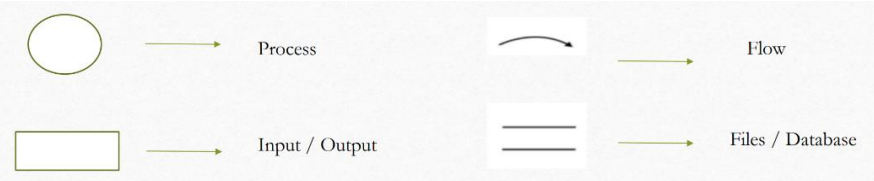


 VIT Vidyalankar Institute of Technology Accredited A+ by NAAC	Department of Computer Engineering A.Y-2025-26
---	---

Semester	T.E Semester V – CMPN
Subject	Web Development Lab
Subject Professor In-Charge	Prof. Divya Nimbalkar
Assisting Teachers	Prof. Divya Nimbalkar
Laboratory	M 516A

Student Name	Sunil Saini
Roll Number	23102A0036
Grade and Subject	
Teacher's Signature	

Experiment Number	6
Experiment Title	DFD-Data flow diagram
Project Title	Smart Hire: AI-Driven Interview Platform for Smart Recruitment
Project Overview	<p>This project aims to develop a two-sided AI-powered platform that streamlines the recruitment process for both interviewers and interviewees. For recruiters, the system automates resume shortlisting, suggests suitable roles, and analyses candidates' online interviews based on facial expressions, voice tone, and engagement. It also sends automatic acceptance or rejection emails and offers personalized task suggestions. On the interviewee side, the platform allows users to explore job openings, submit applications, and receive AI-driven feedback, even in the case of rejection.</p>
Github Link	https://github.com/Aashna890/SmartHire
Overview	<p>A DFD visually represents the flow of data within a system, showing how data moves between processes, external entities, and data stores.</p> <p>Components:</p> 

External Entities: "Developer" and "Recruiter" (rectangles) interact with the system, providing inputs and receiving outputs.

Processes: Ovals (e.g., "1.1 Update User," "2.1 Job Postings") perform tasks, transforming inputs to outputs.

Data Flows: Arrows (e.g., "Account registration," "View Job postings") labeled with data movement direction and name.

Data Stores: Open rectangles (e.g., _ User Accounts DB) store data for retrieval or updates.

Inputs/Outputs: Data entering (e.g., "User Data") or exiting (e.g., "Job List") processes.

Purpose: Illustrates system functionality and data handling without focusing on implementation details.

Levels of DFD

Context Level (Level 0): Single bubble (e.g., "Smart Hire System") showing all external entity interactions (e.g., "View Job postings," "Create Job Posting"). Provides a high-level overview.

Level 1: Breaks Level 0 into sub-processes (e.g., "1.1 Update User," "2.1 Job Postings") with detailed data flows and stores (e.g., _ User Accounts DB). Shows internal process interactions.

Why Stop at Level 1: Sufficient for most systems to understand data flow; deeper levels (e.g., Level 2) add complexity with diminishing returns unless highly detailed design is needed.

How We Split It So Far

Diagram 1 (Initial Context Level): Single "Smart Hire System" with flows like "Account registration," "Apply For Jobs" from Developer, and "Create Job Posting," "Give Application decisions" from Recruiter.

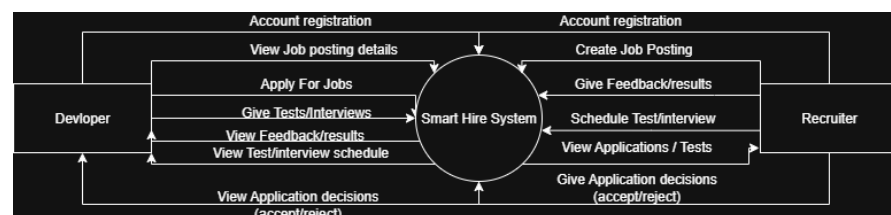


Diagram 2 (Refined Level 0): Updated names (e.g., "Confirm Registration," "Take Tests and Interviews") and subsystems (e.g., "Account Management," "Job and Application Processing").

