

OBJECT ORIENTED ANALYSIS & DESIGN

**SCHOLARSHIP - SELECTION
SYSTEM**

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Domain Classes:

1. Verifier
2. User
3. Organization
4. Student
5. Admin
6. Selected List
7. Scholarship
8. Student Details
9. Details&Criteria
10. Notification

Data Dictionary

Verifier:

Verifier is a class used for verification purposes. In the first stage it verifies the details entered by the student with that of his details. In the second stage, it verifies whether the details given match the criteria for that particular scholarship.

User:

User is the person who has access to the portal and its contents. Every user has a unique-id with which the person can be identified.

Organization:

Organization is a user who offers scholarships to the students. The organization provides the details of the scholarship along with its criteria to the admin of the portal.

Student:

A Student uses the portal to view and apply for the scholarship. If a student wishes to apply for the scholarship, he/she has to fill the form associated with each scholarship and upload the necessary documents which are required for the scholarship.

Admin:

An admin is a user who has overall access to all the user accounts in the portal and is the one responsible for approving the scholarships, verifying the documents uploaded and to generate a list of shortlisted students. He is also responsible for updating the details and the overall maintenance of the portal.

Selected List:

This class contains the details of the students selected for the scholarship. The admin or organization can get the beneficiary details of the particular scholarship from this class.

Scholarship:

This class contains the scholarship ID and scholarship name provided by the scholarship and it also contains the acceptance status of the scholarship provided by the admin.

Student details:

This class consists of most of the details of the students like cgpa, DOB, annual income etc. which is used by the verifier class in the first stage of verification. The admin also updates this class if the student is selected for the scholarship.

Details & Criteria:

The details of the scholarship and the criteria provided by the organization to select the students is stored in this class and is used by the verifier to check whether the applicant matches the criteria.

Notification:

This class is used mainly for notifying the applicants regarding the progress of the application. It starts the process once it is invoked with the message to be sent by the classes during verification and shortlisting process.

Association and Multiplicity

Each student **has** a Student Detail(1-1)
Each Student **applies** for any number of Scholarships(1-many)
Verifier **verifies** Students Details(1-many)
Verifier **verifies** with Details & Criteria(1-many)
Verifier **send status** to Notification(1-many)
Every Scholarship **has** Details & Criteria(1-1)
Admin **uses** Details and Criteria to shortlist the students(1-many)
Admin **approves** the Scholarship(1-many)
Admin **adds** details to Selected List(1-many)
Admin **updates** Students Details(1-many)
Admin **sends** status to Notification(1-many)
Organization **adds** any number of Scholarships(1-many)
Organization **gets** details from Selected List(1-many)

Attributes:

- ***User:***
 - ❖ Unique_id
- ***Student:***
 - ❖ Name
 - ❖ Rollno
- ***Organization:***
 - ❖ Cid
 - ❖ Officer name
 - ❖ Cname
 - ❖ Address
 - ❖ Phoneno
 - ❖ Email
- ***Admin:***
 - ❖ Name
- ***Notification:***
 - ❖ Status
 - ❖ Msg
- ***Verifier:***
 - ❖ Verstat1
 - ❖ Verstat2
 - ❖ Verstat3
- ***Student Details:***
 - ❖ CGPA
 - ❖ DOB
 - ❖ Gender
 - ❖ Religion
 - ❖ Nationality
 - ❖ Caste
 - ❖ Phoneno
 - ❖ Email
 - ❖ Address
 - ❖ Annual income
 - ❖ Fee
 - ❖ Quota
 - ❖ Backlogs
 - ❖ HSC marks
 - ❖ SSLC marks

➤ ***Selected List:***

- ❖ Studname
- ❖ Studroll
- ❖ Schname
- ❖ Schid
- ❖ Benefitamt

➤ ***Details & Criteria:***

- ❖ Year
- ❖ Percentage
- ❖ CGPA
- ❖ Annualincome
- ❖ Category
- ❖ Finalcriteria
- ❖ Amt
- ❖ Validity
- ❖ Backlogs
- ❖ Marks

Classes refined using Inheritance:

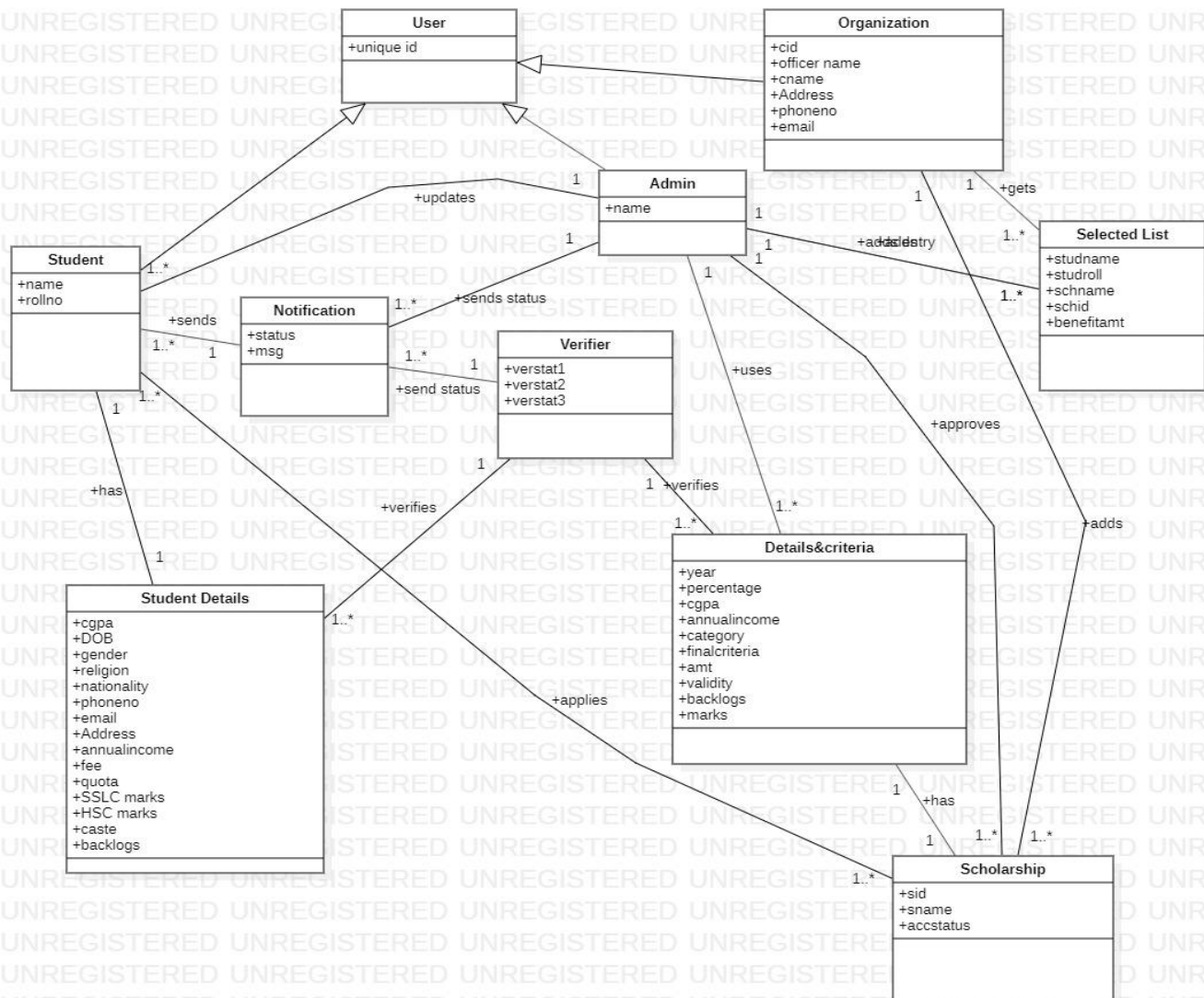
Super Class:

- ❖ User

Sub Class:

- ❖ Student
- ❖ Admin
- ❖ Organization

Domain Model:



Partial Class Model:

