ANIMAL SHELTER WEBSITE

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EXPERIMENT NO 4

AIM: Develop a data flow diagram for the project

THEORY:

DFD is the abbreviation for **Data Flow Diagram**. The flow of data of a system or a process is represented by DFD. It also gives insight into the inputs and outputs of each entity and the process itself. DFD does not have control flow and no loops or decision rules are present. Specific operations depending on the type of data can be explained by a flowchart.
It is a graphical tool, useful for communicating with users ,managers and other personnel. it is useful for analyzing existing as well as proposed system.

It provides an overview of

- What data is system processes.
- What transformation are performed.
- What data are stored.
- What results are produced , etc.

Components of DFD:
The Data Flow Diagram has 4 components:

- **Process** Input to output transformation in a system takes place because of process function. The symbols of a process are rectangular with rounded corners, oval, rectangle or a circle. The process is named a short sentence, in one word or a phrase to express its essence
- **Data Flow** Data flow describes the information transferring between different parts of the systems. The arrow symbol is the symbol of data flow. A relatable name should be given to the flow to determine the information which is being moved. Data flow also represents material along with information that is being moved. Material shifts are modeled in systems that are not merely informative. A given flow should only transfer a single type of information. The direction of flow is represented by the arrow which can also be bi-directional.
- **Warehouse** The data is stored in the warehouse for later use. Two horizontal lines represent the symbol of the store. The warehouse is simply not restricted to being a data file rather it can be anything like a folder with documents, an optical disc, a filing cabinet. The data warehouse can be viewed independent of its implementation. When the data flow from the warehouse it is considered as data reading and when data flows to the warehouse it is called data entry or data updating.
- **Terminator** The Terminator is an external entity that stands outside of the system and communicates with the system. It can be, for example, organizations like banks, groups of people like customers or different departments of the same organization, which is not a part of the model system and is an external entity. Modeled systems also communicate with terminator.

