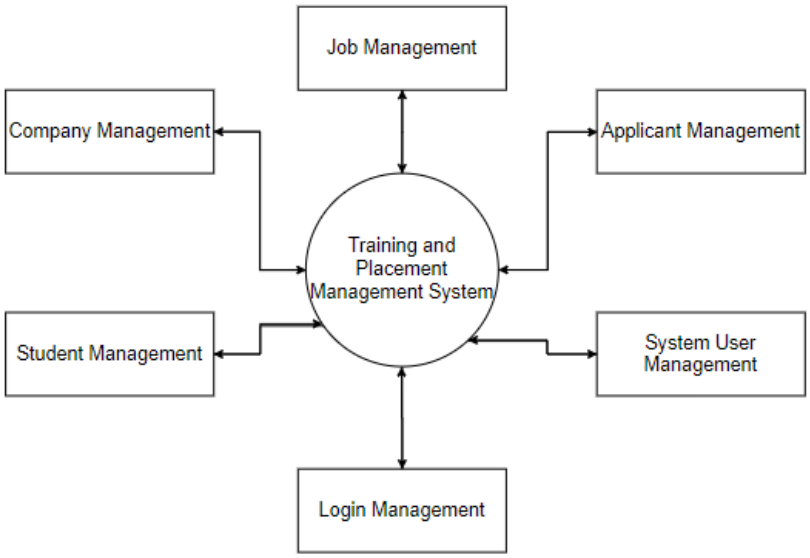
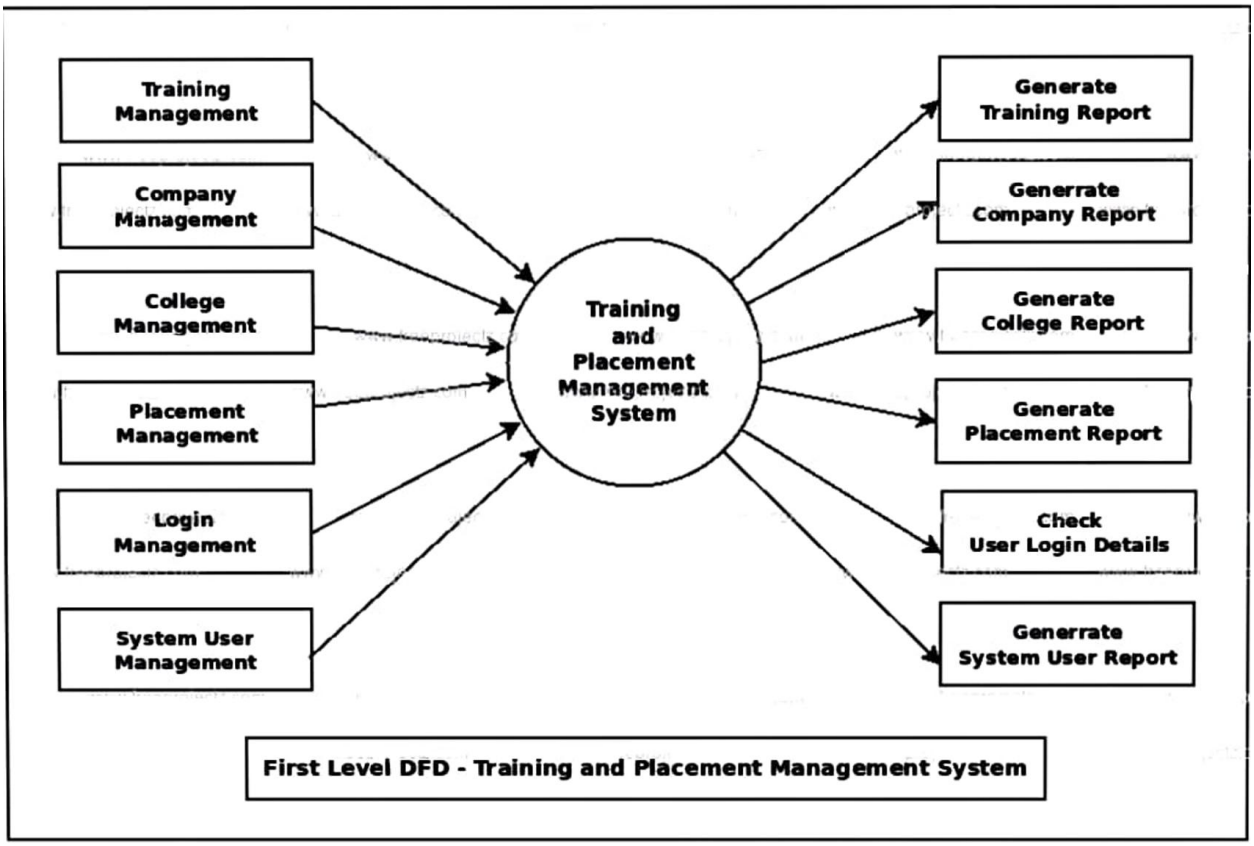
Training and Placement System

