



Modeling of Inter-object Communication in a System

Presented on
08/09/2014

Tool for Multi-layer Sequence Diagram Modeling

For designing the Multi-layer Sequence Diagram, Vincito crew has decided to use **Gliffy** tool.



Gliffy is an online diagram editor. Flowcharts, network diagrams, floor plans, user interface design and technical drawings can be drawn by using Gliffy tool. Users can save their diagrams which are drawn, into their machines under .gliffy extension or as an image file. This tool is low cost and good for business and personal use. In gliffy tool, there are three main areas named toolbar, shape library and drawing stage. These parts make it easy to create relevant diagrams in appropriate manner.

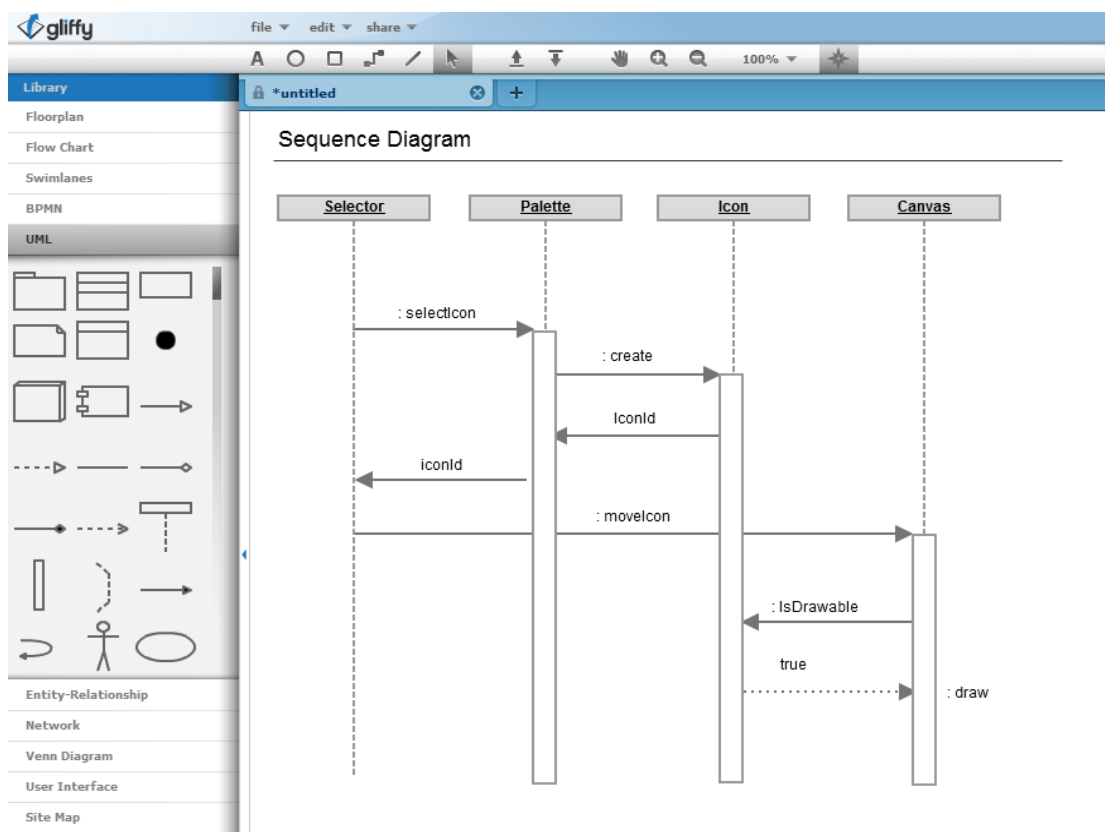


Figure Example of Multi-layer Sequence Diagram

The Multi-layer Sequence Diagram of the system can be documented as above by using this tool.

Description

There are four major activities of the system.

1. Leave management

It is a very difficult task to do leave management. The principle possesses the major responsibility and she wanted to put extra effort to do leave management.

