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Applied Research Plan

Class: S3-CB02

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Topic Of Research

Performance optimization when working with Object Oriented Development.

Joan Krastanov will be using a number of different ICT research methods and comparing his findings with the available literature to answer the questions behind this research paper. These answers are aimed to help readers with optimizing their back-end applications to ultimately produce a better performing higher quality product.

Main Question

Which is the best performing back-end for Object oriented programming?

Sub Questions

1. What is an application back-end?
2. Why is performance optimization important in software engineering?
3. What types of programming languages are there?
4. What is the fastest programming language available?
5. What makes the best performing language better than the competition?
6. Does the popularity of a language relate to its performance?

DOT Methods of research

The best methods which can be used to analyze and answer the below-mentioned questions are:

Sub Question 1:

Document analysis and Literature study – looking at the analytical literature for the definition of an application back-end can give us the definitive answer so that later we can use term for the rest of the research paper knowing exactly what it means.

Sub Question 2:

Best good and bad practices and Document analysis – It is expected that writing code in the most efficient way is regarded as good practice, but we want to be sure just how much of a difference it makes on the performance of the application. The document analysis will help us with getting some more information about why the optimization of an application is so important.

Sub Question 3:

Available product analysis is the best way to figure out the types of programing languages that are out there since we can review what has already been developed by other people in the industry.

Sub Question 4:

Available product analysis, benchmark testing and A/B testing are all great ways of seeing what testing has already been done from other experienced people and comparing the programing languages side by side ourselves to get a conclusive answer.

Sub Question 5:

Document analysis and benchmark test results will show us what actually makes the best programing language better than its competition.

Sub Question 6:

Benchmark test results combined with available literature study will help us compare the best performing language to its popularity and usage in today's world so that we can see if there is a correlation between the two parameters.