Concordia University
Department of Computer Science and Software Engineering

Comparative Study of Programming Languages
COMP 6411 --- Winter 2014

Individual assignment #4

Deadline:	Wednesday March 26th, 2014
Evaluation:	10% of final mark
Late submission:	not accepted

Problem statement

Select and describe two different programming languages according to the following criteria, each criteria being the topic of a separate section in your document. At the end of your document, give the list of references that you used to find the required information. Referencing is expected to be used throughout the text. Failure to properly use references will result in major grade deductions. At least five of your references must be high-quality references that have either a Digital Object Identifier (DOI) or International Standard Book Number (ISBN).

History: Describe the history of development of the language and its significant variants, including dates and the names and affiliations of the developers involved. Describe what languages have influenced its development, and how it has influenced the development of other languages.

Paradigm/Evaluation: Describe what programming paradigms this language is using. If multiple paradigms are used, describe how each paradigm is used. Describe in detail what typing strategy the language is using, e.g.: strong vs weak, static vs dynamic typing, etc. Describe in detail the compilation/interpretation and evaluation process used for the evaluation of the language.

Strengths/Weaknesses and Application Areas: Describe what are the strengths and weaknesses of the language. Describe how these strengths/weaknesses make it a good/bad candidate for the development of different kinds of applications.

Tools: Describe the different available compilers/IDEs for this language. List on which operating system version these are available. These may include commercial, free or open-source solutions. Give the web address of each compiler/IDE available to download from the internet. Describe precisely what compiler/IDE, database connector, GUI library, or any other tool that are to be used in your team's comparative study for this language.

Relationship with term paper

In the term paper, your team will have to describe and compare two different programming languages per team member, e.g. teams of 3 will compare 6 languages. It is thus advised that you discuss with your team mates the languages to be described and compared by your team and that you make your choice for this assignment accordingly. For example, it would be ill-advised to choose a language that is not to be included in the team-work comparative study, or that two different team mates choose the same languages in this individual assignment.

Assignment submission requirements and procedure

You have to submit your assignment before midnight on the due date using the ENCS Electronic Assignment Submission system under the category "*programming assignment 4*". Late assignments are not accepted. The file submitted must be a **.zip** file containing a pdf document containing the above-mentioned information

Evaluation Criteria

History	10 pts
Paradigm/Evaluation	10 pts
Strengths/Weaknesses and Application Areas	10 pts
Tools	10 pts
References	10 pts
Total	**50 pts**