ABSTRACT

In an University or educational institution, timetabling is a problem that must be face in the begining of semester. Timetabling is placement cource activity on specific time that can provide students, lectures need and room limitation. There are a lot of factor in the timetabling problem that related each other and can affect on schedul setting. The optimal scheduling is that can fulfill them. Those factor is consist of hard constraint and soft constraint which are adapted with needs of each university. There are a lot of method to solve timetabling problem, on of them is Genetic Algorithm (GA).

One variation of GA is Island Model GA. Wtih this method, Genetic Algorithm process is done on some computer to decrease time consumtion in its process. But, with Island Model GA there is still problem, which is a computer with high specification will done first and then it idle. This problem in this research will be solved by Reinforced Island Model IGA. So, with Reinforced Island Model IGA, when computer with high specification done its process will help another resource wich is still not finished.

With Reinforcent Island Model GA will solve timetabling problem and also will done the process faster than Island Model GA because all resource work will optimally.

Key Word : Genetic Algorithm, Island Model GA, Penjadwalan, Reinforced.