# Agile Track System - Data Flow Diagram (DFD)

## Level 0: Context Diagram (High-Level Overview)

This shows how external users (Admin/User) interact with the Agile Track System, and how data flows in/out of the system.

### Components:

1. External Entities:  
 - User  
 - Admin

2. System: Agile Track System (Main Process)

3. Data Stores:  
 - User Data (user profiles, credentials, roles)  
 - Scrum Data (scrum teams, tasks, status)  
 - Task History Data (task progress history)

4. Outputs:  
 - Rendered Pages (Dashboard, Login, Profiles, Scrum Details)

### Level 0 Data Flow Summary:

User/Admin → Agile Track System ←→ User Data  
 ↓ ↑  
 Rendered Pages ←→ Scrum Data  
 ↑  
 Task History Data

## Level 1 DFD (Detailed View)

Breaks the Agile Track System into sub-processes and shows how each part works internally.

### Sub-processes:

1. Login/SignUp Handler  
 - Interacts with User Data to validate or create accounts.  
2. Routing System  
 - Decides which page/component to render (Welcome, Login, Dashboard, Profiles).  
3. Dashboard Module  
 - Displays Scrum Teams.  
 - Fetches Scrum details (team, tasks, users) from Scrum Data.  
4. Scrum Details Handler  
 - Displays tasks and team members for selected scrum.  
5. Profiles Handler  
 - Fetches tasks worked by a user.  
 - For admin: fetches all users and allows "Add New User".  
6. Add/Update Scrum Module (Admin Only)  
 - Adds new scrums and tasks to Scrum Data.  
7. Update Task Status  
 - Allows status change of tasks.  
 - Updates in both Scrum Data and Task History Data.

### Level 1 DFD Summary:

User/Admin → Routing System → Respective Page Module  
  
Login Handler ←→ User Data  
SignUp Handler ←→ User Data  
  
Dashboard → Fetch Scrum Teams ←→ Scrum Data  
 → View Scrum Details ←→ Scrum Data, Task History Data  
  
Profiles Page → User Profile & Task Data ←→ Scrum Data, Task History Data  
  
Add New User (Admin) → Add to User Data  
Add New Scrum (Admin) → Add to Scrum Data  
  
Update Task Status (Admin) → Modify Scrum Data & History

## Diagram Suggestion (to draw on paper or tool like Lucidchart / draw.io)

### Level 0:

[User] --------  
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 \   
 → [Agile Track System] ←→ [User Data]  
 / ←→ [Scrum Data]  
[Admin] -------- ←→ [Task History Data]

### Level 1:

[User/Admin]  
 ↓  
 [Routing System]  
 ↓  
 ┌───────────────┐  
 │ Login Handler │ ←→ User Data  
 └───────────────┘  
 ┌───────────────┐  
 │ Signup Handler│ ←→ User Data  
 └───────────────┘  
 ┌─────────────────┐  
 │ Dashboard Module│ ←→ Scrum Data  
 └─────────────────┘  
 ┌────────────────────────────┐  
 │ Scrum Details Handler │ ←→ Scrum Data & Task History  
 └────────────────────────────┘  
 ┌────────────────────────┐  
 │ Profiles Handler │ ←→ User Data, Scrum Data, History  
 └────────────────────────┘  
 ┌─────────────────────┐  
 │ Add/Update Scrum │ → Scrum Data  
 └─────────────────────┘  
 ┌─────────────────────┐  
 │ Update Task Status │ → Scrum Data & History  
 └─────────────────────┘