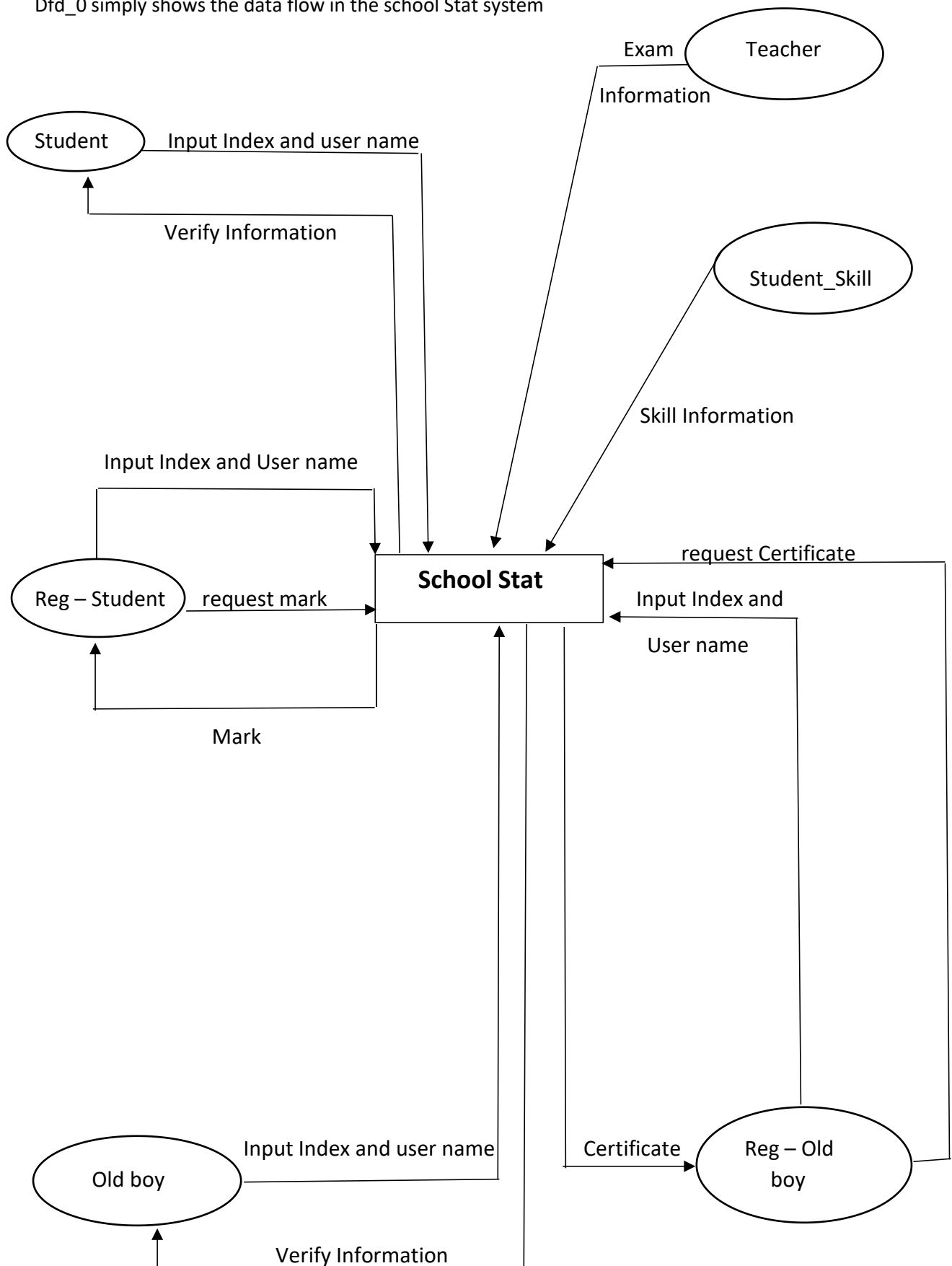