

Design Splitwise

⇒ Requirements

- Add friend Capability
- Add/Manage Group
- Add/Manage friends inside a group
- Manage Expense Inside a group/
without a group
- Split Expense Capability
 - ↳ Equal
 - ↳ Unequal
 - ↳ Percentage wise
- Balance Sheet of Each User.

=> object Identification

- USER
- Expense
- Group
- Split ???
- Splitwise
- Balance sheet

[UML Diagram Next Page]

UML of Splitwise

enum SplitType
{ Equal
unequal
Percentage

} USER

String user id;
String Name;
User ExpenseObj;
sheet

User Controller
List<User> list
// CRUD

Splitwise
User Controller
Group Controller

Group Controller
List<Group>
// CRUD

User Expense Balance Sheet
Map<User, Balance>
double totalMySp
double total payment
double to take
double to get back

Balance Sheet Controller
// CRUD

Group
String id;
List<Expense>
List<User>
Expense Controller obj
String name

Balance
double Amount
double Amt get back

Expense Controller
Create
Expense();

Split factory

User userObj;
double Amt;
Split percentage;

Split

Expense
String id;
String description;
double Amt;
User partyObj;
Split Type;
List<Split> obj

Expense Split
Validat, Request
Compound Amt();

Equal

unequal

percentage