

# TEAM 18

## POCKET: A VIRTUAL WALLET

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## Abstract:

- Pocket takes the trouble out of Sharing expenses - with friends, roommates or anyone.
- Pocket focuses on fairness. Whether you are sharing a ski vacation, splitting rent with roommates, or owe someone for lunch, Pocket makes life easier.
- Pocket organize all your shared expenses with great UI, so that everyone can see whom they owe and who own them.
- Pocket provides graphical view of expenses month-wise, so that user can make comparative analysis of their spending's.
- Manage Separate group for separate purposes for free.
- No need to show Bill to everyone.

## **Pocket just has one actor i.e. User and its functionalities is as follow:**

- User can register for pocket via google or Facebook as well if they don't want to fill signup form for pocket. After user Logs In he/she can start adding expenses.
- Once the user is logged in he/she can start adding expenses straightaway.
- There are various ways to add expenses. User can either create group with roommates or family members to add expense or they can add expense separately with friends without creating group. If user wants to manage their own expense they can do that as well.
- User can edit or delete expense based on their requirement. User can also upload picture of Bill with the expense just to manage track of all expenses.
- Users in group can also comment on the expenses they are part of to add something specific to that expense only.
- Users can see their monthly expenses as well as group expenses in a chart format category wised just to know how much they are spending on each category each month.

## Used Technologies:

**Architecture:** Model View Controller (MVC))

**Front End:** HTML, CSS, JavaScript, Google Graphs, Ajax

**Java Web technologies:** JSP, Servlet

**Database:** Mongo DB, MySQL

## Modules:

There are four modules in Pocket:

- Expense Management
- Group Expense Management
- User Details Management
- Expense Analysis

### 1. Expense Management:

- **Add Bill:** - User can add bill amount, username of user who shares the bill and comments regarding expenses.

**Split Bill:** - User can add bill and split the amount in the following ways.

- Split equally
  - Split by Exact amount
  - Split by percentage
- **Add Comment:** - User can add comment regarding the bill expense.
- **Edit Bill:** - User can modify the bill details.
- **Delete Bill:** - User can delete the bill details.
- **Settle:** - User can settle the bill

### 2. Group Expense Management:

- **Create a Group**
  - Sent/Receive invites to friends for joining the group.
- **Edit a Group**
  - Add new member to the group.
  - Change group name.
  - Delete member from the group.
- **Delete Group**
  - **Constraint:** - If and only if every bill is settled in the group.
- **Add bill to the group**
- **Add limit to the group:** You can add limit to each group of what you want to spend.
- **Settle Expense**
- **Delete Expense**
- **Edit Expense**

### 3. Users Details Management:

- **Login/Sign Up:** login and sign up with Facebook, Gmail and other Email.
- **Forgot Password:** create the new credentials if user forgot the password.
- **Email verification on Sign Up:** On signup verification mail will be sent to user to check email exist or not.
- **Manage Account:** create, update and delete the account
- **Send invites to friends:** send invites to friends for joining Pocket via Email.
- **Logout**

### 4. Expense Analysis:

- **View Monthly Expenses**
  - **Group wise:** Users can view their monthly expense in every group for each month.
  - **Personal:** You can view your personal expense for each month in a chart format just to get the overview of how much you spend every month.
- **View Category wise expense:**
  - **Group wise:** Users can view how much they spend on each category e.g. Dining, grocery etc. in each group category wise in chart format.
  - **Personal:** Users can view category wise their personal expenses out of the group how much they spend on each category.
- **Standing in a group:** Users can also view the status of their expenses in a form of graph compared with other group members.