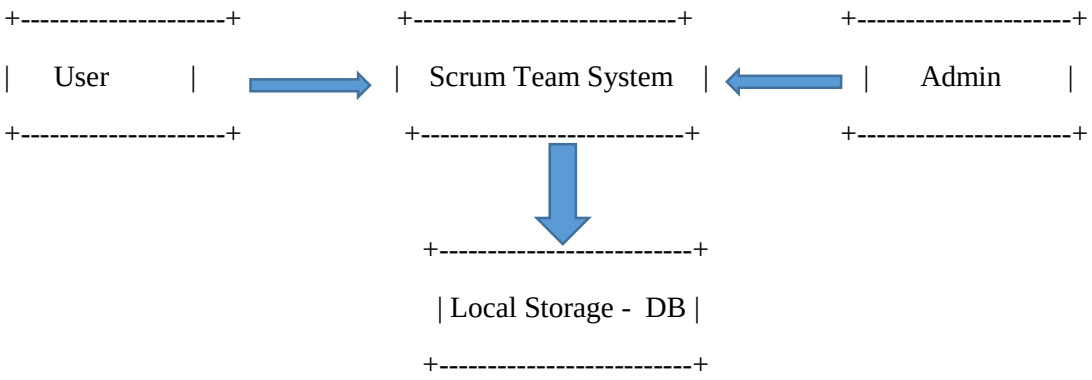
AGILE TRACK SYSTEM

Data flow diagram for the Agile track system, including all interactions between users, admins, scrum teams, tasks, and profiles. The DFD will have multiple levels:

- **Level 0 (Context Diagram)**: Shows the overall system and how external entities (Users & Admins) interact with it.
- **Level 1 DFD**: Breaks down the major processes in detail.

Level 0: Context Diagram



- **User/Admin** interacts with the **Scrum Team System**.
- The system manages **Users, Scrum Teams, and Tasks**.
- Data is stored in **Local Storage (acting as a database).**

Level 1: Context Diagram

Level 1: User Process

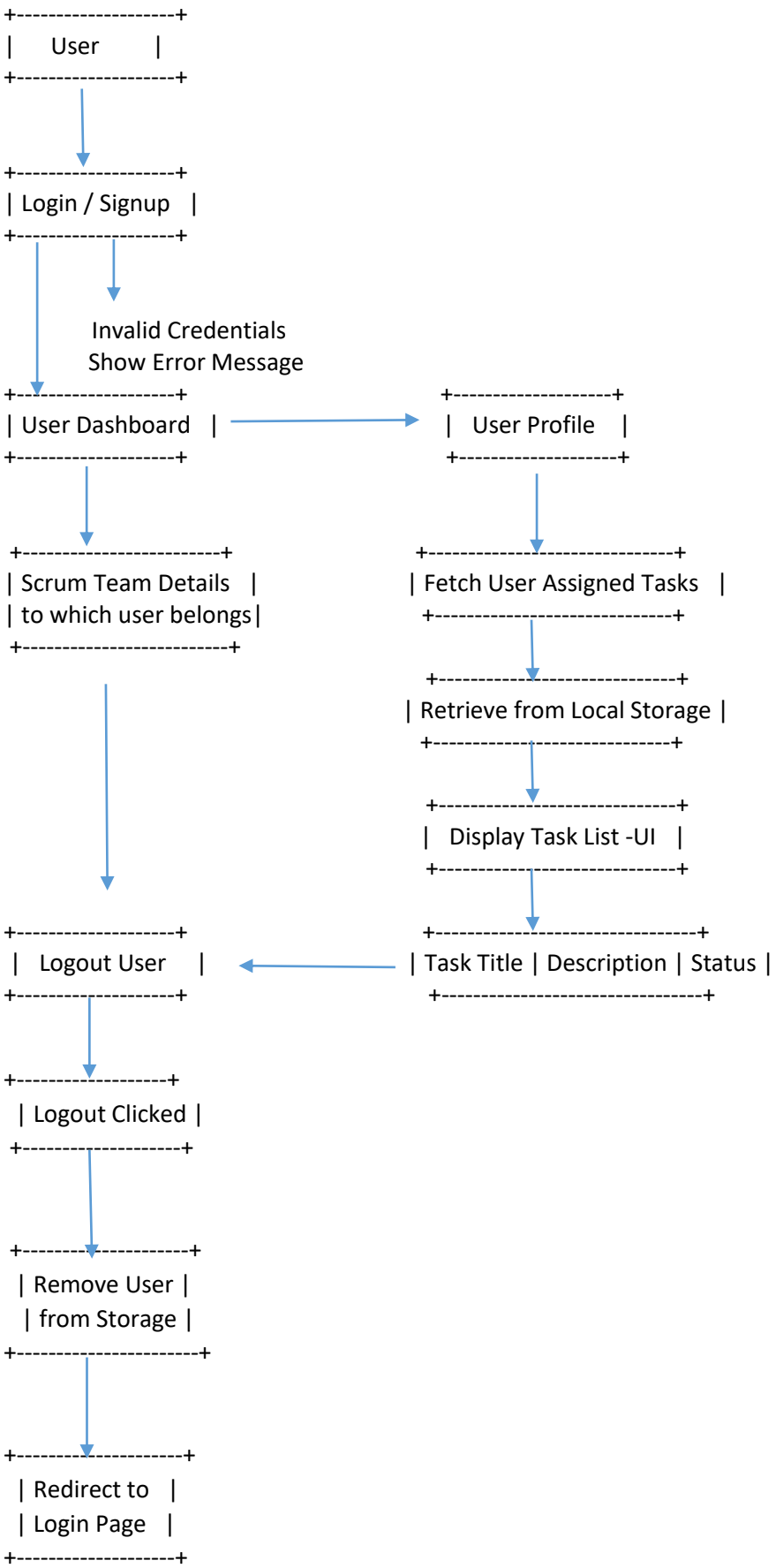
- Users **Login/Signup**.
- After login, they access the **User Dashboard** (Scrum teams they belong to).
- Clicking **Get Details** shows **Scrum Team Details** (tasks, progress, and team members).
- The **User Profile** displays task history.

