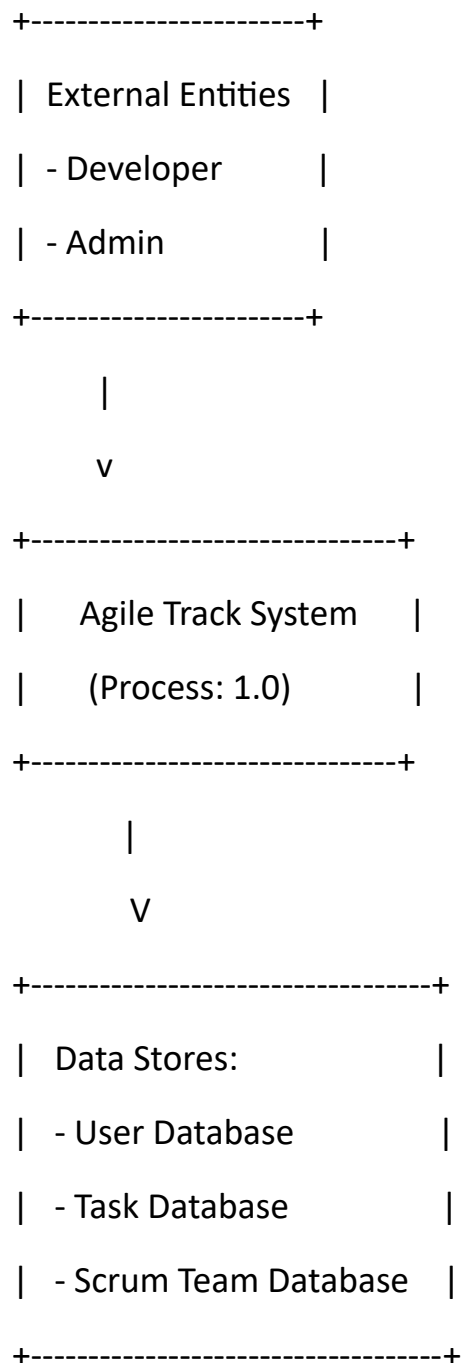# Agile-Track-System

Data-Flow-Diagram

Level 0 (Context Diagram)

