

SPL-1 Project Report 2020

**Computerized Adaptive Test System**

SE 305: Software Project Lab I

Submitted by

Name: **Md. Khairul Alam**

Bsse Roll no: 1118

Session: 2018-19

Supervised by

Dr. Zerina Begum

Designation: Professor

Institute of Information Technology

University Of Dhaka

**Table of Contents**

1. Introduction...........................................................................................3

1.1. BackgroundStudy...............................................................................3

1.2. Challenges..........................................................................................4

2. Project Overview..................................................................................5

3. User Manual..........................................................................................6

4. Conclusion ...........................................................................................9

5. Appendix..............................................................................................9

References ...............................................................................................9

**1. Introduction**

This project is about special kind of exam test system which is called computerized adaptive test system. This is one kind of computer administered test which adapts to the candidate's ability in real-time by selecting different questions from the bank in order to provide a more accurate measure of their ability level on a common scale. Basically the students will get questions according to their ability where there will be 50% chance of giving correct answer. I create questions for students of class 9-10 and get their ability based on two algorithm (**Rasch** algorithm and **Monte Carlo** algorithm).Computer will generate questions by these algorithms where next question will arrive according to the response of previous question.

The main