## **Abstract**

Efficiency rate of *Waterfall* software development process for small-medium project is getting worse in this decade. The new concept software methodology called *Scrum*, one of agile family method is tried to solved this problem. *Scrum* needs complementary other agile method like *XP* and *RUP* for really being applied in real world. *Scrum* is an ubiquitous term, then author of this final assignment refer to *F-Scrum* to differentiate Srum that is used here toward others.

The result of comparasion between *Waterfall* and *Scrum* (call *F-Scrum*) within "*Relative Effort*" and "Time to Develop" parameters (COCOMO) has found that *Scrum* was better than *Waterfall* for this final assignment scope only.

**Keywords**: *Waterfall*, *Scrum*, *F-Scrum*, COCOMO.