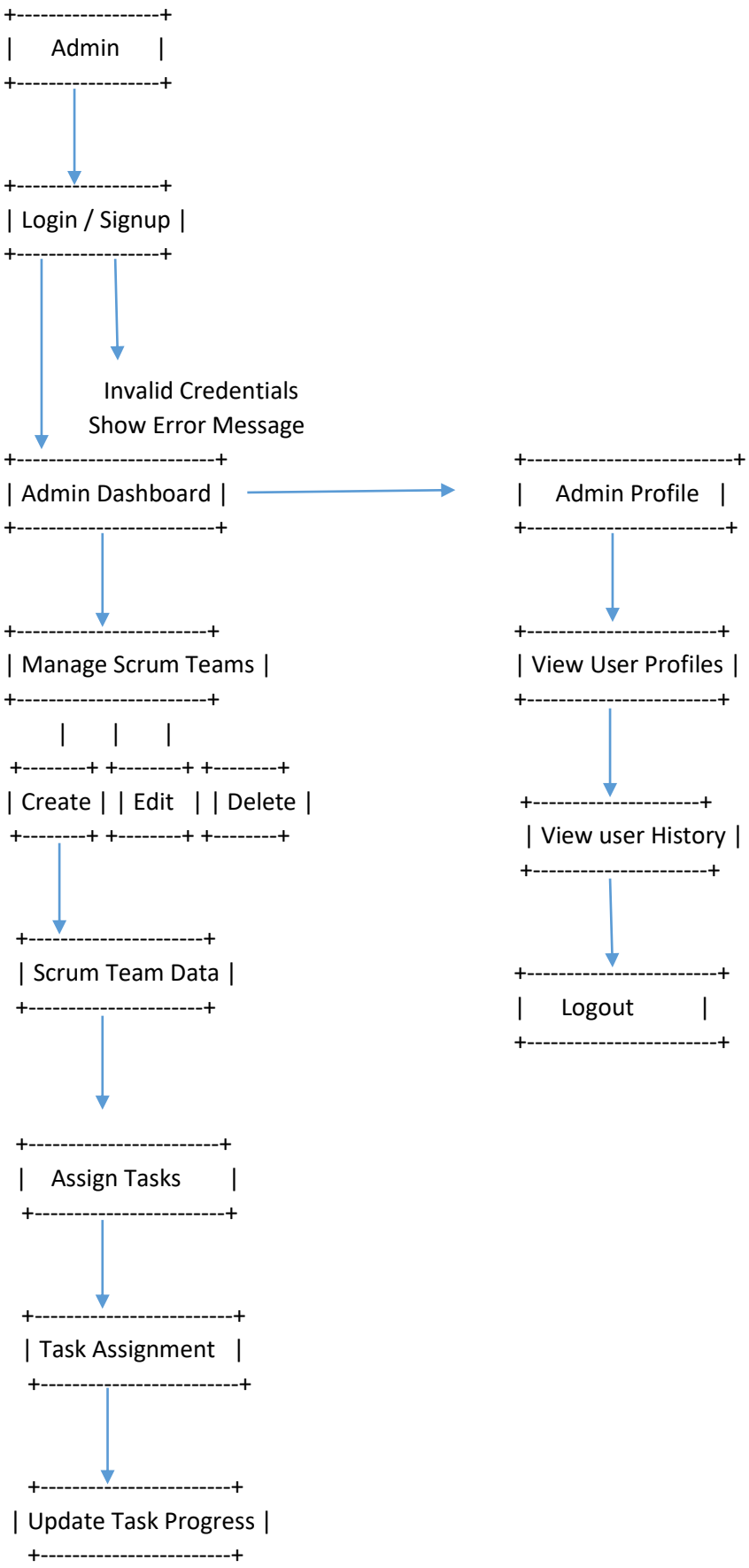
• Level **1: Admin Process**

- Admins **Login/Signup**.
- The **Admin Dashboard** shows all scrum teams and available actions.
- Admins can:
  - **Manage Scrum** (Add, Edit, Delete teams).
  - **Assign Tasks** to users.
  - **Manage Users** (View history, Add new users).

• Level **1: Local Storage (DB)**

- Stores:
  - **Users Data** (Credentials, roles, task assignments).
  - **Scrum Teams Data** (Teams, members, tasks).
  - **Tasks Data** (Task details and progress).


User
Login / Signup
Invalid Credentials
Show Error Message
User Dashboard
User Profile
Scrum Team Details
to which user belongs
Fetch User Assigned Tasks
Retrieve from Local Storage
Display Task List -UI
Task Title | Description | Status
Logout User
Logout Clicked
Remove User
from Storage
Redirect to
Login Page


Admin
Login / Signup
Invalid Credentials
Show Error Message
Admin Dashboard
Manage Scrum Teams
Create
Edit
Delete
Scrum Team Data
Assign Tasks
Task Assignment
Update Task Progress
Admin Profile
View User Profiles
View user History
Logout

1. External Entity: Admin

- Logs in / Signs up
- Adds Users
- Manages Scrum Teams
- Assigns & Updates Tasks

2. Processes (Main Functionalities)

- **Authenticate Admin**
  - Input: Email & Password
  - Process: Validate Credentials
  - Output: Redirect to Admin Dashboard / Error Message
- **Add New User**
  - Input: Name, Email, Password, Role Selection (Admin/User)
  - Process: Store in User Database
  - Output: User Created / Error Message
- **Manage Scrum Teams**
  - Input: Admin Actions (Create, Edit, Delete Teams)
  - Process: Update Scrum Team Data
