Fleetwise Application Details, Schema and UI Design Specifications

# Primary Objective

The primary purpose of Fleetwise is to streamline the management of physical assets across various locations and departments within an organization. By leveraging cutting-edge technology, this application aims to enhance asset visibility, improve accountability, and support strategic decision-making.

# General Overview

Audience members can create assets and associate many fields such as price, quantity, storage location with the said asset. Audience members who are the original creator of the assets are also allocated the ability to assign other members as collaborators. Collaborators have the same privilege as the user who created the asset initially. Collaborators are only allowed for composite assets and only allow the creator to remove the asset. Collaborators however can use the selected asset to their own needs. The creator can change the permission of the selected asset at any time. Required fields are marked with an asterisk and must be completed prior to adding any asset.

Every selected asset can be categorized. The same asset can be placed into multiple categories. Audience members can view the categorized asset in various forms and can also download them if required. Every selected asset can also be allocated their own maintenance plan. Once a maintenance plan is set, the asset cannot be added into another maintenance plan. This is by design. Assets that require weekly maintenance cannot also request yearly maintenance. Audience members can bulk upload assets instead of filling them out one by one. Download the selected template and fill in the fields. **Adding more than required fields will not support uploading selected asset.** Download asset list with a simple save button.

# Application Schema

All schema that are marked with an asterisk (\*) consists of basic audit columns.

## Audit Columns

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required (From user) |
| 1 | Created At | The date the report was created | N (auto populated) |
| 2 | Created By | The user id of the audience that created the report | N (auto populated) |
| 3 | Updated At | The date the report was last updated | N (auto populated) |
| 4 | Updated By | The user id of the audience who updated the report latest | N (auto populated) |
| 5 | Shareable Groups | Collaborators of the select table. Users can be added by the creator. | N (auto populated) |

## Profile\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required (From user) |
| 1 | Username | The username of the selected audience | Y |
| 2 | Full Name | The full name of the selected audience | Y |
| 3 | Avatar URL | The image associated with the selected audience | N |
| 4 | Email Address | The email address of the selected audience | N (auto populated) |
| 5 | Phone Number | The phone number of the selected audience | N |
| 6 | Appearance | Visual enhancements such as dark mode and light mode | N |
| 7 | About Me | Description of the selected audience | N |
| 8 | Grid View | View asset details in grid mode or list mode | N (defaults to N) |
| 9 | Online Status | Is the user online. | N |
| 10 | Role | The role of the user | N |

## Storage Locations\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | Storage Location | The list of options that is used to store an item. The audience can add new storage locations if required | Y (auto populated) |

## Category\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The id of the created category | N (auto populated) |
| 2 | Name | The name of the selected category | Y |
| 3 | Description | The description of the selected category | Y |
| 4 | Color | The color code for the selected category | Y (default to white) |
| 5 | Status | The status of the selected category. Foreign key references to the Status table. | Y |
| 6 | Max Item Limit | The limit of maximum numbers that can be stored in the selected category | Y |
| 7 | Min Item Limit | The limit of minimum numbers that can be stored in the selected category | Y |

## Category Item\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The id of the created category | N (auto populated) |
| 2 | Category ID | References the ID of the selected category | Y |
| 3 | Item ID | References the ID of the selected asset | Y |

## Maintenance plan\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The id of the created maintenance plan | N (auto populated) |
| 2 | Name | The name of the selected maintenance plan | Y |
| 3 | Description | The description of the selected maintenance plan | Y |
| 4 | Color | The color code for the selected maintenance plan | Y (default to white) |
| 5 | Maintenance Status | The status of the selected maintenance plan. Foreign key references to the Maintenance Status table. | Y |
| 6 | Max Item Limit | The limit of maximum numbers that can be stored in the selected maintenance plan | Y |
| 7 | Min Item Limit | The limit of minimum numbers that can be stored in the selected maintenance plan | Y |
| 8 | Plan Type | The type of plan associated with this created plan. Eg, annual, daily etc | Y |
| 9 | Location | The location of the plan. | N |

## Maintenance Plan Item\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The auto populated ID. | N (auto populated) |
| 2 | Maintenance Plan ID | References the ID of the selected maintenance plan | Y |
| 3 | Item ID | References the ID of the selected asset | Y |

## Maintenance Plan Status\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The auto populated ID. | N (auto populated) |
| 2 | Name | The name of the selected maintenance plan status | Y |
| 3 | Description | The description of selected maintenance plan status | Y |
| 4 | Color | The color of selected maintenance plan status | Y |

## Notes\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The id of the created note | N (auto populated) |
| 2 | Title | Title of the selected note | Y |
| 3 | Description | Brief description of the selected note | Y |
| 4 | Status | The status of the selected note. Foreign key references to the Status table. | Y |
| 5 | Color | The color code for the selected note | Y (default to white) |
| 6 | Completion Date | The date the note is marked as completed. | Y |
| 7 | Location | The location of the note | N |

## Assets\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required (From user) |
| 1 | ID | The id of the created asset item | N (auto populated) |
| 2 | Name | Brief description of the selected asset item | Y |
| 3 | Description | Brief description of the selected asset item | Y |
| 4 | Unit Price | The unit price of the selected asset item. Defaults to 0.00 if empty | N |
| 5 | Bar Code | The bar code of the selected asset item | N |
| 6 | SKU | The sku code of the selected asset item | N |
| 7 | Quantity | The count of the selected asset item | Y |
| 8 | Purchase Location | The location where the asset item was purchased | N |
| 9 | Status | The status of an asset item provided by the user. All items are hidden by default to prevent collaborators from accessing data. | N (auto populated) |
| 10 | Return date time | The estimated date time the asset should be returned. | N |
| 11 | Storage Location ID | The ID of the storage location the asset item is stored in | N (auto populated) |
| 12 | Is Returnable | The status that signals the item is returnable product | N |
| 13 | Return Location | The location where the asset item must be returned | N |
| 14 | Max Weight | The maximum weight of the item in kg | N |
| 15 | Min Weight | The minimum weight of the item in kg | N |
| 16 | Max Height | The maximum height of the item in cm | N |
| 17 | Min Height | The minimum height of the item in cm | N |

## Recent Activities\* (auto-populated table)

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The auto populated ID | N (auto populated) |
| 2 | Activity ID | The unique ID that references the asset. If a column was deleted, the ID used to reference that column. | N (auto populated) |
| 3 | Type | The type of activity. C, M and A. | N (auto populated) |
| 4 | Title | The name of the column. If a column was deleted, it references the previous name used. | N (auto populated) |
| 5 | Custom Action | The action taken by the user for the selected activity. Created, Updated or Deleted. | N (auto populated) |

## Status\*

|  |  |  |  |
| --- | --- | --- | --- |
| S. No | Field | Description | Required |
| 1 | ID | The id of the status | N (auto populated) |
| 2 | Name | The name of the selected status | Y |
| 3 | Description | Brief description of the selected status | Y |
| 4 | Color | The color code for the selected status | Y (default to white) |

# UX Color and Schematics

**Design Choice**

* MUIV5 Components

# Application Software Used

**1. React with MUI Components.**

**2. Go Programming language for backend support.**

**3. PSQL for database management.**

# Company Overview and Brand

* Business Name – **Fleetwise**
* Founded in 2024 under **Earmuffjam Inc.**
* Service – Platform to create new assets and update associated assortments for selected assets.