Service Now Project Documentation

Introduction

- **Project title :** Calculating Family Expense Using service Now
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Project Overview

- **Purpose:** This documentation outlines the steps to build a basic family expense tracking application using the ServiceNow platform. This project will help you apply core concepts like creating tables, forms, and reports to a real-world scenario.
- **Features :**
  - A Personal developer instance{PDI} of servicenow.
  - Basic understanding of servicenow platform and studio.

Part 1: Application Setup

1. **Navigate to ServiceNow Studio:**
   - In your ServiceNow instance, type "Studio" in the Application Navigator and click on **System Applications > Studio**.
   - Click on **Create Application** and select **Start from scratch**.
2. **Create a New Application:**
   - Provide the following details:
     - **Name:** Family Expense Tracker
     - **Description:** An application to track and calculate family expenses.
     - Click **Create**.

Part 2: Creating the Expense Table

The expense table will store all the individual expense records.

1. **Create a New Table:**
   - In Studio, click **Create Application File**.

○ Search for "Table" and select **Table**. Click **Create**.

2. **Configure the Table:**
   - **Label:** Expense

○ **Extends Table:** Task (This is good practice for common functionalities like State, Assigned to, etc.) ○ Click **Submit**.

3. **Add Columns to the Table:**
   - From the **Columns** tab, click **New**.

○ Create the following columns:

Column 1:

■ **Label:** Amount
Type: Currency

Column 2:

■ **Label:** Date
■ **Type:** Date

Column 3:

■ **Label:** Category

■ **Type:** Choice
■ **Choices:** Add choices like Groceries, Rent, Utilities, Transportation, Entertainment, Education, and Other.

- **Column 4:**
  - **Label:** Description
  - **Type:** String
- **Column 5:**
  - **Label:** Family Member
  - **Type:** Reference
  - **Reference:** User [sys_user] (This allows you to select which family member incurred the expense.)

Part 3: Building the Expense Form and List View

1. **Configure the Form Layout:**
   ○ In the table record, click on **Form Design**.

○ Arrange the fields in a user-friendly layout. You can drag and drop fields like Amount, Date, Category, Description, and Family Member. ○ Save the form layout.

2. **Configure the List Layout:**
   ○ From the table record, click **List Layout**.
   ○ Select the columns you want to display in the list view, such as Number, Amount, Date, Category, and Family Member.

○ Click **Save**.

Part 4: Creating Reports and Dashboards

Reports are essential for calculating and visualizing your expenses.

1. **Create a New Dashboard:**
   ○ In the Application Navigator, search for "Dashboard" and click **Dashboards**.
   ○ Click **New** and create a new dashboard called Family Expense Dashboard.
2. **Create a Report for Total Monthly Expenses:**
   ○ On your new dashboard, click the **Add widgets** button.
   ○ Click on **Reports** and then **Create a new report**.

   ○ **Data:**

   ■ **Table:** Expense (x_yourco_fam_exp_tracker_expense)

   ■ **Filter:** [Date] [on] [This month] ○
   Type:

   ■ **Aggregation:** Sum

   ■ **Aggregated field:** Amount

○ **Group by:** Category

○ **Visualize:** Choose a Pie Chart or Bar Chart.

○ Save the report and add it to your dashboard.

1. **Create a Report for Expenses by Family Member:**
   ○ Create another new report.
   ○ **Data:**

   ■ **Table:** Expense

■ **Filter:** [Date] [on] [This month] ○
Type:

■ **Aggregation:** Sum

■ **Aggregated field:** Amount ○
Group by: Family Member

○ **Visualize:** Use a Bar Chart.

○ Save the report and add it to your dashboard.

2. **Create a Report for Total Annual Expenses:**
    ○ Create a third report.
    ○ **Data:**

■ **Table:** Expense

■ **Filter:** [Date] [on] [This year] ○
Type:

■ **Aggregation:** Sum

■ **Aggregated field:** Amount

○ Save the report and add it to your dashboard as a single score report.

Part 5: User Access and Roles

For a family application, you'll want to ensure only family members can view and add expenses.

1. **Create a new Role:**
    ○ In the Application Navigator, search for "Roles" and click **Roles**. ○ Click **New** and create a role called family_member.
2. **Assign Roles to Users:**
    ○ Navigate to **User Administration > Users**.

○ Select a user and add the family_member role to their account.

3. **Secure the Application:**
    ○ In Studio, go to your application.

○ In the Application Navigator, find your new Expense table.

○ Click on **Access Controls**.

○ Create new Access Control records to restrict read, write, and create operations on the Expense table to users with the family_member role.

This documentation provides a foundational structure. For a more advanced application, you could add features like:

- A workflow for expense approval (e.g., a manager or parent's approval).

- Monthly budgeting targets.
- Automated notifications.
- Integration with other systems for data import