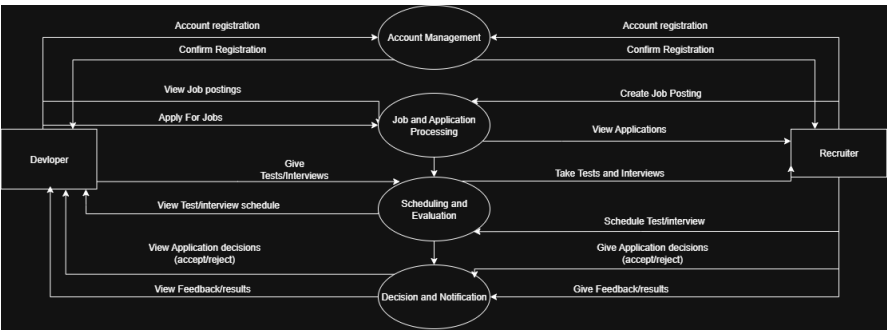
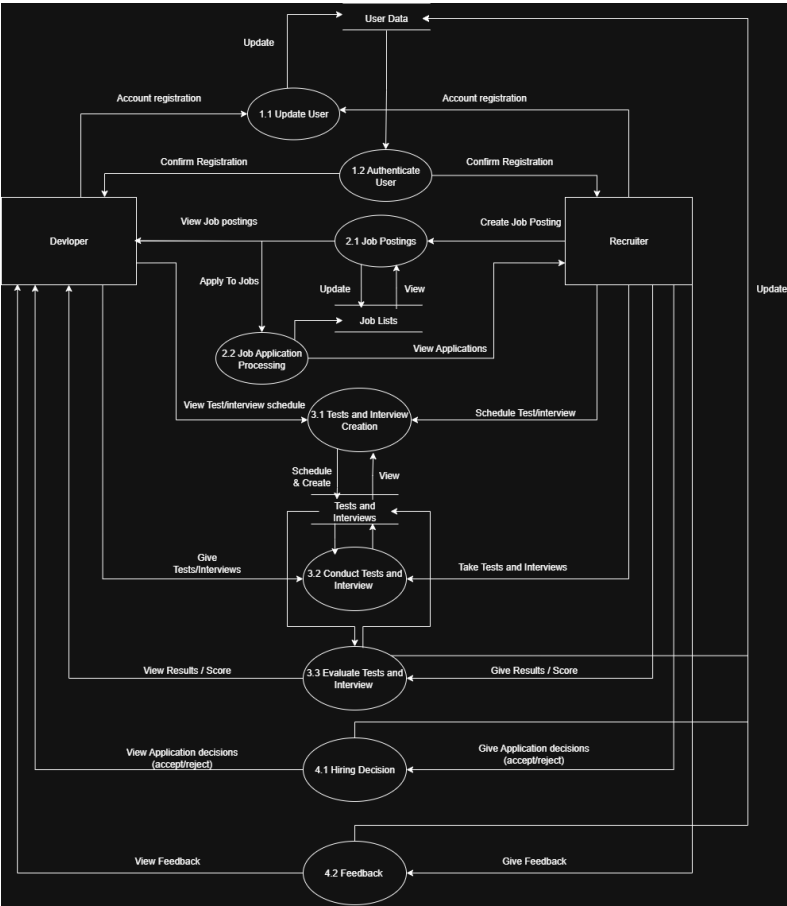


Diagram 3 (Level 1): Decomposed into sub-processes (e.g., "1.1 Update User," "3.1 Test and Interview Creation") with data stores (e.g., _ User Accounts DB) and detailed flows (e.g., "User Data," "Job List").



Conclusion

The DFD progression from Level 0 to Level 1 effectively captures the Smart Hire System’s data flow, starting broad and refining into actionable processes.

	The diagrams provide a clear, scalable blueprint for system design, balancing detail and simplicity for practical use.
--	--