**Agile Tracking System**

This Data Flow Diagram (DFD) represents the processes and interactions within the Agile Tracking System App, which is designed for managing user profiles, tasks, scrum teams and roles. It includes both admin and user functionalities, such as adding users, managing tasks and handling scrum teams. The app also supports login, signup and logout functionalities, making it essential for role-based access control.

**Level 0: Context Diagram**

**Overview:**

The Agile Track System App facilitates the management of users, scrum teams, tasks and their respective statuses. Users can log in, view their dashboards, and update profile information. Admins can manage users, create or edit scrum teams and modify task details.

**Entities & Processes:**

* **User** → Logs in, views their dashboard, manages profile details and interacts with tasks.
* **Admin** → Has the ability to manage users, tasks, scrum teams and assign/update task statuses.
* **Agile Track System App (Process 1.0)** → Handles all app functionalities, including user authentication, profile management, scrum team management and task management.
* **LocalStorage (Data Store)** → Stores user profiles, tasks, scrum teams and login details persistently.

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| Agile Track System App |

| (Process 1.0) |

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| LocalStorage |

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**Level 1: Detailed Breakdown**

This level provides a more detailed view of individual processes involved in the Agile Tracking System App.

**Process 1.1 - User Authentication (Login/Signup/Role Check)**

* Handles user login and signup.
* Verifies the user's role (Admin or Regular User).
* Stores session data (e.g., role and authentication details) in **localStorage**.

**Process 1.2 - Profile Display and Dashboard**

* Displays user profile information and task status on the dashboard.
* Regular users see their tasks and profile details.
* Admin users can manage users and tasks, view scrum teams and assign tasks.

**Process 1.3 - Task Management (Viewing, Editing, Deleting, Changing Status)**

* Users can view their assigned tasks and their status.
* Admins can edit task details, change the status, delete tasks and assign tasks to users.

**Process 1.4 - Scrum Team Management (Admin Only)**

* Admins can create, edit, or delete scrum teams.
* Scrum teams consist of a group of users working on specific tasks.

**Process 1.5 - User Management (Admin Only)**

* Admins can add, edit, or delete users.
* Admins manage user roles (Admin or Regular User) and assign users to scrum teams.

**Process 1.6 - Logout**

* Logs the user out of the system and clears the session data in **localStorage**.

**Process 1.7 - UI Enhancements**

* Handles UI updates, such as smooth transitions, responsive design, and error handling.

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| Process 1.1 - User |

| Authentication (Login, |

| Signup, Role Check) |

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| Process 1.2 - Profile & |

| Dashboard Display (Tasks, |

| Profile Information) |

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| Process 1.3 - Task |

| Management (View, Edit, |

| Delete, Change Status) |

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| Process 1.4 - Scrum Team |

| Management (Admin Only) |

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| Process 1.5 - User |

| Management (Admin Only) |

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| Process 1.6 - Logout |

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| Process 1.7 - UI |

| Enhancements |

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| LocalStorage |

| (Stores Users, Tasks, Teams)|

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**Data Flow**

**Step 1: User Authentication**

* User logs in or signs up.
* The app checks the user credentials and role (Admin or Regular User) from localStorage.
* Authentication data is saved in localStorage for session management.

**Step 2: Profile Display & Dashboard**

* After login, Process 1.2 displays the user’s profile and task details in the dashboard.
* Admins see a list of all users and tasks along with options to manage users and scrum teams.
* Regular users see their own tasks, status and profile details.

**Step 3: Task Management (Viewing, Editing, Deleting, Changing Status)**

* Users can view the tasks assigned to them and their status.
* Admins have the option to edit, delete or assign tasks to any user.
* The task’s status can also be changed based on progress (e.g., To Do, In Progress, Done).

**Step 4: Scrum Team Management (Admin Only)**

* Admins can create and manage scrum teams by adding or removing users.
* Scrum teams are linked to tasks and team members are responsible for completing them.

**Step 5: User Management (Admin Only)**

* Admin can add new users, edit existing user profiles, and delete users.
* Admin assigns users to different scrum teams and updates their role (Admin or Regular User).

**Step 6: Logout**

* User logs out and session data is cleared from localStorage.

**Step 7: UI Enhancements**

* UI updates include smooth transitions, error handling, and responsive design.
* Changes are dynamically reflected in the user interface.

**Data Persistence:**

* All data such as users, tasks, and scrum teams are persisted in localStorage so that they remain available across page reloads.
* Updates such as adding/removing users, tasks or changing task status are immediately reflected in localStorage.