**CSCI 326 (Software Engineering) – Class Project**

In this project, you and your partners will work to develop a program called “Elementary Fraction Worksheet Generator” to help elementary school students’ learning process. The detail of the software is discussed below.  This project can be worked on outside of class but you ***must***work with your partners! The project are not individual efforts, both you and your partners must work together on these project.

Submission:

* Drop your .zip file which includes all project files through Blackboard.
* Turn in your hardcopy of the report at the beginning of the class

Grading scale: Program: 70 points

Report & presentation: 30 points

* Report format will be given separately later
* You must present and demonstrate your software in front of audience.
* You must prepare ppt slides for your presentation.

 Submission Date:  4/28/2016 by 6:30 P.M.

**Important Announcement:**

1. Your file name should be your <team name>.zip. (Example: Fusion.zip)
2. Your program must include your name, date produced, and purpose of program on the top of your codes.
3. You should have comments on each of class, methods, and other codes to make program understandable.
4. Failure to do 1, 2, and 3 will lost at least 20 points.
5. If your program has compilation errors, you will get 0 point in this project
6. Since this is the last project of the semester, this should be done in a team. An instructor will not help any of the team while they are writing codes. However, each team can discuss with the instructor any algorithm you developed.
7. Each team member must contribute the coding the program to produce complete software.
8. Team evaluation (for each team member) will be done at the end of the semester.
9. If you do not present your work, you will get 0 points in this project.

Project Overview

This software will help elementary school students to study and practice Fraction.  Elementary school teachers need to develop the worksheet for their students to practice the fractions. Some of the students don’t understand the concept of fraction at all. So, they need the worksheet with some images to understand easily and efficiently. Some students already understand the concepts of fractions. So they can skip that procedure and they can directly practice the calculation of the fractions. The high level problems for students who know the fraction well need word problems to advance their understanding of fraction.

Following is the example Website for the fraction:

<http://www.math4childrenplus.com/grades/4th-grade/worksheets/>

<http://www.math4childrenplus.com/fractions/>

<http://www.math4childrenplus.com/fractions-games/>

<http://www.fractions4kids.com/games/>

<http://www.fractions4kids.com/fraction-quizzes/>

<http://www.fractions4kids.com/worksheets/>

The client requests following features as minimum:

* Tutorial
* Practice test worksheet and answer sheet
* Different level worksheet and answer sheet (three different level).
* The worksheet problems are randomly generated.
* Beginner level worksheet needs some images for learners to improve understanding of fraction.