Capstone Project – Modern Web Full Stack

Mutual Fund Mart

[CSP-012]

**REVISION HISTORY**

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| --- | --- | --- | --- |
| **Date** | **Version** | **Description** | **Author** |
| Nov-24-2017 | 1.0 | Initial Version | Modern Web Full-stack team |

# Mutual Fund Mart

The proposed system should enable registered users to perform transactions on the listed mutual funds. The users should be able to purchase mutual fund schemes. The user interface to the system should be implemented using Angular or React. In order to manage the data required for the system, an Express Server interfacing with MongoDB should be used. The REST based Express backend will receive the requests from the client side Angular or React and store the necessary data or retrieve the data.

**Note:**

1. The features given below are the minimum basic features that are required to be implemented. But you need not limit yourself. You can try to make it as close to the real system and it is left to your imagination and the domain knowledge you possess.
2. To make the user interface better, you should use Bootstrap or Material.
3. Appropriate input fields should be used to make it user friendly. For example, where date is inputted, you should use a date field and not a string field.
4. Validations should be done, wherever applicable, and make it user friendly.
5. Wherever list of things are viewed, there should be Search filter provided to only display a subset of rows, so that user can quickly see it when there are many rows to be viewed (similar to how it was implemented in ILP).
6. While viewing, when different columns are displayed, customization should be provided to display only a subset of the columns (similar to how it was implemented in ILP).

Following modules should be implemented in the system.

1. Authentication Module
2. Admin Module
3. User Module

## Authentication Module

Refer the document, **AdditionalDocument\_AuthenticationModule.docx** for an explanation of the details to be implemented as part of the Authentication Module. It contains details related to User authentication as well as Admin authentication.

## Admin Module

Admin should be able to do the following operations.

1. View Categories
2. Add Category
3. Update Category
4. Delete Category
5. View schemes in a Category
6. Add scheme to a category
7. Update scheme
8. Delete scheme
9. Chart – Top mutual fund schemes

**View Categories**

The list of categories available should be displayed. Buttons can be displayed to allow for update or delete a category.

**Note:** Category could be like “Equity”, “Debt”, “Hybrid”, “FMP” etc.

**Add Category**

While adding the category, the following input details can be accepted.

* Category name
* Category description

Category ID can be auto generated.

**Update Category**

When the list of categories are displayed, one category can be selected to update at a time. The category name and category description can be allowed to be updated.

**Note:** Category ID should be used as the key to look for Category details and it cannot be modified.

**Delete Category**

When the list of categories are displayed, one category can be selected to delete at a time. There should be no schemes in the category for the delete to succeed. If schemes are present in the category, deletion of category should not be allowed.

**View schemes in a category**

The list of schemes available in a category should be displayed. Buttons can be displayed to allow for update or delete of a scheme.

**Note:** Scheme could be like “HDFC Top 200 Fund”, “HDFC Income Fund” etc.

**Add scheme to a category**

While adding the scheme to a category, the following input details can be accepted.

* Scheme name
* Scheme description
* Scheme NAV

Scheme ID can be auto generated.

**Note:** To reduce complexity of this application, scheme NAV can be assumed to be some random fixed value as entered in “Add scheme to a category”.

**Update scheme**

When the list of schemes in a particular category are displayed, one scheme can be selected to update at a time. The scheme name, scheme description and scheme NAV can be allowed to be updated.

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**Delete scheme**

When the list of schemes in a particular category are displayed, one or more schemes can be selected to delete at a time.

**Chart – Top mutual fund schemes**

The top mutual fund schemes (based on the number of units purchased by various users) should be shown in a chart. It can be top 5, 10, etc, which should be customizable.

## User Module

User should be able to do the following operations.

1. View categories
2. View schemes in a category
3. Add scheme to basket
4. Update scheme in basket
5. Delete scheme from basket
6. View basket
7. Place order
8. View Purchase history

**View categories**

The list of categories available should be displayed. Buttons can be displayed to allow for viewing schemes in a category.

**View schemes in a category**

The list of schemes available in a category should be displayed. Buttons can be displayed to add the scheme to basket.

**Add scheme to basket**

On clicking the button to add the scheme to basket, the scheme should get added to the basket. Number of units to purchase should be taken as input.

**Update scheme in basket**

When the list of schemes in the basket are displayed, one scheme can be updated at a time. The number of units for purchase should be allowed to be updated.

**Delete scheme from basket**

When the list of schemes in the basket are displayed, one or more schemes can be selected to delete at a time.

**View basket**

The list of schemes available in the basket should be displayed. Buttons can be displayed to allow for update or delete of a scheme in the basket. A button should also be displayed to place order for purchasing the selected schemes.

**Place order**

On clicking the button to place an order, order should be placed, which means the order should go into purchase history.

**Purchase history**

Users should be able to view the list of schemes they have purchased. The details of the scheme purchased should be displayed.