Home Management System
Project Proposal

Description

Home management portal to track home related activity such as expenses, grocery purchases, who is cooking next, whose turn is in cleaning trash using a combination of functions like expense manager, to do list, note taking utilities along with a instant messenger for member communication regarding the activity.

Users

Each project(name for new profile) consists of groups. Group can be created by one or more individual members. The portal consists of three abstract activity.

Activity

Task, List and Expense. Task involves work which will consume time of the activity based on the type of work, example Trash cleaning or cooking. List is a way to specify items in a order or unordered form, grocery listing for next week or things to repair in house. Expense activity will involve the money component in it, grocery purchases, refueling vechile. One or more combination can be used to create groups. The groups will encompass members. The task alone group will be cooking turns. Expense activity will involve trips. List activity will involve. Below is the example of each.

Table 1: Task

Cooking	✓
Bob	✓
Ram	✓
Jay	✓
Diya	✓
Robert	
Linda	
John	

Table 2: Listing

Cooking	Qty	✓
Rice	10 kg	✓
Wheat Flour	10 kg	
Tortilla	10 pc	
Milk	3 Gallons	
Eggs	18	

Scope

Each users in the given project will have equal access. The groups can be created with the registered members or non-registered members. Registered members can create new groups, add, delete or modify items. Non-registered members can add, delete or modify items. Non-registered members entry will be added into Members with partial access.

Table 3: Expense

Item	Cost	Paid by
Rice	$20	Ram
Wheat Flour	$20	Diya
Tortilla	$5	John
Milk	$2.5	
Eggs	$4	

Tables

Members(MemberID,MemberName,Email,Phone)
Groups(GroupID,MemberID,GroupName)
Expenses(TransactionID,GroupID,MemberID,TransactionItem,Cost,ShareType)
Listing(ListingID,GroupID,MemberID,List,Status)
Task(TaskID,GroupID,MemberID,Task,Status)
InstantMessage(MessageID,ToID,FromID,Message,Time,Privacy,tags)

Entity Relationship Diagram
Incomplete
Implementation
Database implementation is using PostgreSQL and MongoDB(Messaging table alone). User interface is either using html/php or AngularJS.