At the highest level, the **Agile Track System** interacts with different external entities:

```
+-----------------------+

|  External Entities   |

|  - Developer          |

|  - Admin              |

+-----------------------+

     |

     v

+-------------------------------+

|    Agile Track System     |

|    (Process: 1.0)          |

+-------------------------------+

     |

     V

+----------------------------------+

|  Data Stores:                |

|  - User Database             |

|  - Task Database             |

|  - Scrum Team Database    |

+----------------------------------+
```
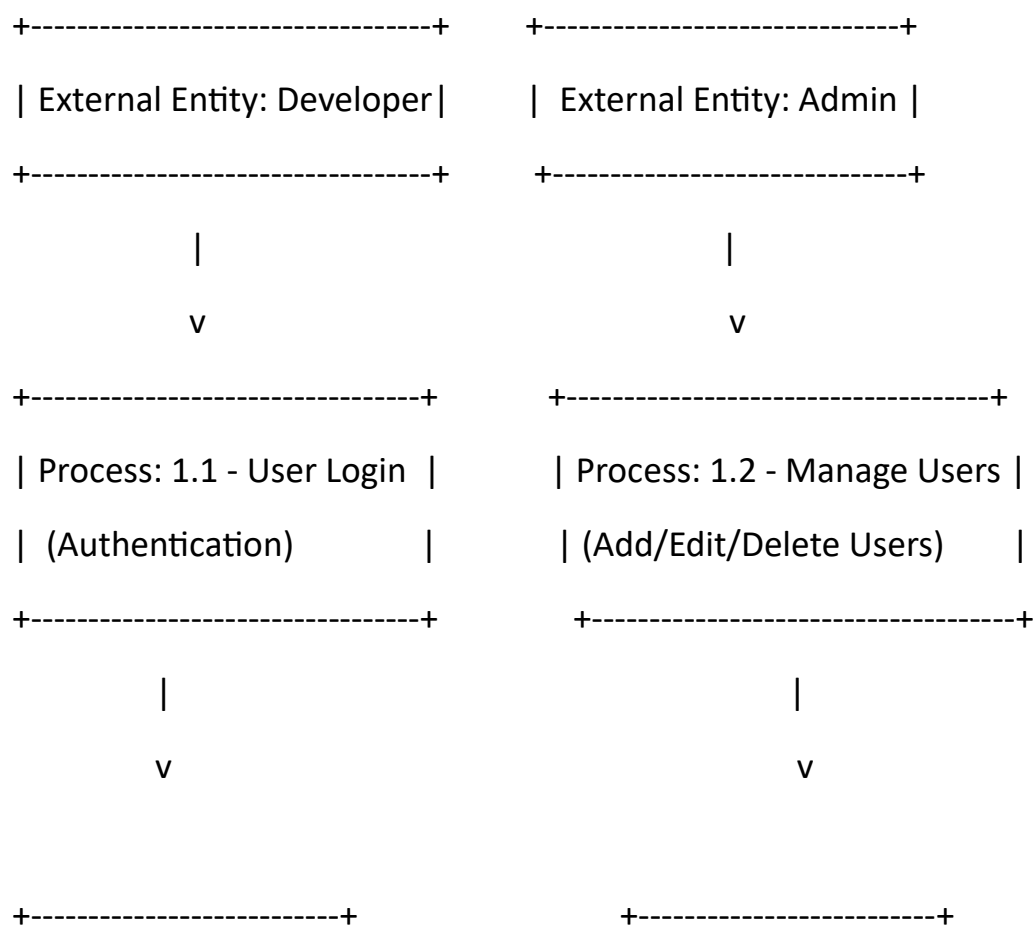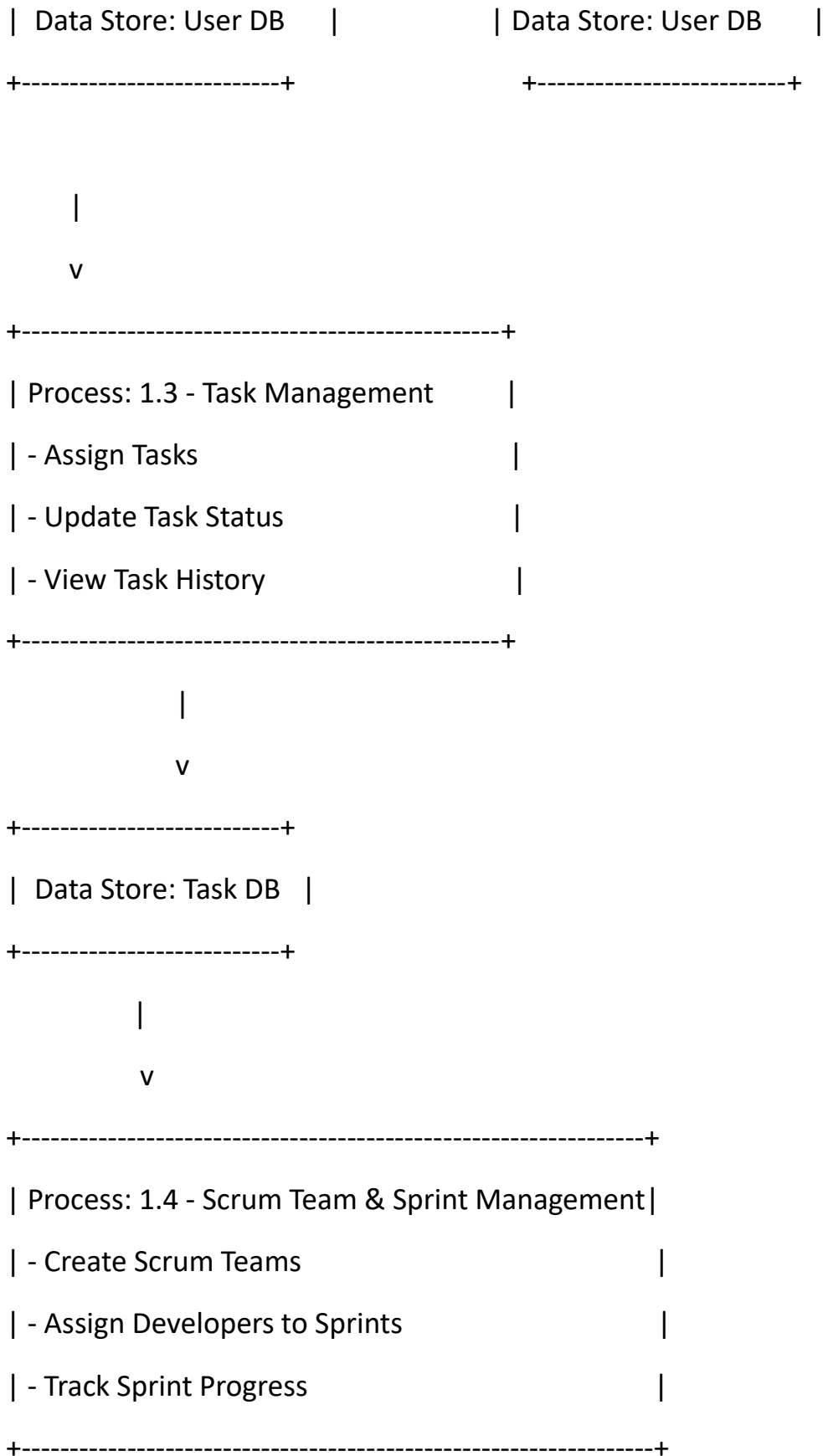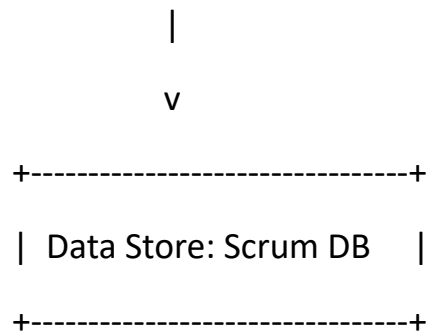
Explanation (Level 0)

