

PRACTICAL : 03

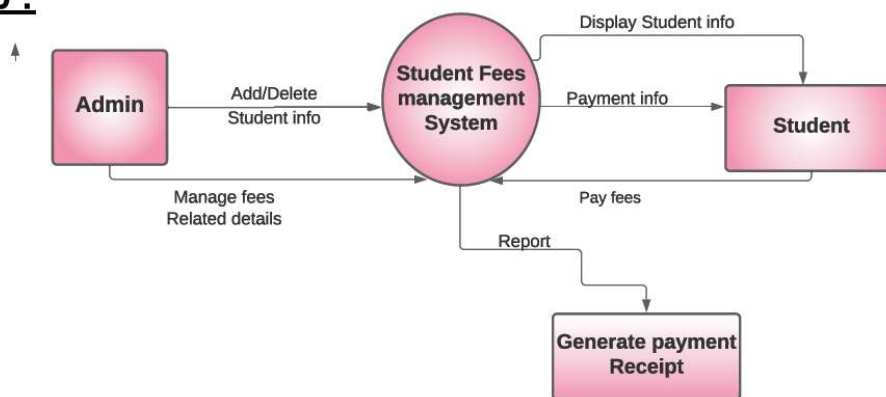
To perform the function-oriented diagram for the system:

3.1 Aim: Prepare Data Flow Diagram

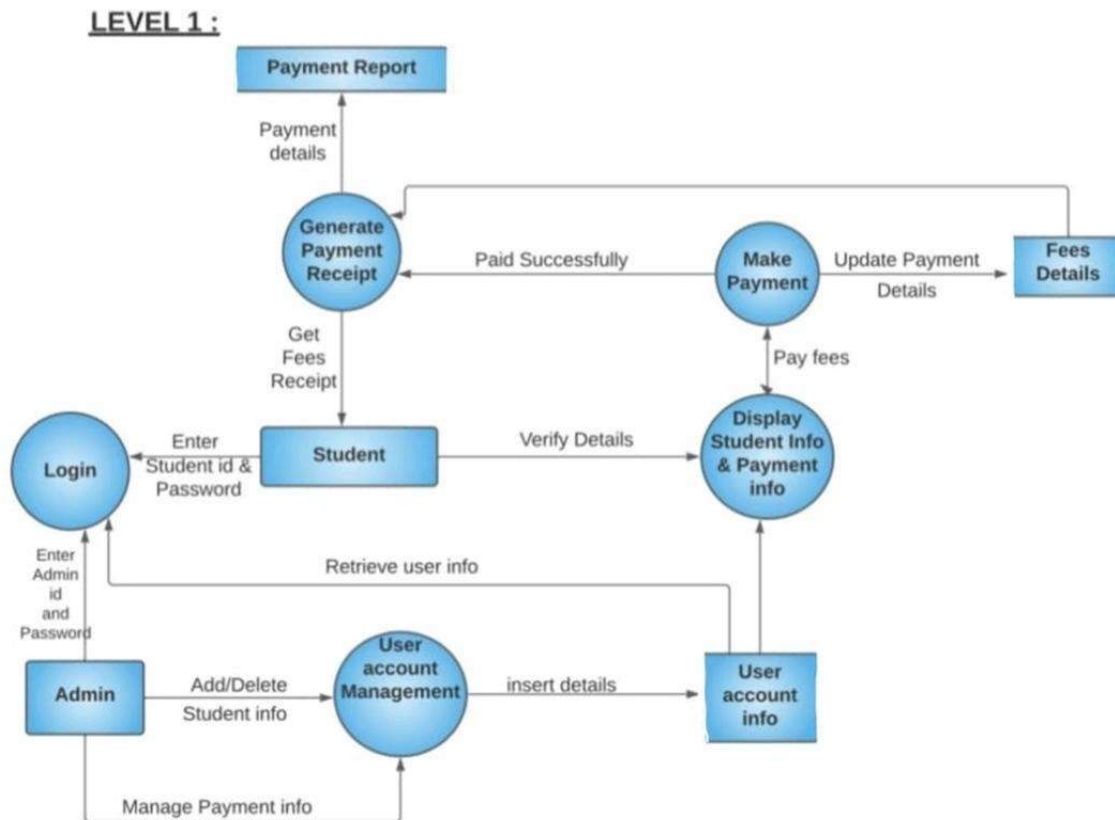
Project: Student Fees Management

A Data Flow Diagram (DFD) maps out the flow of information for any process or system. It uses defined symbols like Rectangle for Entity, Circle for Process, Arrow for Data flow and Dataset for storing the data. It uses defined symbols like rectangles, circles and arrows, plus short text labels, to show data inputs/output/storage points and the roots between each destinations.

LEVEL 0 :



- Admin and Student are the two external entities that are connected with our application. Both the entities must be registered on the site first in order to interact with the application (although registration for both entities is very different). The Student will interact with the application through its Frontend (UI) while an Admin will interact directly with the backend.



- ❖ The Main process of level 0 is further decomposed into 5 subprocess in the level 1 diagram.
- ❖ A student will interact with 4 of this process while the admin will interact with 2.

Student interactive process:

- Login: Process to login into the website to use its features.
- Display Student info. & Payment info. : Displays personal details and payment with details.
- Make payment: The student can pay fees through by selecting different payment gateway like credit/debit card, net banking, etc.
- Generate Receipt: Student can generate receipt as a proof payment for every fees payment transaction.

