Modeling of Behavioral Requirements and Information Flow within the System

Presented on
24/08/2014

Tool for Modeling of Behavioral Requirements

For designing the behavioral model, 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.
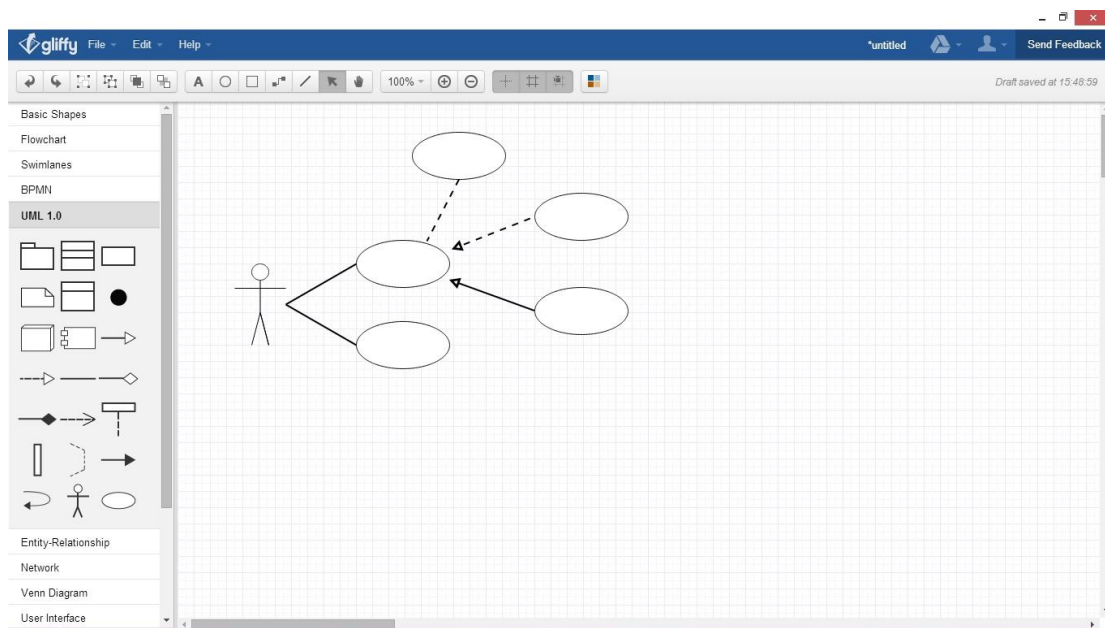

Figure Example of behavioral model diagram.

The behavioral model of the system can be documented as above by using this tool.

Descriptions and Behavioral Modeling

For the system there are four parts can be identified as the contents of behavioral model

Flow of activities for scenario of Leave Management System

Main Flow
1. Teacher request leave from the principle
2. Check the details of the leave request
3. Check the available leave leftover and inform it to the teacher
4. Update system or log file on corresponding date(s) (mark the attendance)
5. Temporarily assign another compatible teacher to cover the subjects
6. Approve the leave request

Exception conditions
1. If teacher exceed total number of leave then principle can
   a) Ask is it essential leave or
   b) Approve no pay leave
2. If a teacher cannot assign temporarily for current subject
   a) Check the current reason for the leave and ask is it essential or
   b) Approve leave and assign teacher to look after the class(not for the subject)

Flow of activities for the scenario of Report Generation

Main Flow
1. Zonal education office request student evaluation report from the principal
2. Principal inform to the teachers to gather student grades and marks
3. Once all grades and marks are collected send all the data to clerk to generate report
4. After finishes the report principal check the report and analyze it
5. If errors and mistakes appears in the report resend to clerk and tell to modify it
6. Repeat 4 and 5 until get complete report
7. Approve the report details and send it for the Zonal education office

Exception conditions
1. If marks of the students not yet evaluated
   a) Start evaluation process and collect marks and grades
2. If report shows poor results and rates
   a) Initiate projects and activities to build up student progress

Flow of activities for the scenario of Annual Service Charges Collected by SDS

Main flow
1. Ask approval from principal to collect school service charges
2. After getting approve inform teachers to collect the money from students
3. Collect the details and money from the teachers
4. Repeat the process until collect all the money from the students
5. Update the system or log files of the collected money
6. Update the fund of the SDS

Exception conditions
1. If students unable to pay the charges
    a) Request a valid document or letter from Gramasevaka to confirm inability to pay
    b) Avoid collecting money from siblings learning in same school and the student who encountered with above problem
2. If students do not pay service chargers
    a) Find siblings of that student learning in same school and collect money from one of them or
    b) Contact parents and inform to pay service chargers

