Problem Statement

Grade Management System

The primary purpose of the system is to input, store and edit grades for student's assignments. The system to be built consists of the following components:
- an input editor
- a file handling module
- an update and retrieval component
- an output report generator

- **The Input Subsystem**

The input component has to accept a file which was originally generated with the Excel spread sheet (see the example screen shot). All modifications and corrections should be made on this Excell sheet and not later on during processing.
The user interface shall prompt for the file name and osibly convert the .xsl fiel into a plain text file reformatted for input to tha subsequent processing stages. This information must be displayed in a screen window but the user must NOT be able to change these values before they are stored in the sytem, meaning that eventual errors must be corrected on the spread sheet.

- **The File Handler**

The file handler accepts the data delivered by the input subsystem and adds some housekeeping data such as a time stamp and a sequence number to the data. It then writes this information to the mass storage. For later editing and updating, the file system must also be able to retrieve individual records based on the name or the sequence number and deliver it to the Update and Retrieval component..

- **The Update and Retrieval Component**

This component has its own graphical user interface and must retrieve selectively information from the File Handler component for viewing. Editing (changing individual fields of the retrieved record)and subsequently writing this information back to the File Handler should not be possible but should be done by updating the original spread sheet.

- **The Output Report Generator**

This output report generator accepts input from the graphical user interface and generates a complete report of all students and assignments contained in the File Handler storage. It dis-

plays these results in a separate window on the screen and allows to user to send this information to a printer.

- **General observation:**

The system shall run on a stand-alone PC-type system interactively with only local storage and no network connection.

Assignment (due Sept. 21 9:30):

Specify all Use Cases in as much detail as necessary for the requirements analysis,
draw all Use Case diagrams (in UML), and
identify possible questions for the next meeting with your "customer".

sample spread sheet for input

stud-id	Name	First name	test #1	test #2	test #3	test #4	test #5
	weights		1.25	0.95	2	1.5	1.75
@77001234	Maha	Guru	100	100	100	100	100
@00112378	Columbus	Greg	90	100	40	0	0
@00115312	Onate	Nathan	100	100	70	40	100
@00214711	DeSoto	Brent	70	90	40	0	65
@00113717	Cortez	Aaron	100	100	100	0	100
@00224715	Washington	Samuel	100	100	100	0	65
@00114761	Ganado	Jeffrey	100	100	0	100	100
@00208216	Pena	Victorio	100	100	100	70	100
@00121417	Prado	Perez	0	0	0	0	0