

**Indian Institute of Technology, Kharagpur**  
**Department of Computer Science and Engineering**  
*Software Engineering (CS 29206), Spring 2022-23*

**Project Assignment 2 – Testing Plan and Testing Report**

**Grading guidelines:**

1. *Zero marks for a submission if it does not pass the plagiarism test.*
2. *Break-up of Credits will be as follows:*
  - (a) *Correctness: 30%*
  - (b) *Unambiguousness / consistency: 20%*
  - (c) *Completeness: 30%*
  - (d) *Verifiable / Ranked for importance: 20%*

***Total marks: 50***

You are required to submit the documents and complete the implementation for the single project that has been assigned to your team. However, you should browse and brood over the entire problem set for your practice. Practice is especially important to learning the software engineering skills pertaining to requirements specification, design, testing, etc. Only reading the theory cannot make you a good software developer.

While doing the problem assigned to you kindly note the following:

- The assignments are to be done in groups as assigned. Partners in a group are expected to contribute equally and hence will get equal credit unless there is documented evidence for unequal contribution.
- All assignments in this set should be coded in C++ or Java or Python on Linux or Windows or MacOS platform. A combination of languages (and specific subsidiary languages for specific sub-systems like Javascript for webpage, SQL for database) may also be used. You should choose the language/s and platform based on the system you are implementing and justify the choice.
- The last quiz will be based on the project and some presentation along with question answering will be used for grading.
- Copying of assignments is considered serious offense. Both the person copying and the one supplying the copied material will be penalized.

**Tips for solution:**

- If you cannot solve a problem, solve a simpler problem (by omitting some of the functionalities, details, etc.).
- Now, add some of the functionalities you had omitted and see if you can solve this new problem. It may not always be possible to incrementally incorporate new functionalities into the simpler solution without any alterations to the solution already worked out. You might even have to rework (or drastically modify) your simpler solution to accommodate a new functionality.
- Surely, it is more laborious to carry out incremental solutions than solving the full problem in one shot. But, it often works, and gives you new insights into the problem.

### **Tasks for Project Assignment 2:**

**Task 1:** You need to create a testing plan for the software designed and implemented earlier. You can refer to the IEEE-829 standard for best practises. You need to submit the test plan document.

**Task 2:** Implement the test plan (either automated or manual). Create the test cases. Submit the test report of executing the test cases.

### **Submission:**

Submit the test plan document, the testing report with test cases and pass / fail. Additionally, you can submit the testing code.