Admin interactive process:

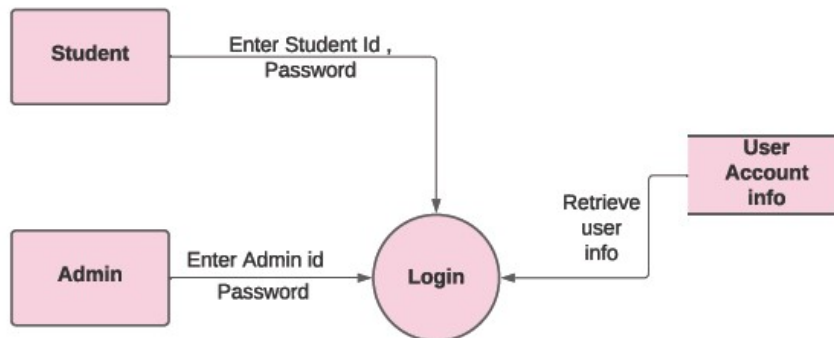
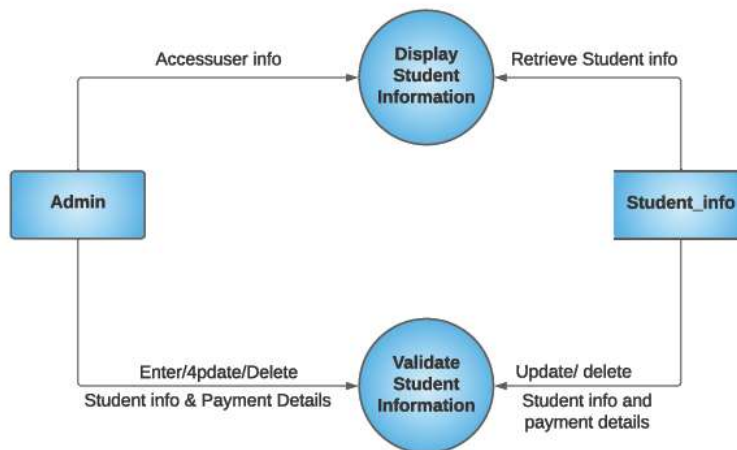
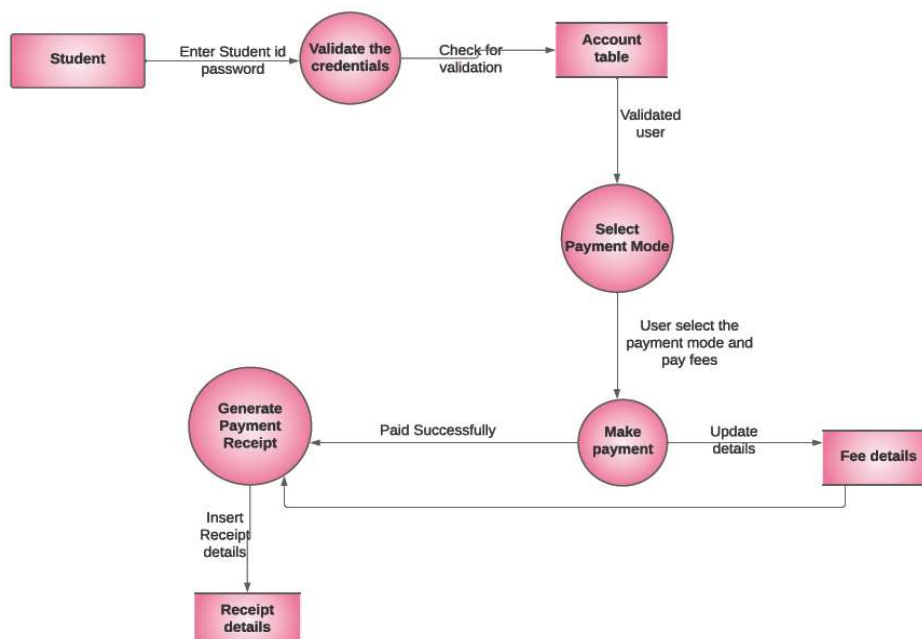
- Login: Process to login into the website.
- User account management: This process is used by admin to add/delete student info. and also to manage payment info.

Level 1 diagram also features 3 data stores:

User Account Info: stores the User's registered information.

Fees details: Stores fees data.

Payment Report: Stores Payment report data.

LEVEL 2 :**1. Login :****2. Student Information Management :****3 . Online Payment :**

2-level DFD goes one process deeper into parts of 1-level DFD. It can be used to project or record the specific/necessary detail about the system's functioning.

The Level 2 DFD for student fees management system should represent the basic modules as well as data flow between them.

Since the DFD level 2 is the highest abstraction level, its student fees management system processes must be detailed that is based on the DFD level 1.

Finally, after figuring the processes given in the system, the user will now have their request being processed.

The Processes that the system should prioritize are as follows:

- login
- student information management
- online payment

DFD level 2 let's you know the ideas on where does the data inputs goes and inputs comes within the student fees management system. Considering the dataflow mentioned above, you can determine well the importance of breaking the processes into more specific manner.

The presented level not only shows you the detailed processes of system, but also gives you precise destination of the data that flows in the system.

❖ Thus the data flow diagram helps system designers and other stakeholders during initial analysis stages to visualize a current system or one that may be necessary to meet every requirements.