**DATA FLOW DIAGRAM OF AGILE TRACK SYSTEM**

The **Agile Track System** is a web-based **Single Page Application (SPA)** that helps teams manage **scrum-based projects** efficiently. It provides **user authentication, and functionalities for tracking scrum teams, tasks, and profiles.**

**Features**

* **User** - Can view their assigned tasks and scrum teams.
* **Admin** - Can manage scrum teams, tasks, and user profiles.
* **Authentication & Authorization:** Login/Signup functionality with role-based redirection.
* **Scrum Team Management:** View and manage scrum teams and their tasks.
* **User Profiles:** Users can track their tasks, and Admins can add and manage users.
* **Task Tracking:** Tasks have statuses that can be updated (To Do, In Progress, Done).
* **Navigation:** Dashboard, Profile, and Logout links persist throughout the application.
* **Local Storage:** Data (users, teams, tasks) is stored in localStorage for persistence.

**LEVEL 0 : CONTEXT DIAGRAM**

At this level, the **entire system as a single process** interacting with users.

**Entities:**

1. **User** (Employee) : Logs in and views scrum teams & tasks.
2. **Admin** : Logs in and manages users, scrum teams, and tasks.

* User/Admin logs in
* System retrieves data from Local Storage
* User views tasks and scrum teams
* Admin manages scrum teams and tasks
* Updates are stored back into Local Storage

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| User | ----> | Agile Track | ----> | Local Storage |

| (Employee) | <---- | System | <---- | (Users, Tasks, |

+------------------+ +------------------+ | Scrum Teams) |

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| Admin | ----> | Agile Track |

| (Manager) | <---- | System |

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**LEVEL 01 : DETAILED DESCRIPTION**

 **Authentication (Login/Signup)**

* User enters credentials.
* System validates credentials from Local Storage.
* Redirects based on role (User/Admin).

 **Dashboard**

* Fetches scrum teams from Local Storage.
* Displays list of teams and tasks.

 **Task Management**

* Users view their assigned tasks.
* Admins create, update, and assign tasks.
* Updates stored in Local Storage.

 **User Management**

* Admin can add and manage users.
* Admin assigns tasks to users.

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| Login Page |

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| 1. User enters |

| credentials |

| 2. System checks |

| Local Storage |

| 3. Redirects to |

| Dashboard |

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| Dashboard |

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| 1. Fetch Scrum |

| Teams from |

| Local Storage |

| 2. Display list |

| of Teams |

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| Scrum Team | | Task Page |

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| 1. View Team Info | | 1. View Tasks |

| 2. Click Details | | 2. Change Status |

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| User Page |

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| 1. View My Tasks |

| 2. Update Status |

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**(1) Authentication System (Login, Signup, Role-Based Access)**

**Process:**

* User enters **email & password**.
* System **validates credentials** from Local Storage.
* If valid, system retrieves **user role** (User/Admin).
* System **redirects** to the respective dashboard.
* If signup, system stores **new user credentials** in Local Storage.

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| Login/Signup |

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| 1. Enter Email |

| & Password |

| 2. Check in |

| Local Storage |

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| Verify User | ---> | Redirect to |

| Credentials | | Dashboard Based |

|---------------------| | on Role |

| 1. Match email | |---------------------|

| & password | | User → UserDash |

| 2. If match, get | | Admin → AdminDash |

| user role | +---------------------+

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| Signup Process |

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| 1. Store New User |

| in LocalStorage |

| 2. Redirect to |

| Login Page |

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**(2) Scrum Team & Task Management**

**Process:**

* System fetches **Scrum Teams & Tasks** from Local Storage.
* Admin can **add**, **update**, or **assign** tasks.
* Users can **view** their assigned tasks.
* Updates are stored back in **Local Storage**.

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| Scrum Team Management |

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| 1. Fetch Teams & Tasks |

| from LocalStorage |

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| Assign Tasks | ---> | Update Task Status |

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| 1. Admin selects user | | 1. User selects Task |

| 2. Assigns task to user | | 2. Updates status |

| 3. Save to LocalStorage | | 3. Save to Storage |

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**(3) User Dashboard (Task Status Update, Profile, Logout)**

**Process:**

* User **views their assigned tasks**.
* User **updates task progress**.
* System **stores updated tasks** in Local Storage.
* User **can log out** .

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| User Dashboard |

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| 1. Fetch User Tasks |

| 2. Display on UI |

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| Update Task Status |

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| 1. Select Task |

| 2. Change Status |

| 3. Save to Storage |

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| Logout Process |

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| 1. Clear Session |

| 2. Redirect to Login|

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**(4) Admin Dashboard (User & Team Management)**

**Process:**

* Admin can **view** all users and teams.
* Admin can **add a new user** (stored in Local Storage).
* Admin can **assign tasks**.

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| Admin Dashboard |

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| 1. View Users & Teams |

| 2. Display on UI |

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| Add New User |

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| 1. Admin enters data |

| 2. Save to Storage |

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| Assign Task |

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| 1. Select User |

| 2. Assign Task |

| 3. Save to Storage |

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