Course name: Software Development in Practice

Course outlines:

- Software development Life-cycle (SDLC), CMMI
- Create requirement, solution, detailed design for software product
- Perform code review, create unit test case, write unit test code, perform unit test
- Perform cause analysis for improvement

Training Outcomes:

After finished this course, graduate will gain experiences of a programmer. The trainee is reminded and gained the expertise of software process such as Waterfall, Spiral Models; process improvement model such as CMMI.

Duration: 2 training days (4h/days) + 2 days for home work

Topics:

No.	Day	Topic	Topic objectives	Duration (h)
2	1	Software development Life-cycle	- Understand stages, output of each stage in SDLC - Comprehensive roles and responsibilities in software development	1:00
3	1	Overview CMMI – How to apply into the software development	Can understand and apply some main Process Areas from CMMI: - REQM - Requirements Management - CM - Configuration Management - VER – Verification - CAR - Causal Analysis and Resolution	0:30
4	1	Software project introduction	- Can verify software documents by checklist - Understand coding standard and can apply tools to check code. - Can define project task list	1:00
5	1	Plan for home work	- Understand what will be done in homework - Join the team in googlecode. - Using Eclipse and TortoiseSVN	0:15
6	2	Workshop – review Home work	- Comprehensive applying coding standard in software development - Can practice the method of cross-check/peer review source code - Perform Unit Test	1:30
7	2	Workshop – CMMI applying	- To identify causes of selected outcomes and take action to improve - Review the software project by CMMI's PA	1:30

Prerequisites

- Have background about OOP
- Have knowledge about Java Web Application Programming: JSP, Servlet
- Have skill to develop a small project by Java with following:
  - + Java Script, CSS
  - + JSP, Taglib
  - + Servlet
  - + Hibernate