

### ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಬೆಳಗಾವಿ

VISVESVARAYA TECHNOLOGICAL UNIVERSITY - BELAGAVI

#### REVA INSTITUTE OF TECHNOLOGY AND MANAGEMENT

#### DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING



# 8<sup>th</sup> Semester Project Proposal Presentation on

#### TITLE OF THE PROJECT:

#### <<TITLE OF THE PROJECT>>

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## Introduction

In a competitive environment, it is often required to find the program that runs most efficiently among several programs. Currently few to none applications are available that compares programs and analyzes their efficiencies. This system will not only analyze the code, but also have a code repository that stores the most efficient functions as and when encountered.

## **Abstract**

A Performance evaluator engine will analyze the code and give the result in a visual representation. We create a central repository which stores the best functions which can be used by other users and also for further comparisons and optimization.

# **Literature Survey**

# Why do we need it?

The major advantages of such a system are:

- reusability of code
- multi language compatibility
- compare code
  - assessments
  - ranking
- visual results for the function
- retrieval of functions, mapping with tags
- testing using restrictions/ constraints on the input

# Scope for future work

- handling the library requirements for the function
- tag based retrieval (porting / eval function)
- visual aspects for code development ( flowcharts, class diagram)
- optimization
- analyser improvements to identify syntax of code

# **Hw/Sw Requirement**

#### Software requirements:

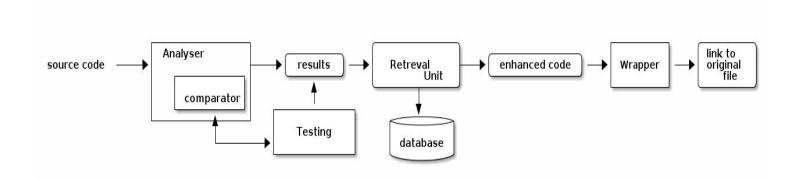
- Operating System :
  - server: Linux (ubuntu 16.04)
  - database: Linux (ubuntu 16.04) / windows
- Tools: Python, Mongodb, CherryPy, Docker

#### Hardware requirements ( developed on )

- Processor : intel core i5
- Memory: 4GB Ram or higher
- Hard disk space : 2GB or more

Note: system requirements maybe subjected to change.

# Methodology/ Technique to be applied



# **Conclusions**

- visual aid for development and analysis
- compare code of different languages
- reduced plagiarism
- credit for work
- frequent enhancements

## References

Enrique FLores ,Alberto Barron-Cedeno Towards the Detection of Cross-Language Source Code Reuse(2011)

Arwin, C., Tahaghoghi, S.M.M.: Plagiarism Detection across Programming Languages

D. Binkley "Source Code Analysis: A Road Map" IEEE Future of Software Engineering (FOSE'07)2007.