

Data Flow Diagram Practice 4

34 Marks

Design a data flow diagram (DFD) for a University Research Grant Application System.

- Researchers can submit new grant applications, view the status of their submitted applications, and receive notifications regarding the outcome.
- Grant Reviewers can access submitted applications, review them, provide scores and comments, and recommend approval or rejection.
- The Grants Office Administrator manages researcher accounts, assigns reviewers to applications, tracks application progress, and finalises grant decisions.
- The system needs to maintain Researcher Profiles, Grant Application Details, Reviewer Assignments, Reviewer Scores and Comments, and Grant Decision Records.

Task:

1. Draw a Level 0 Data Flow Diagram for this University Research Grant Application System.
2. Decompose the "Process Grant Application" process to Level 1, showing more detailed sub-processes and data flows involved in an application moving from submission to initial review assignment.

Data Flow Diagram Practice 4 Mark Guide

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Level 0

Symbolisation	Marks	Logic and structure	Marks
External Entities	Provides correct symbol for data source [1 mark]	External Entities	Researcher [1 mark] Grant Reviewer [1 mark] Grants Office Administrator [1 mark]
Processes	Provides correct symbol for Processes [1 mark]	Processes	Submit Application Data [1 mark] Validate Application [1 mark] Record Application Details [1 mark] Notify Researcher of Submission [1 mark] Assign Reviewer to Application [1 mark] Notify Reviewer of Assignment [1 mark]
Data Stores	Provides correct symbol for data store [1 mark]	Data Stores	D: Data Store [1 mark]
Data flows	Provides correct arrows with one way flow [1 mark] Provides correct labels that explain relationships [1 mark]	Data flows	Data flows for Level 0 between all identified entities, processes, and data stores as described in the scenario [3 marks]

Level 1

Symbolisation	Marks	Logic and structure	Marks
External Entities	Provides correct symbol for data source [1 mark]	External Entities	Researcher [1 mark] Grant Reviewer [1 mark] Grants Office Administrator [1 mark]
Processes	Provides correct symbol for Processes [1 mark]	Processes	Browse Courses [1 mark] Select Course [1 mark] Submit Enrolment Request [1 mark] Validate Enrolment [1 mark] Process Course Payment [1 mark] Update Enrolment Status [1 mark]
Data Stores	Provides correct symbol for data store [1 mark]	Data Stores	D: Data Store [1 mark]
Data flows	Provides correct arrows with one way flow [1 mark] Provides correct labels that explain relationships [1 mark]	Data flows	Data flows for Level 0 between all identified entities, processes, and data stores as described in the scenario [3 marks]