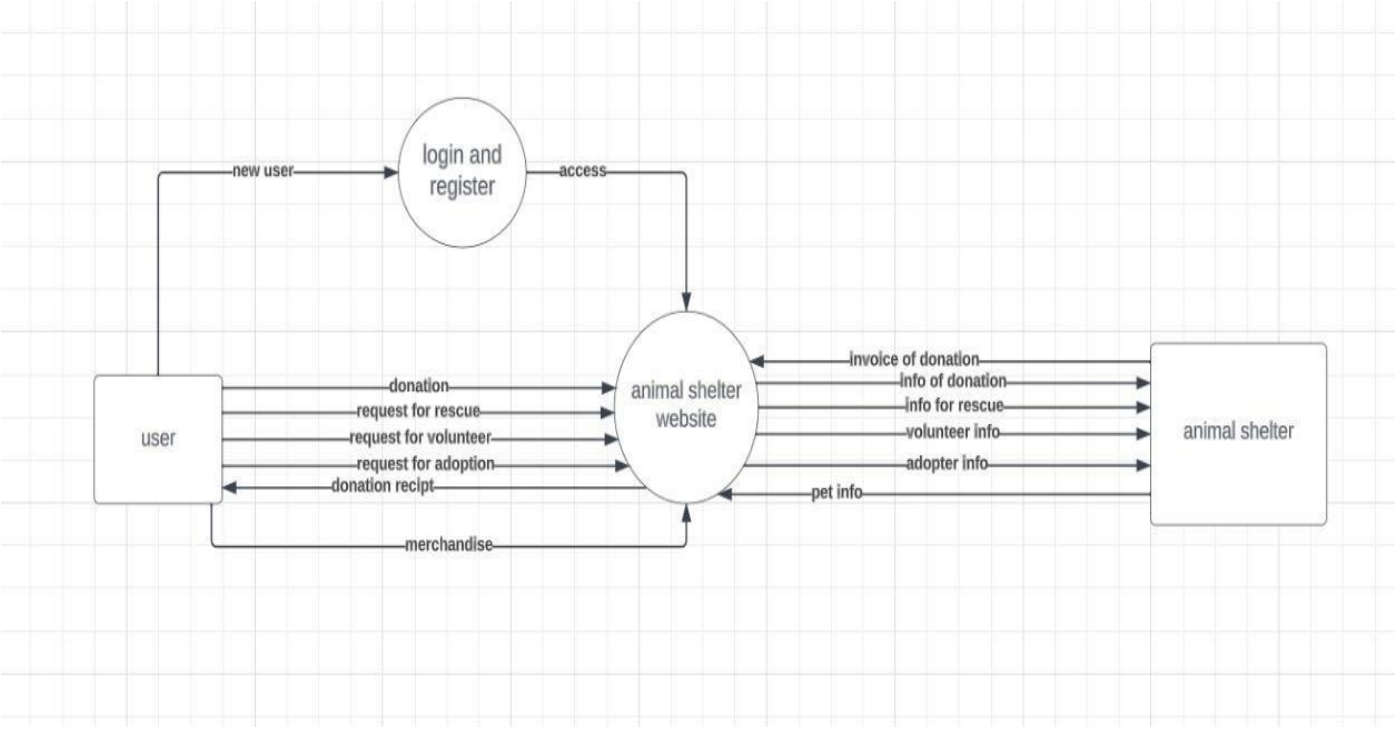
Rules for creating DFD

- The name of the entity should be easy and understandable without any extra assistance(like comments).
- The processes should be numbered or put in ordered list to be referred easily.
- The DFD should maintain consistency across all the DFD levels.
- A single DFD can have a maximum of nine processes and a minimum of three processes.

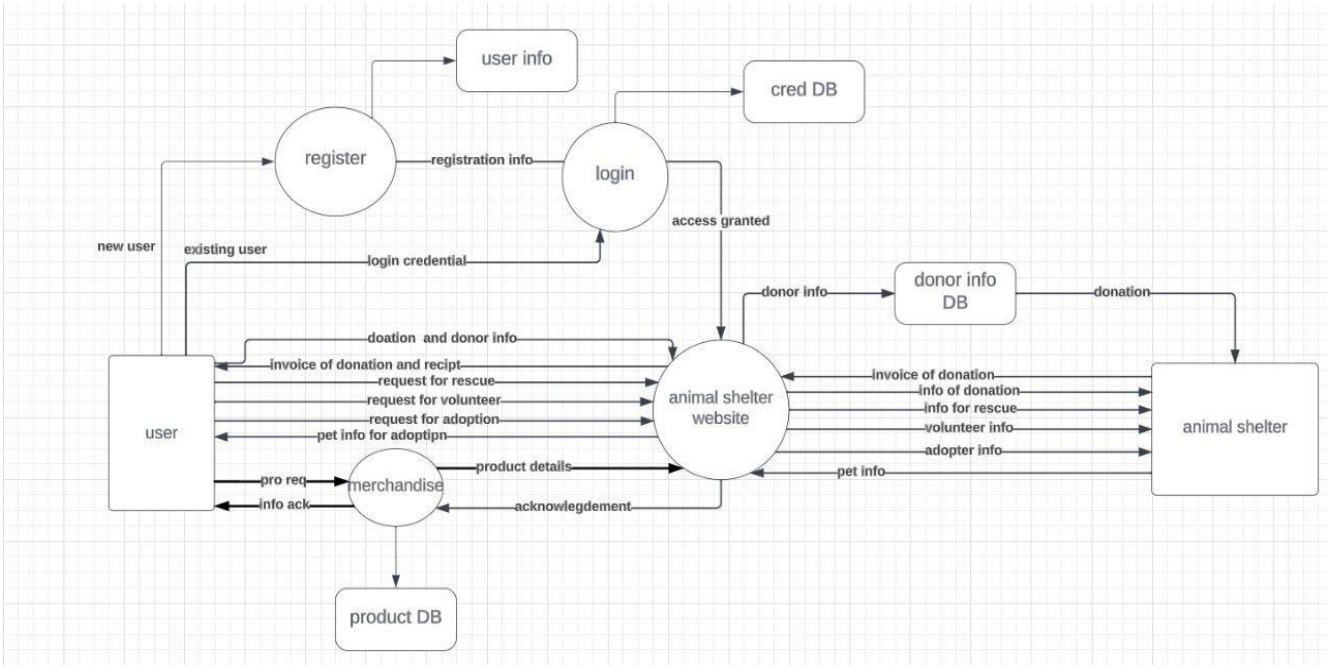
Symbols Used in DFD

- **Square Box:** A square box defines source or destination of the system. It is also called entity. It is represented by rectangle.
- **Arrow or Line:** An arrow identifies the data flow i.e. it gives information to the data that is in motion.
- **Circle or bubble chart:** It represents as a process that gives us information. It is also called processing box.
- **Open Rectangle:** An open rectangle is a data store. In this data is store either temporary or permanently.