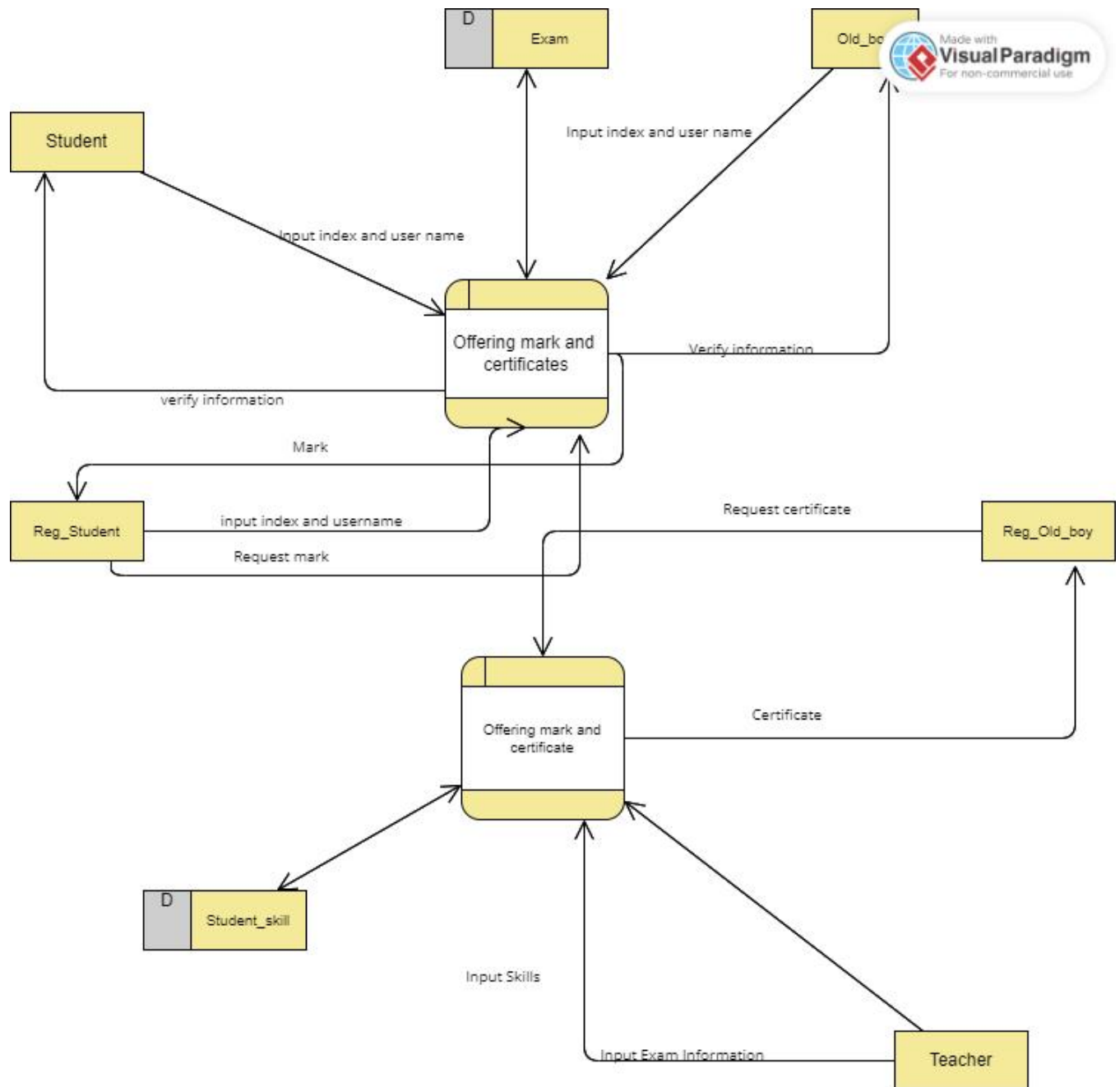# DFD 0