When principle is asked for a leave by a teacher she first checks that person's available leaves. If she/he doesn't have available leaves principle asks for a no pay. According to the response of the teacher, principle takes her decision.

If teacher does not have available leaves, principle checks another teacher for that corresponding subject and if principle could find another one for particular day she acquires the leave. Otherwise discuss with the teacher and come up with a solution.

2. Progress report generation

This is another major objective of this system. It is a very complex and time-consuming process while it does manually.

When zonal education center requests the annual progress report principle gathers every information regarding the student progress. Teachers provide the details of student progress subject wise and class wise. Principle checks the accuracy of the details and sends it to clerk to create the progress evaluation report. Clerk creates the report and sends it again to the principle for approval. If it gets approved report will be sent to the zonal education center.

3. Annual service charge management

There are many conflicts and problems occur when SDS goes to collect school fees and school service charges. Therefore our system provides an efficient and convenient way to fulfill that task.

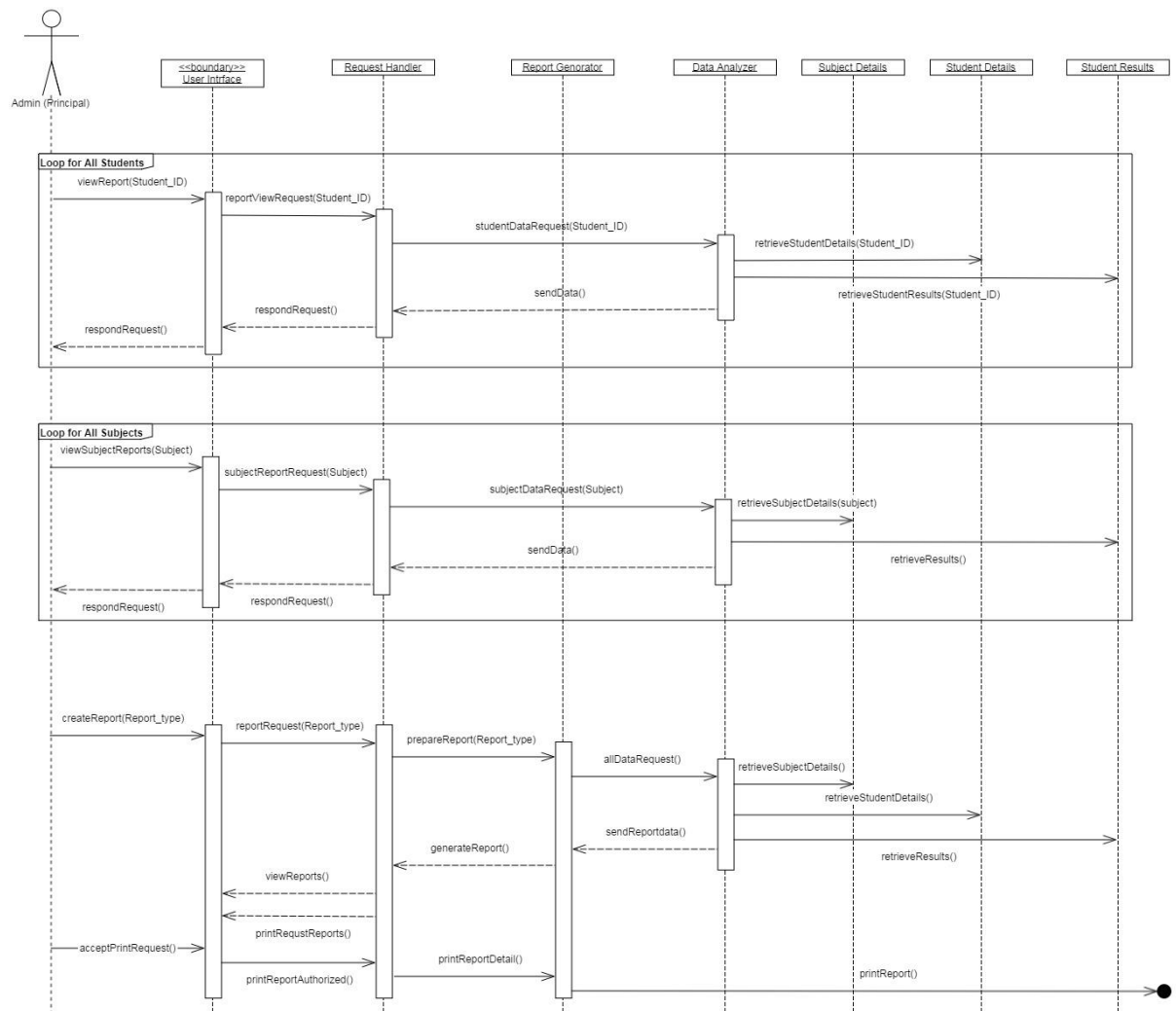
Firstly SDS should get approval from the principle before collecting money. If it gets approved SDS informs teachers to collect money from the students, but if there are more than one student from a family, fees needed to be paid by one student only. While collecting money it checks whether one has already paid or not. If not teacher should take steps to collect money.

4. Covering relief periods.

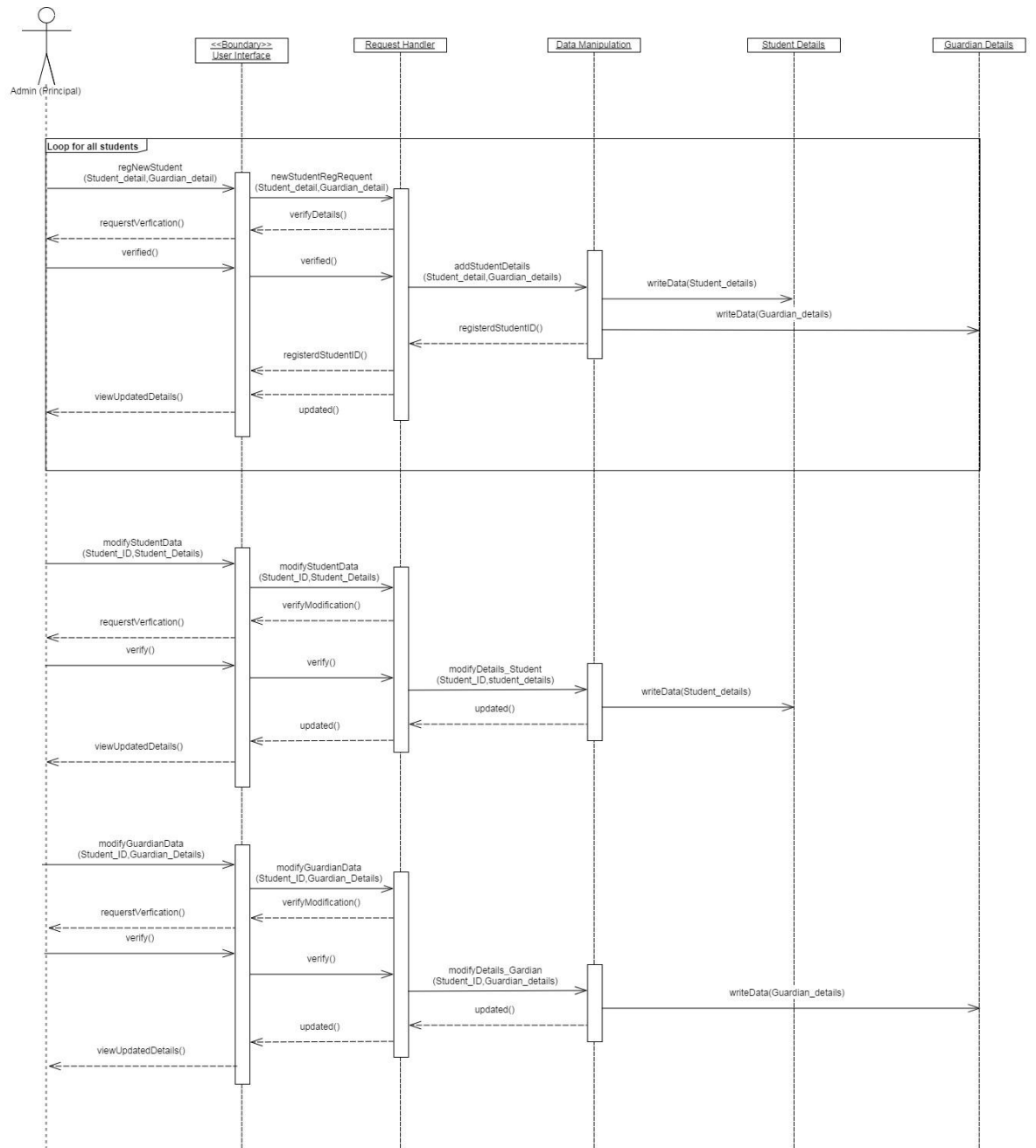
Covering relief period is another major process and almost 90% of it is done by the principle. She should collect all the attendance details of the teachers prior to make a schedule for relief period covering.

