CSCI910 – Software Requirements, Specifications and Formal Methods

Tutorial 11

Objectives

- Get familiar with Z notation

Exercise 1: Specification of a school

- A school contains a set of people.
- Belong is the set of all people who are a staff member or as a student.
- Staffs are the set of all the teachers employed.
- Pupil is the set of all students.
- Prefect is the set of all prefects.
- Head is the person who is in charge of the school.
- Nobody is both a Staff member and a Pupil.
- The people who belong to the school are either Staff or Pupils.
- The Head is a staff member
- Prefects are selected from the student body.
- There is at most one head.

Operations:

- Staff Joining School
- Pupils Joining School
- Staff Leaving School
- Pupil Leaving School
- Appoint Head
- Dismiss Head
- Appoint Prefect
- Dismiss Prefect