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**Topic:** Software Engineering – Project Idea Abstract

## **Online Metric Report Generator**

The project is based on determining the complexity for a particular software. In software programming, as the design of software is realized, the number of elements and their interconnections gradually emerge to be huge, which becomes too difficult to understand at once. Software design complexity is difficult to assess without using complexity metrics and measures. The tool basically determines the metric report for any software.

### **Functionalities:**

#### **1. User module:**

- Registration: To use the features of the tool users have to register.
- Login: With the help of correct username and password users will login.
- View previous results: With the help of this functionality user can see his previous project complexity reports and save it in his system.

#### **2. Code inspection:**

- The source code hence provided by the user, for a module will be used to determine the complexity of that particular module.

#### **3. Report Generation:**

- The report for a particular software module will be generated.
- The generated report will have attributes such as vocabulary, size, program volume, difficulty, efforts, errors, testing time, maintenance index, etc.
- Cyclomatic complexity of a program can be evaluated as well.

#### **4. Save as facility:**

- This will help the user to save their report to the server.

### **Requirements/Languages used:**

- Javascript, PHP, MySQL
- Also a system to create server.

**References:**

- [https://www.tutorialspoint.com/software\\_engineering/software\\_design\\_complexity.htm](https://www.tutorialspoint.com/software_engineering/software_design_complexity.htm)
- [https://en.wikipedia.org/wiki/Halstead\\_complexity\\_measures](https://en.wikipedia.org/wiki/Halstead_complexity_measures)
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