In this event principle checks for absent teachers and identifies their periods. And secondly she looks for teachers who are present today eligible for that subject and their availability. If they are available asks them to continue the lesson if not ask neighbor class teacher to watch over.

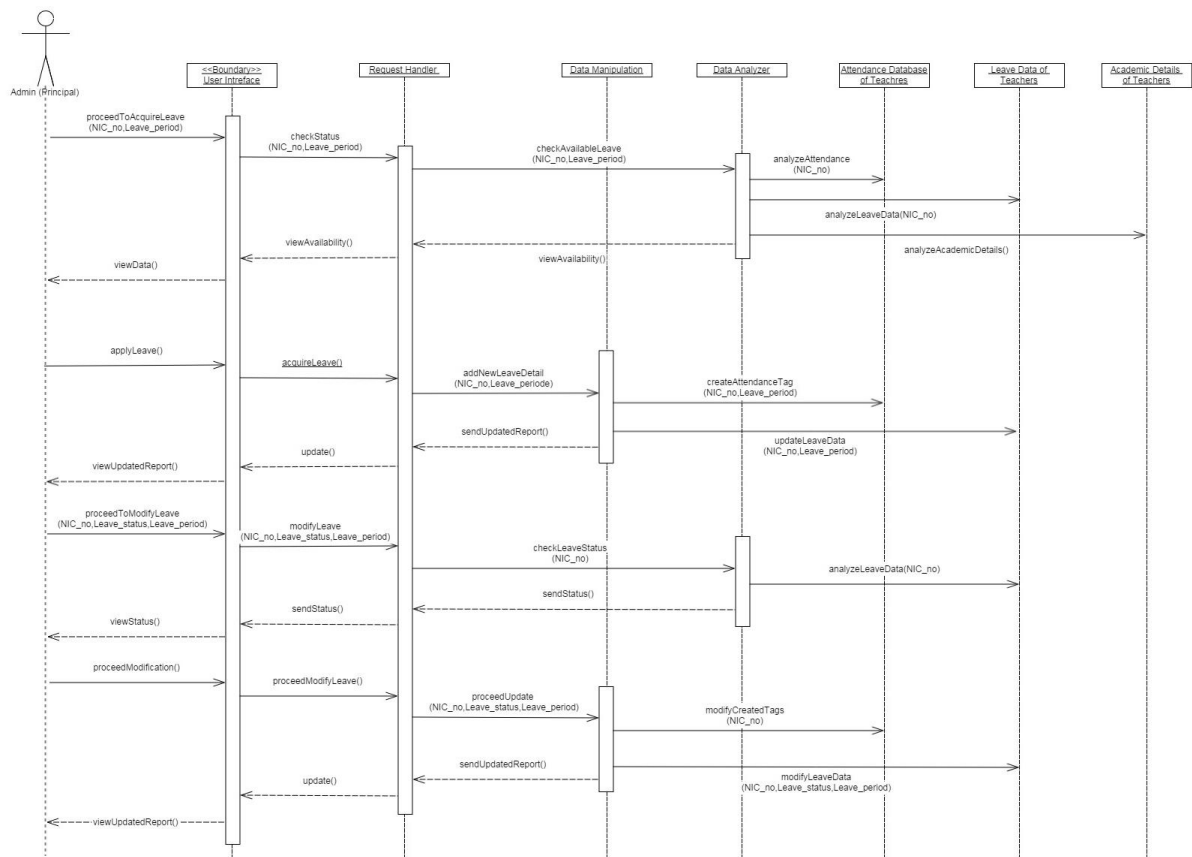
Relevant Multi-layer Sequence Diagrams