OUTPUT:



1) DFD 0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cred DB
register
registration info
login
access granted
new user
existing user
login credential
donor info
donor info DB
donation
doation and donor info
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request for rescue
request for volunteer
request for adoption
pet info for adoptipn
user
animal shelter website
invoice of donation
info of donation
info for rescue
volunteer info
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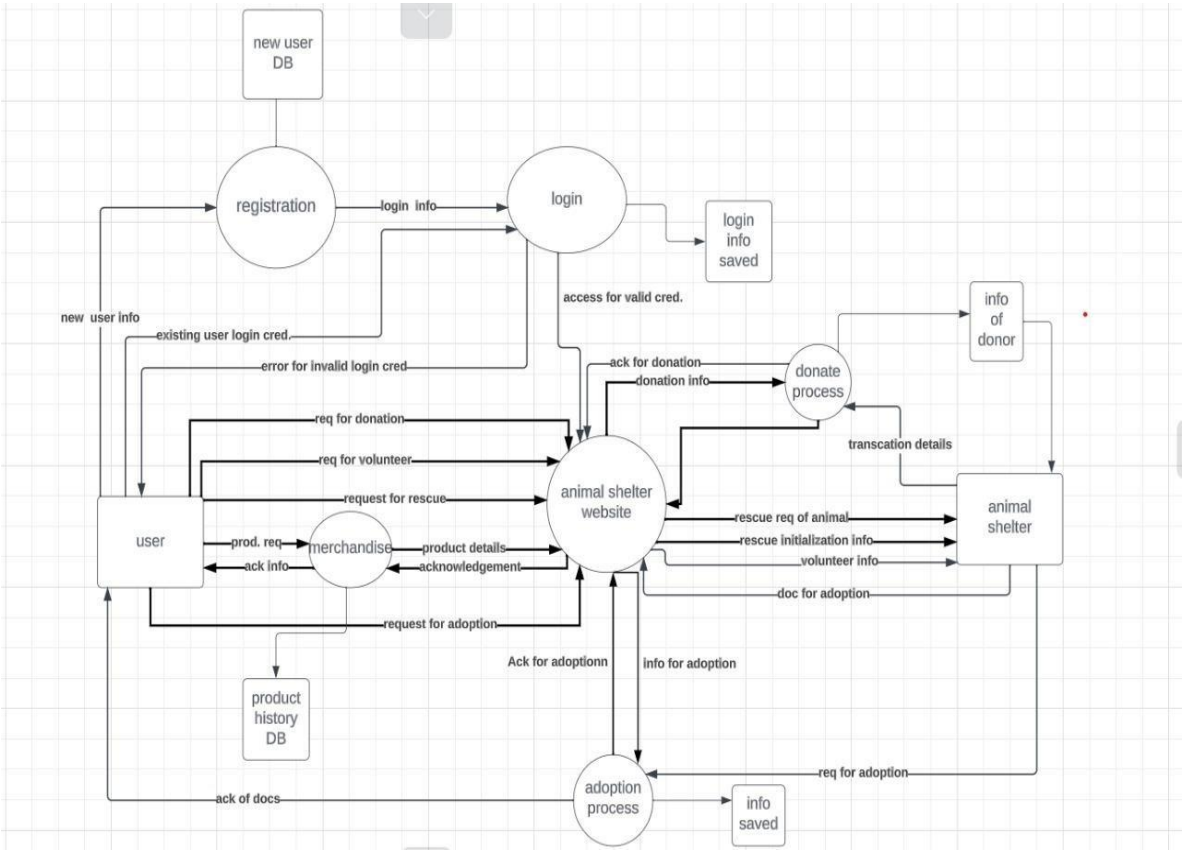
2) DFD 1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login info
login
login info saved
access for valid cred.
new user info
existing user login cred.
error for invalid login cred
info of donor
ack for donation
donation info
donate process
req for donation
req for volunteer
request for rescue
transcation details
animal shelter website
animal shelter
user
prod. req
ack info
merchandise
product details
acknowledgement
rescue req of animal
rescue initialization info
volunteer info
doc for adoption
request for adoption
Ack for adoptionn
info for adoption
product history DB
req for adoption
adoption process
info saved
ack of docs

3) DFD 2