**Data Flow Diagram (DFD) for Agile Tracking System**

**Introduction**

A Data Flow Diagram (DFD) provides a graphical representation of how data moves through the Agile Tracking System. This system allows users (employees and admins) to log in, view tasks, track their progress, manage teams, and oversee project workflows in an agile environment.

**Level 0 DFD (Context Diagram)**

At the highest level, the system is represented as a single process interacting with external entities.

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| External Entities |

| User (Employee) |

| Admin |

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| (Login, View Tasks, Update Progress)

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| Agile Tracking System |

| (Process: 1.0) |

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| (Retrieves task/team/user data)

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| Data Store: Agile Data |

| (Users, Tasks, |

| Scrum Teams) |

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**Explanation:**

* **External Entity (User - Employee/Admin):** Interacts with the system by logging in, viewing tasks, updating progress, and managing teams.
* **Process (Agile Tracking System):** Manages user authentication, task tracking, and team management.
* **Data Store (Agile Data):** Stores users, tasks, and scrum teams.

**Level 1 DFD (Detailed Breakdown)**

This level decomposes the main process into smaller sub-processes.

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| External Entity |

| (User/Admin) |

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| (Login)

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| Process: 1.1 - Handle |

| User Authentication |

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| (Validates credentials)

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| Process: 1.2 - Fetch |

| User Dashboard |

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| (Retrieves tasks/teams)

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| Data Store: Agile Data |

| (Tasks, Users, Teams) |

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| (Returns task/team data)

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| Process: 1.3 - Render |

| Dashboard View |

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| (Admin manages users/tasks)

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| Process: 1.4 - Update |

| Task Status |

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| (Saves changes)

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| Data Store: Agile Data |

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**Explanation:**

* **Process 1.1 - Handle User Authentication:** Validates user credentials (Employee or Admin).
* **Process 1.2 - Fetch User Dashboard:** Retrieves relevant tasks and team details.
* **Process 1.3 - Render Dashboard View:** Displays the user’s tasks and scrum team data.
* **Process 1.4 - Update Task Status:** Allows users to update task progress and admins to manage team assignments.
* **Data Store (Agile Data):** Stores all task, user, and team-related information.

**Conclusion**

The Agile Tracking System efficiently handles user authentication, task tracking, and team management. The Level-0 and Level-1 DFDs illustrate how data flows within the system, from login to task updates. This structured approach ensures a clear understanding of the system’s functionality, aiding in further development and optimization.