Internship Proposition

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# MIPS

<https://www.youtube.com/watch?v=tPpSNeDwPkk>

# Situation

* CyberLab is a web application that is used by doctors/medical staff to
	+ Order tests at a clinical laboratory (think: blood tests, urine samples…)
	+ Consult the results of those tests
* The application has interfaces with a variety of external applications like
	+ Hospital information systems to communicate patient information.
	+ Laboratory information systems
	+ External order placers
	+ …
* To integrate with all these external applications and their wide range of protocols and dialects, CyberLab has its own Java-based Message Translation framework. (JMT framework)
* The framework uses JMT configuration files. These are a mixture of XML and Java code snippets. This has proven to be a flexible way to adapt to changing requirements.

# Challenge

* JMT files are compiled and executed inside the CyberLab application. There is currently no alternative way to test JMT configurations files than deploying them into CyberLab. This makes editing JMT files time consuming.
* The goal of this internship would be to provide tooling for editing, compiling, and testing JMT configuration files.
	+ Command line tools to compile and test JMT configuration files should be sufficient
	+ The ultimate dream is to have a full blown JMT editor with code completion and in-editor test capabilities.
* This will have an immediate positive impact on the development team because this will
	+ save time (faster time to market)
	+ allow us to automate testing of JMT configurations (higher quality)

# Project

* Language
The target language for compiled JMT files is Java (11)
* Communication language
Dutch/English/French
* Duration
4-6 weeks
* Location
Ghent

# Divers

Currently there is no tooling for JMT files. This is a greenfield project, so there is a lot of room for own ideas, design decisions…