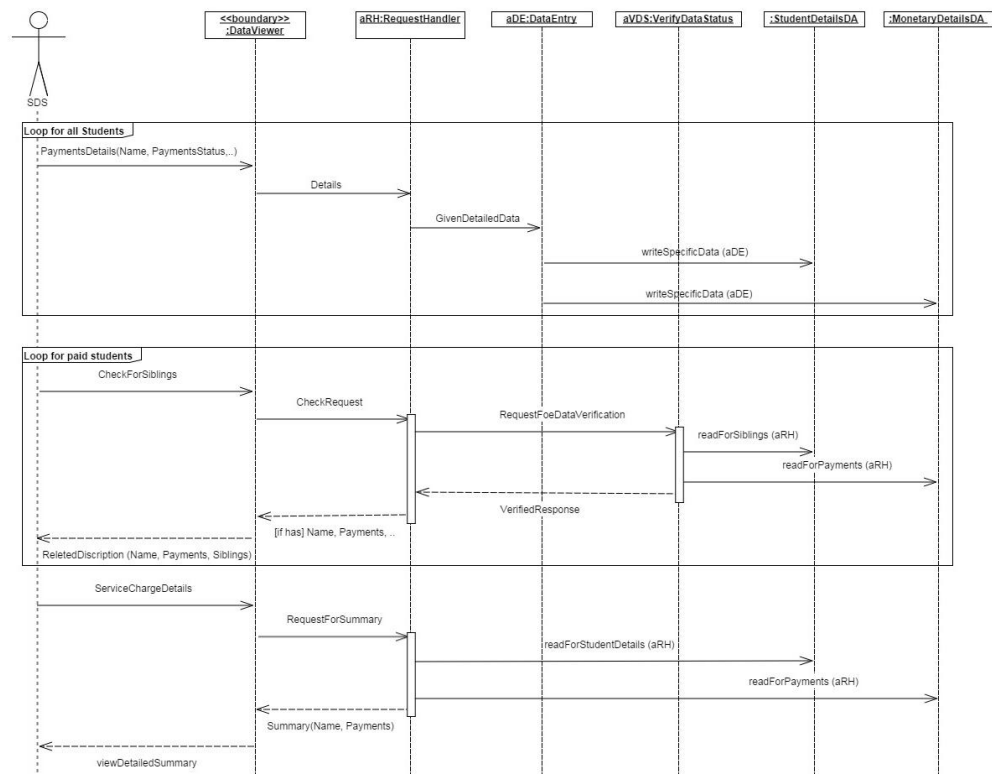
Principal - Report Generation



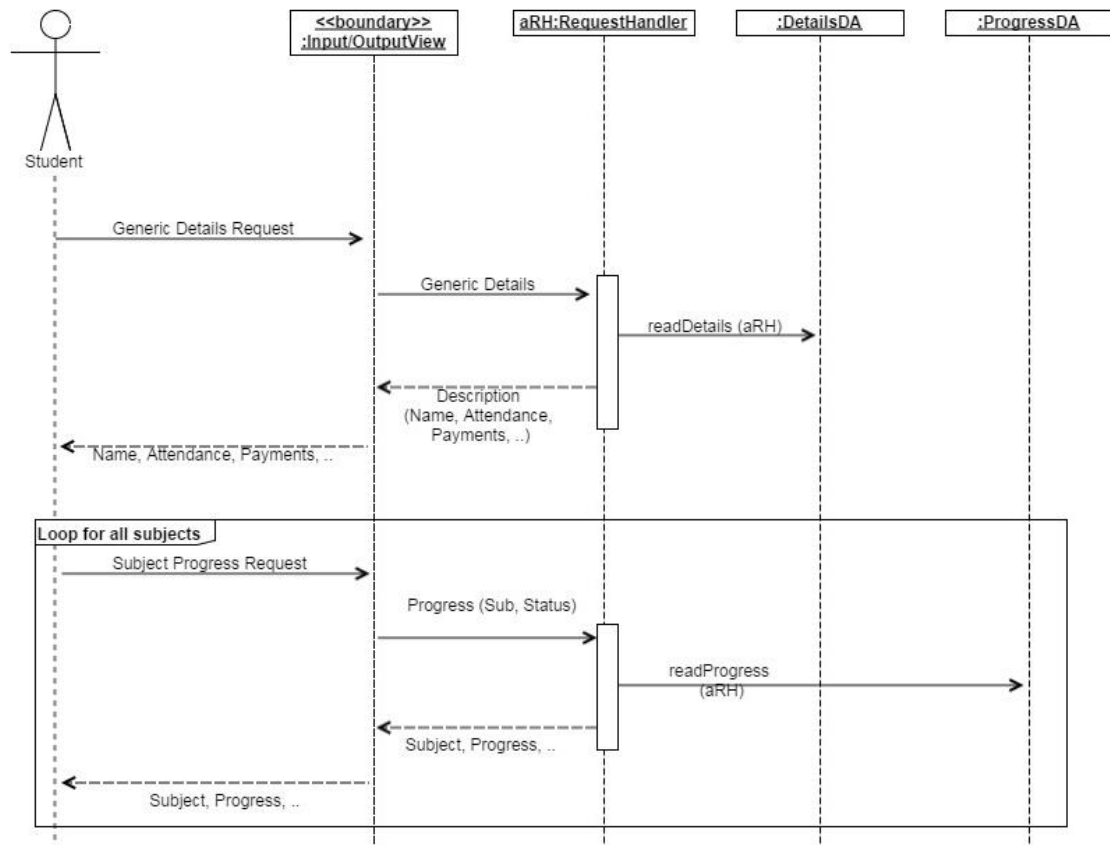
Principal - Manage Staff/Students



