

Solution Requirements Document (SRD)

Date:	November 02, 2025
Team ID:	NM2025TMID05019
Project Name:	Calculating Family Expenses using ServiceNow
Maximum Marks:	4 Marks

1. Document Purpose

This SRD defines the functional and non-functional requirements for the Family Expense Automation System (FEAS) built on ServiceNow. It serves as the single reference document for configuration, development, testing, and validation.

2. Scope Summary

In-Scope:

- Automation of daily and family expense tracking
- Creation of Family and Daily Expenses tables
- Implementation of Business Rules for calculation
- Relationship mapping between tables
- Dashboards and reports for visualization

Out-of-Scope:

- Third-party financial integrations
- Mobile app extensions
- AI-based prediction modules

3. Functional Requirements

ID	Requirement	Priority	Acceptance Criteria
FR-01	Record daily expenses with date and amount fields	Must	Entry saved successfully with validation
FR-02	Auto-generate unique number via Number Maintenance	Must	MFE-prefixed ID created automatically
FR-03	Link Daily Expenses with Family Expense records	Must	Relationship visible in Related List
FR-04	Business Rule auto-updates Family Expense totals	Must	Total and comments auto-updated
FR-05	Maintain Expense Details with all comments	Should	Appended structured text
FR-06	Dashboard to display daily and total sum of expenses	Should	Graphical dashboard view
FR-07	Export monthly reports	Could	Excel/CSV export available
FR-08	Trigger alerts when expenses exceed threshold	Could	Notification generated

4. Non-Functional Requirements

ID	Category	Requirement	Target	Verification
NFR-01	Performance	Expense update time	<3 sec	Manual UI test
NFR-02	Scalability	Concurrent entries supported	1000/day	Load test
NFR-03	Availability	Instance uptime	99.9%	ServiceNow SLA
NFR-04	Reliability	Error rate	<1%	Log analysis
NFR-05	Security	Access restricted by role	Family User	ACL check
NFR-06	Usability	Simple dashboard/forms	>4/5 UAT	User survey
NFR-07	Maintainability	Low-code configuration	90%	Code review
NFR-08	Auditability	Track all updates	100%	History log
NFR-09	Compliance	No personal data stored	Compliant	Audit test
NFR-10	Supportability	Alerts for rule failure	Real-time	Log monitor

5. Data Requirements

Entity	Key Fields	Source	Update Frequency
Family Expenses (u_family_expenses)	expense_id, amount, u_expense_details	Business Rule	Real-time
Daily Expenses (u_daily_expenses)	expense_id, u_member_name, u_expense_details, u_expense_comments	User input	Real-time
Number Maintenance (sys_number_mfe)	number	System	On insert
User Table (sys_user)	name, role	System default	On creation/update

6. Interface Requirements

Interface Type	Details
UI Forms	Family and Daily Expense entry forms
Related Lists	Linked Daily Expenses under Family Expense record
Dashboards	Expense analytics by member/date
Reports	Monthly and daily Excel export
Notifications	Expense threshold alerts

7. Constraints & Assumptions

Constraints:

- Works only within ServiceNow Developer instance
- Requires internet connectivity
- Uses standard ServiceNow UI

Assumptions:

- All users have valid access
- Entries made daily
- Business Rules execute correctly

8. Traceability Matrix

Req ID	User Story	Test Case	Status
FR-01	Story 1	TC-001	Draft
FR-03	Story 2	TC-003	Draft
FR-04	Story 3	TC-005	Draft
NFR-01	—	TC-PERF-01	Passed
NFR-05	—	TC-SEC-01	In Progress

9. Risks & Open Items

Risk	Impact	Mitigation
Incorrect Business Rule logic	High	Code review before deploy
Data duplication	Medium	Unique constraints
Instance downtime	Medium	Backup before updates
User input errors	Low	Mandatory fields

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