  - Output: Updated Team List / Error Message
- **Assign Tasks to Users**
  - Input: Select User, Assign Task
  - Process: Update Task Data in Local Storage
  - Output: Task Assigned / Error Message
- **Update Task Progress**
  - Input: Change Task Status (To-Do → In Progress → Done)
  - Process: Modify Task Status in Database
  - Output: Updated Task Status / Error Message
- **View User Profiles & Task History**
  - Input: Select User Profile
  - Process: Retrieve User Task History
  - Output: Display Task Details
- **Logout**
  - Input: Logout Action
  - Process: Clear Session, Redirect to Login Page
  - Output: Logout Confirmation.

Conclusion for DFD

The **Data Flow Diagram (DFD)** for **Agile Track System** project effectively represents the flow of information between the **Admin, User, and System** while ensuring data consistency and security.

- **Admin Functionalities:**
  - Manages user accounts.
  - Handles **scrum team creation, task assignment, and progress updates**.
  - Views **user profiles and task history** for better tracking.
- **User Functionalities:**
  - Can log in and view their **assigned tasks and scrum teams**.
  - Has a **dedicated profile page** to track progress.
- **Authentication & Security:**
  - The system ensures **only authenticated users/admins** can access their dashboards.
  - If unauthorized, users are redirected to the **login/signup page**.
- **Data Handling & Error Management:**
  - Data is stored in **local Storage**, ensuring persistence across sessions.
  - If incorrect inputs are provided, proper **error messages** guide users.