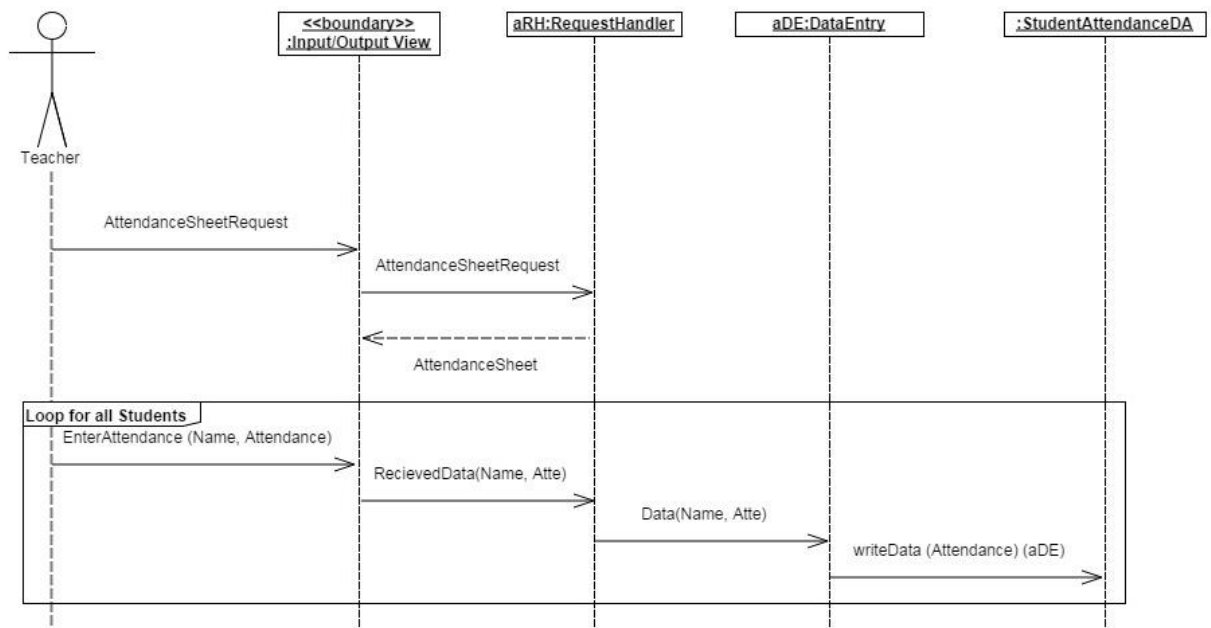
Principal – Leave Management



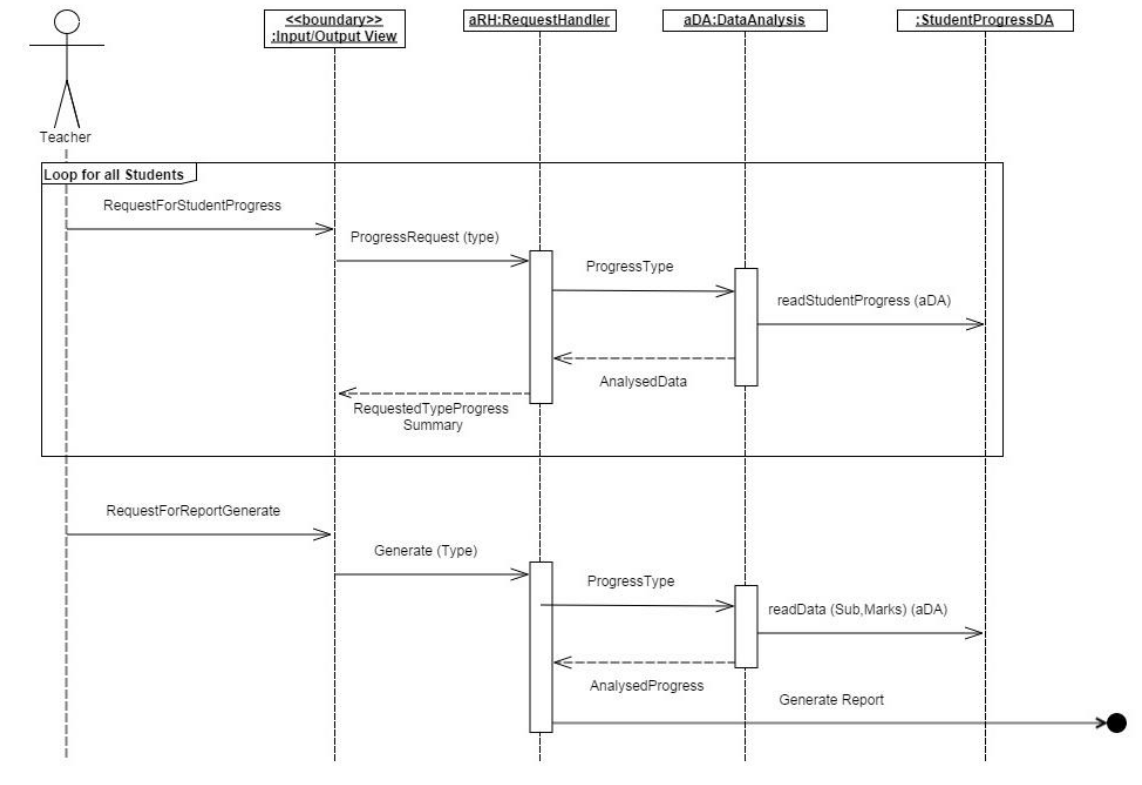
SDS



Student



Teacher-Mark Attendance



Teacher-Report Generation