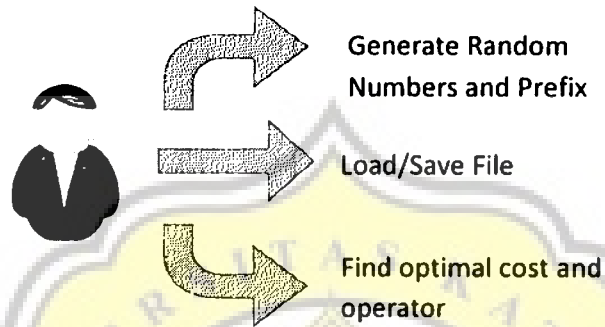


Chapter IV

Analysis and Design

4.1 Analysis

4.1.1 Use Case Diagram



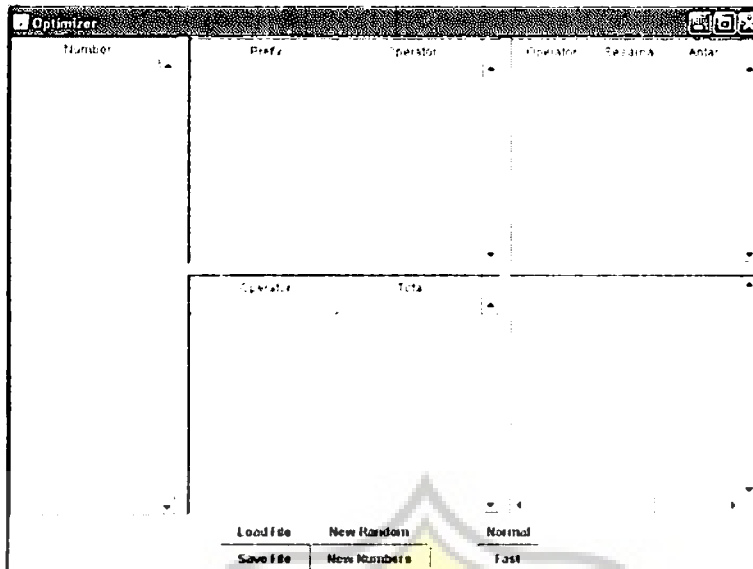
4.2 Design

4.2.1 Class Diagram



4.2.1.1 GUI

GUI is a class that is responsible for the creation and showing of the user interface. It uses Optimizer class as the engine behind the user interface.



The methods are for the purpose of creating the UI, except :

Method optimize() is for iterating the calculation to be shown in output area.

Method print() is for showing messages in output area.

4.2.1.2 Optimizer

Optimizer is the class that do most of the processing of the data. It converts the raw data provided in form of a file to a LinkList, and show return the output of the operator with the least cost.

4.2.1.3 LinkList

LinkList is the class that joins multiple links (nodes) together, and provide the methods to add links, traverse between links, printing the content of the links, and so on.

4.2.1.4 Link

Link is the individual data container which has two data variables (nomor and op) and two reference variables (next and indexTo)