Introduction

E-Compile Lab is a tool that’s helps software developers/Architectures to identifying better and suitable technologies for their end products. Developers facing difficulties identifying better solution as long as they have to download, install and configure each and every similar technologies/products. Also some software components / libraries are highly expensive, so it’s making almost impossible to research on those software components and libraries. As a result, individual and freelance developers’ ends up using pirated software components and hard /useless solutions.

Aim

* Implement simple snippet manager to run and store code segments.
* Implement and use web crawler to search similar solutions that user trying to evaluate.
* Implement web service to communicate client for do compiling and execution code segments.
* Implement sever component to support several programing language
* Implement software library cloud which enables to users to use software libraries in snippet manager.

Objectives

* Solutions to eliminate difficulties of installing and configuring each technologies or software components by introducing pre-defined / pre-configured platforms
* Learn about web crawling techniques and implement web crawler to search similar solutions for given code snippets.
* Learn about NOSQL databases to store document base objects.
* To provide supports to developer to try out more available similar solutions to compare and apply the most suitable solution
* Learn about Cloud computing and how to provide platform as a service. (Paas)

Background

## Compared to Existing applications

* Online compiler concept is a newly introduced concept. But it’s still not advanced to facilitate large scale projects and those only compatible with static core platforms like java, ruby, python etc... In this proposed system enables to research and develop on those core platforms with other 3rd party libraries.
* Also proposed systems provide details about similar products, so users can research on more products even without knowing a product.
* Code assistance also provide via client tool for 3rd party libraries.
* In this proposed system , software cloud concept used to provide software libraries for developers on research purposes by simply adding them to workspace.