- **External Entities**: Developers, Scrum Masters, Product Owners, and Admins interact with the system.

- **Agile Track System (Process 1.0)**: The main system processes requests related to task management, scrum tracking, and notifications.

- **Data Stores**: Information is stored in multiple databases (Users, Tasks, Scrum Teams, and Notifications).

Level 1 (Decomposed Processes)

Now, let's break down the **Agile Track System (Process 1.0)** into multiple sub-processes.

```
+--------------------------------+        +------------------------------+

| External Entity: Developer|        |  External Entity: Admin |

+--------------------------------+        +------------------------------+

              |                                      |

              v                                      v

+--------------------------------+        +-------------------------------------+

| Process: 1.1 - User Login  |        | Process: 1.2 - Manage Users |

|  (Authentication)          |        | (Add/Edit/Delete Users)      |

+--------------------------------+        +-------------------------------------+

              |                                      |

              v                                      v


+-------------------------+                +-------------------------+
```

```
| Data Store: User DB    |              | Data Store: User DB     |

+--------------------------+            +------------------------+


      |

      v

+------------------------------------------------+

| Process: 1.3 - Task Management       |

| - Assign Tasks                       |

| - Update Task Status                 |

| - View Task History                  |

+------------------------------------------------+

          |

          v

+--------------------------+

|  Data Store: Task DB   |

+--------------------------+

        |

        v

+----------------------------------------------------------------+

| Process: 1.4 - Scrum Team & Sprint Management|

| - Create Scrum Teams                         |

| - Assign Developers to Sprints               |

| - Track Sprint Progress                      |

+----------------------------------------------------------------+
```

```
            |
            v

+-------------------------------+

|  Data Store: Scrum DB    |

+-------------------------------+
```

Explanation (Level 1)

1. **User Login (1.1):** Developers, Admins, and Scrum Masters authenticate via the **User DB**.

2. **Manage Users (1.2):** Admins can add, edit, or delete users.

3. **Task Management (1.3):** Developers update tasks, assign tasks, and track history.

4. **Scrum Team & Sprint Management (1.4):** Scrum Masters create teams, assign tasks, and monitor sprint progress.