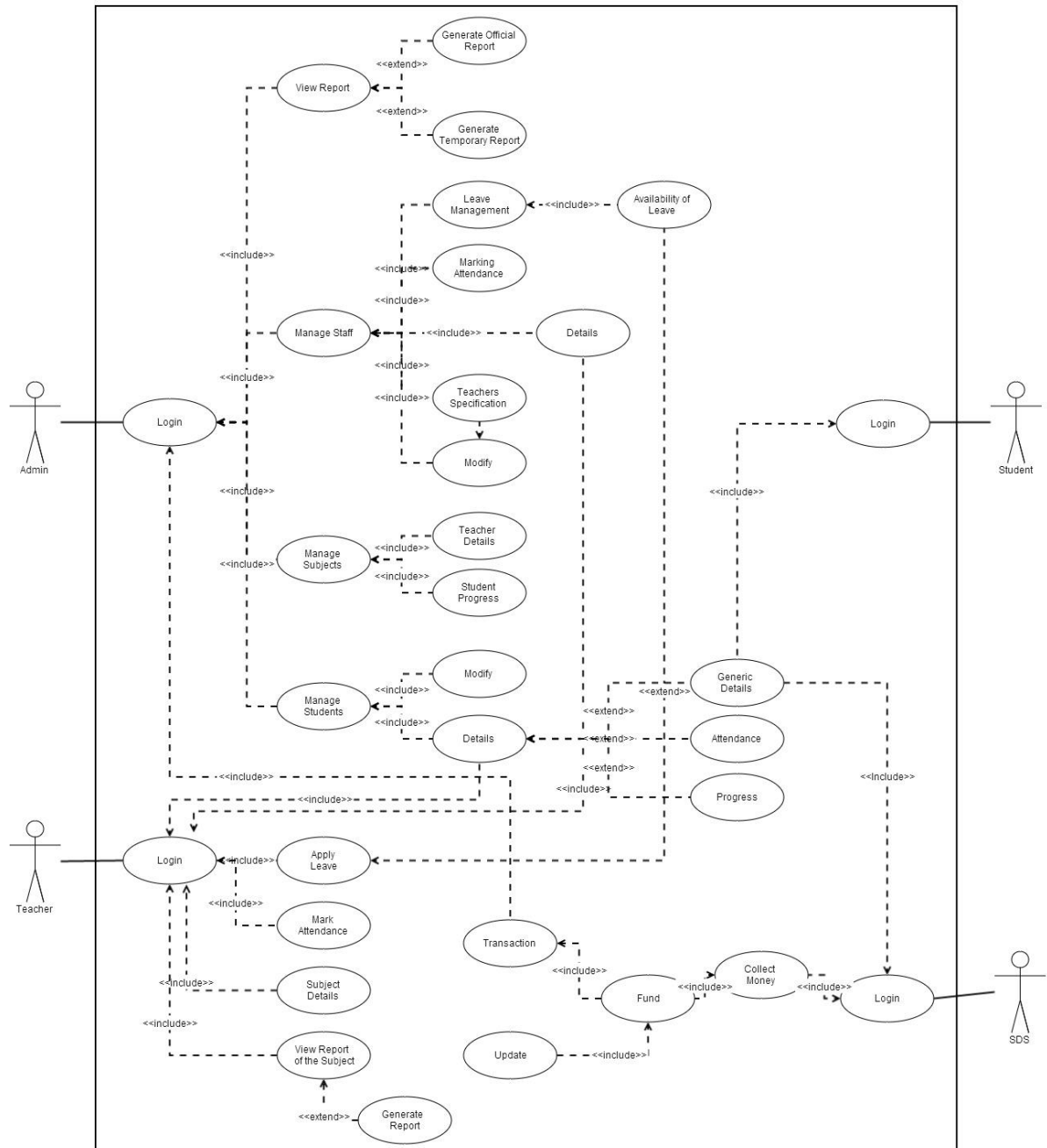**Flow of activities for the scenario of covering relief periods**

Main flow
1. Principal collects details about unavailable teachers in the day
2. Identify their periods that has to be done
3. Check the available teachers who eligible for corresponding subjects
4. Check available off periods for the corresponding teacher
5. Assign the teacher for the class to cover the period
6. Provide relief form to teacher to fill
7. Update or add details for the relief period file

Exception conditions
1. If no teachers are available to cover subjects of the relief periods
    a) Assign a teacher to cover another subject or
    b) Assign neighbor class teacher to watch over

Behavioral Model

Information Flow within the System(Sequence Diagram)

SDS

:System

Loop for Paid Students

EnterPaymentDetails

Enter whether Paid

Loop for Paid Students

CheckForSiblings

[If has] Name, PaymentsStatus

If there are siblings and they have paid, then it is done for checking student. Otherwise that student has to pay.

RequestforServiceChargeDetails

SummaryofPaidCharges

Student

:System

GenericDetails

Discription(Name, Grade, Attendance, PaymentsOfFees, ...)

Loop for all subjects

ProgressRequest

Subject Progress upto now