Data Flow Diagram

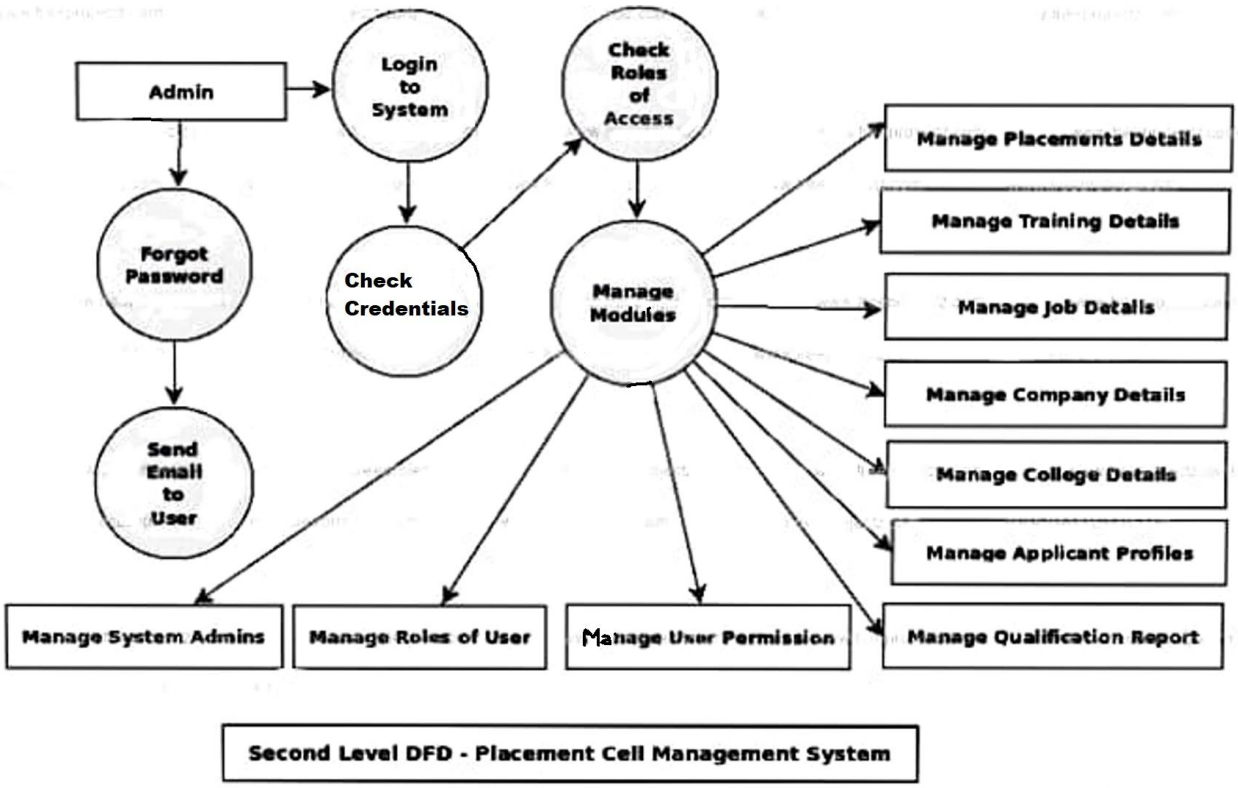
Level 0 DFD :



Level 1 DFD :


Training Management
Company Management
College Management
Placement Management
Login Management
System User Management
Training and Placement Management System
Generate Training Report
Generrate Company Report
Generate College Report
Generate Placement Report
Check User Login Details
Generrate System User Report
First Level DFD - Training and Placement Management System

Level 2 DFD :



Second Level DFD - Placement Cell Management System

Data Dictionary

Student l ogin = Student_Id + Password

Administrator l ogin = Administrator_Id + Password

Company Login = Company_Id + Password

Job_Details = Job_Id + Job_name

Student_Id = char + char + digit + digit + digit + digit

Administrator_Id = char + char + digit + digit + digit + digit

Company_Id = char + char + digit + digit + digit + digit

Course_Id = char + char + char + digit + digit + digit

Password = [char | digit | [@ | # | $ | & | *]]*

Application Form Details = Personal_details + Educational_details + Document_verification

