

# Domain Modeling

Presented on 18/08/2014



# **Tool for Domain Modeling**

For designing the domain 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.

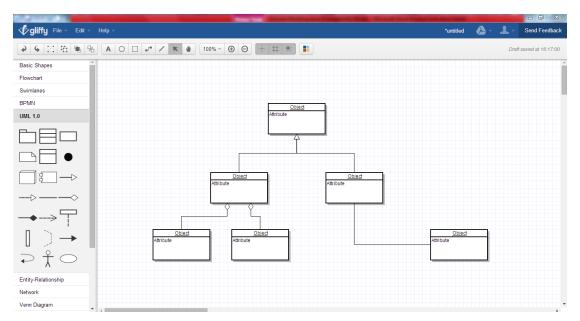


Figure Example of domain modeling diagram.

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



### **Domain Modeling**

When thinking about consolidated system, *conceptual classes* for entire project can be listed as follows.

- Staff
- Principal
- Teacher
- Student
- School Development Society
- Progress
- Report
- Subject
- Periods
- Salary Information

Since these are *conceptual classes*, it will not contain method signatures indicating operations and capabilities of class. These *conceptual classes* can be known as *domain objects* as well.

The identified sub-domains as follows.

- Principal
- Teacher
- SDS
- Student

# **Descriptions of Sub-domains**

#### **Principal**

Principal is the administrator of the system and entire governance is handled by her. She should be responsible for all activities which are befallen in school and the conduct of the system depends on the decisions which are taken by her.

The management of the staff and school is controlled under the sanction of Principal. She is the main actor of most of processes of school such as

- Managing leaves of staff
- Record the attendance of teachers
- Making decisions regarding teachers and school
- Representing for school (provide details about staff and student to relevant departments such as Zonal)
- Giving approve for school projects (collecting school fees from students) and
- Caring about educational progress of students.



#### **Teacher**

After the principal, teacher is the next authorized person of the school. Most of process regarding students is handled by teacher. As well as all the responsibilities of students are burdened by him/she.

Teacher is always responsible for the educational progress of students and if student weak, the relevant actions should be taken to uplift student. Teacher control the following processes.

- Making progress reports of students. (monthly, term by term, school-based)
- Inform students about school affairs. (Collecting school fees, special occasions)
- Covering relevant periods and relief periods as well.
- Recording attendance of students and exam marks.
- Supporting principal for representations of school (Making reports for Zonal) Hence, the all facts about students are owned by teacher and the second guardian of the student is the teacher.

#### **School Development Society (SDS)**

As many other institutes, school also has a process for financial affairs. These affairs are controlled by the school development society. There is a specific amount known as school service charges which should be paid annually by students. The system is supposed to handle that part as a main sub domain.

SDS has the responsibility to get service charges from each student. If there is more than one student from one family, all students can pay this fee as one. No need to pay each one. But handling and maintaining this process is somewhat more difficult than it appear.

- Check who are the siblings
- Record their payments
- Maintain the linked data base between students and parents

Are the primary tasks that SDS has to be deliberate regarding this process.

#### Student

The main purpose of the school is providing knowledge and skills for future generation. Most of the activities are done from school is for the students and these activities done from administration is vary for the groups of the students.

Because students are the main category of the school, all the activities, projects, syllabus and all the process are depend on the level of the students. Different ages, education levels and languages are critical part of the making decisions of above mentioned process.



# **Domain Model**

