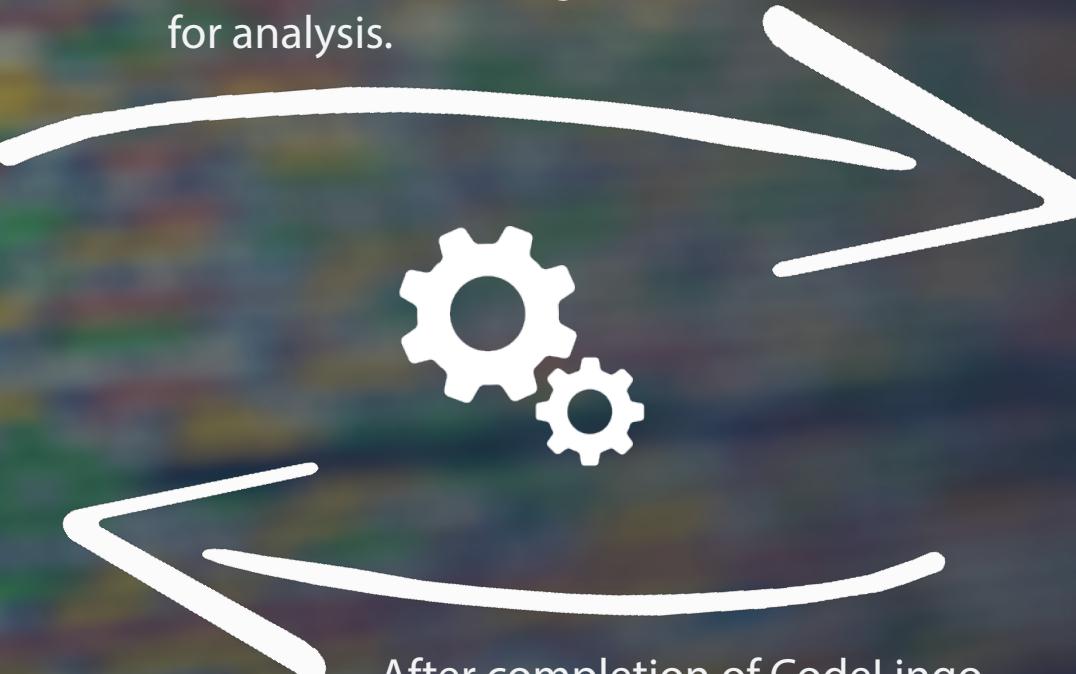
BIT Platform Web service will be the middleman between GitLab repositories and the CodeLingo on-prem server. This suite provides the lecturer tools to generate course relevant lingo files containing CodeLingo Query Language (CLQL). These lingo files provide CodeLingo the instructions in which to review the code.



## GitLab

Centrally located, GitLab allows the storage of student code within course specific repositories. Here BIT Platform Web services can pull down repos to perform code reviews.

After the Web service has pulled down a repository and generated or supplied a lingo file specifying what to match, a review is initiated sending data to the CodeLingo server for analysis.



## CODE LINGO

Having been supplied a repository, CodeLingo utilises the CLQL stored within the lingo file to match the specified arguments.

### Student team

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