Personal Details = [Student_Id + Student_name + Student_email_Id + Student_phone_number + Permanent_address + Student_CV_document_upload] *

Student_name = First_name + Middle_name + Last_name

Student_email_Id = [character] * + @ + Domain

Student_phone_number = digit[10]

Permanent_address = House_no + Street_name + Area + [City | Village | Town] + District + State + Pin_code + Landmark

Pin_code = digit[6]

Educational Details = [Course_Id + Course_name + Marksheet_class_10 +

Marksheet_class_12 + Marksheet_Graduation]*

Marksheet_class_10 = Marks_maths + Marks_science

Marksheet_class_12 = Marks_physics + Marks_chemistry + Marks_maths

Marksheet_Graduation = Marks_CGPA + Marks_SGPA

Application Form Details Review = Personal_details + Educational_details +

Document_verification

Add_Batch = [Application Form Details]*

Publish_Result = Marks_1stRound + Marks_2ndRound + Marks_3rdRound + [Approved | Declined }

Download_Report = [Publish_Result]*

Payment Details = Transaction_id + Amount + Mode_of_payment

Transaction_Id = [char] * + [digit] *

[Fine | Training | Application_Fee] = [Job_Id + Rate] + Tax + Convience_fee

Mode_of_payment = [Credit_card | Debit_card | UPI | Net_banking]

Payment Status = [Confirmed | Denied]

Application Confirmation = Student_name + Student_Id + Job_name + Job_Id +

Payment_status + Transaction_Id

Questionnaires

1. **State and explain with example,the rules of data flow between external entities, process and internal entities.**

   External Entity :

   An external entity, which are also known as terminators, sources, sinks, or actors, are an outside system or process that sends or receives data to and from the diagrammed system. They're either the sources or destinations of information, so they're usually placed on the diagram's edges. External entity symbols are similar across models except for Unified, which uses a stick-figure drawing instead of a rectangle, circle, or square.

   The rules associated with external entities are :

   - Each external entity must communicate with the system i n some way, thus there is always a data- flow between an external entity and a process within the system.
   - External entities may provide and receive data from a number of processes. It may be appropriate, for the sake of clarity and to avoid crisscrossing of data flows, to depict the same external entity at a number of points on the diagram. Where this is the case, a line is drawn across the left corner of the ellipse, for each occurrence of the external entity on the diagram. Customer is duplicated in his way in our example.

   Process:

   Process is a procedure that manipulates the data and its flow by taking incoming data, changing it, and producing an output with it. A process can do this by performing computations and using logic to sort the data, or change its flow of direction. Processes usually start from the top left of the DFD and finish on the bottom right of the diagram.

   The rules for processes are :

   - Process names should be an imperative verb specific to the activity in question, followed by a pithy and meaningful description of the object of the activity. Create Contract, or Schedule Jobs, as opposed t o using very general or non-specific verbs, such as Update Customer Details or Process Customer Call.
   - Processes may not act as data sources or sinks. Data flowing into a process must have some corresponding output, which is directly related to it. Similarly, data-flowing out of a process must have some corresponding input to which is directly related.

- Normally only processes that transform system data are shown on data-flow diagrams. Only where an enquiry is central to the system it is included.
- Where a process is changing data from a data store, only the changed information flow to the data store (and not the initial retrieval from the data store) is shown on the diagram.
- Where a process is passing information from a data store to an external entity or another process, only the flow from the data store to the process is shown on the diagram.

Internal Entity :

An internal entity is an entity (i.e., person, place, or thing) within the system that transforms data.

2. Distinguish between DFD and flowchart.

Data Flow Diagram (DFD)	Flowchart
1. The main objective is to represent the processes and data flow between them.	1. The main objective is to represents the flow of control in program.
2. It defines the flow and process of data input, data output, and storing data.	2. It has only a single type of arrow used to show the control flow in the flow chart.
3. It is the view of the system at a high level.	3. It is the view of the system at a lower level.
4. These are represented by five symbols.	4. These are represented by three symbols.
5. It deals with the logical aspect of the action.	5. It deals with the physical aspect of the action.
6. It defines the functionality of the system.	6. It shows how to make a system function.
7. It is used for complex systems.	7. It is not very suitable for a complex system.