## Project One Assignment Math Quiz Generator & Solver

Dr. 何明昕, He Mingxin, Max

c.max @ yeah.net

Email Subject: SE-yourlD-Name: TOPIC

Download c.program @ yeah.net

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## **Software Engineering**

You are asked to finish the following 3 (at least 2) programs (**Task 3 is optional**) in any programming languages:

**Task 1.** A Math Quiz Generator. It should generate primary school level Math Quiz(questions) according to the requirement specified in a input text file / json file / XML file / property file, and output the quiz (problems) generated in a text file. The problems should cover + - \* / operations in integers, fractions and fix-point numbers with given ranges. A fraction could be represented as 3 | 7 or 23\_1 | 11. Quizs are something like:

- [3] 171 / 9 =
  [8] 123\_3|5 19\_4|7 =
  [15] 3.14159 \* 3\_1|2 \* 2 =
  [21] 3|8 \* 5\_2|7 + 2\_1|2 / 0.618 =
- (Tips: You may design a special ID to identify problem type & problem itself for every problem.)

**Task 2.** A **Math Quiz Solver.** It read the problems generated by **Task 1** and output a reference answer text file that contains problems & answers.

Task 3 (Optional). A Math Answer Checker. It read an exam paper text file including problems with answers given by students, check all answers one by one, add a CORRECT or WRONG mark for every problem, and output a text file based on the input paper with checking marks (CORRECT or WRONG).

Please send your work with specification & running results (ziped to one file with your name & ID) to **c.max@yeah.net** before **April 11**.

## Next Up

## Specification for Reactive Systems Design, Testing Sample Case Studies (\*)

Questions?