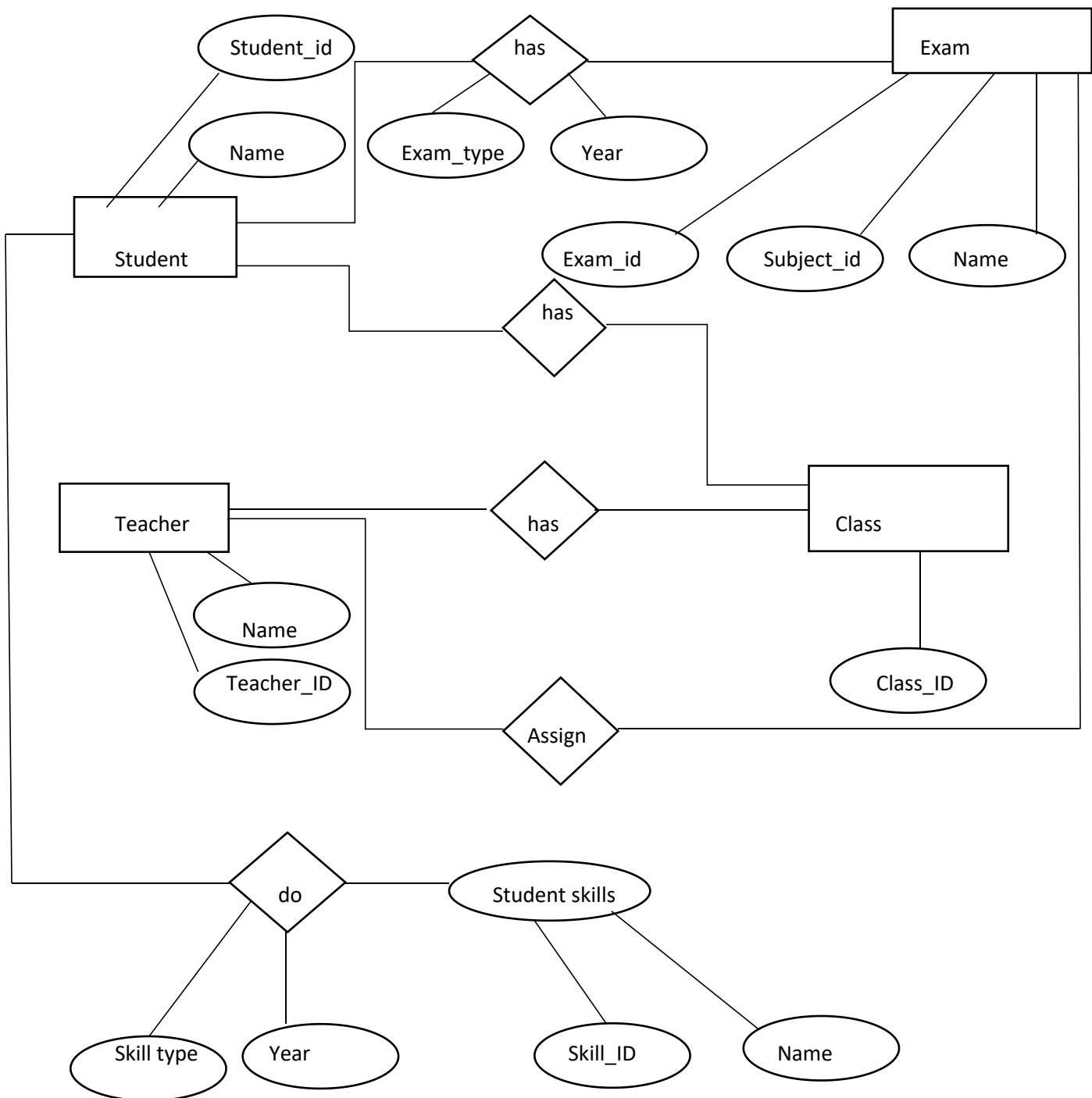Dfd_0 simply shows the data flow in the school Stat system

DFD 1

dfd 1 shows the complexity of the data flow in the school_Stat system

Although taken as two processes, it is the same process.

- The student enters the index number and username into the system

- The system checks whether the information is correct and informs the student

- After that, the registered student enters the previously entered password and logs into the system

- When requested by the student through the grading system, the assistant retrieves information from the exam database and presents it to the student.

- Also, when the certificate has been applied for, the data is obtained from the specified database and the certificate is created.

ER Diagram For School Stat System

Student_id

Name

has

Exam_type

Year

Exam

Student

Exam_id

Subject_id

Name

has

Teacher

has

Class

Name

Teacher_ID

Class_ID

Assign

do

Student skills

Skill type

Year

Skill_ID

Name

System Design

System Components

- User Interface

- Authentication Service

- Admin Panel

Creativity

Integrate with national student ID systems for seamless user verification

Develop a notification system to alert users when new certificates are available.

Scalability

Utilize a cloud-based architecture with auto-scaling capabilities to handle fluctuating user loads.

Implement caching mechanisms to reduce database load for frequently accessed data.

Security Considerations

Encrypt all sensitive data at rest and in transit

EX: HTTPS and data encryption