# ‘Financial Freedom’ Proposal

## Describe the proposal

‘Financial Freedom’ is a browser based web-application for individuals interested in keeping track of their personal finances, and who want an opportunity to compare against their peers. The system will allow users to create budgets and savings goals, by keeping track o recurring incomes and expenses, as well as unaccounted ones. Our system will provide some analytics into spending habits, as well as giving an insight into how these compare with others in the community. Furthermore, ‘Financial Freedom’, will give users the opportunity to opt in, to a notification system which will send emails, and SMS messages in response to unsustainable or irregular spending.

## Use cases

MVP:

Create/Edit budget (incomes, expenses, saving goal)

Opt in or out of public data pool

Add/Edit/Delete ad-hoc incomes, expenses

View spending analytics pages

Compare budgets, incomes, expenses against others (with data filters)

Receive notifications of irregular spending habits via SMS or email

Nice to have:

Update profile

Theme app

## Communication topology

The system will be implemented as a 3-tier architecture. This will include a web-client written on the React framework, using MobX for state management, and semantic-ui for styled components. The web server will be a python REST API on the falcon framework. Data will be stored in a PostgreSQL relational database. All interactions between the web server and the database will be done through the Peewee object relational mapper.

Example use case: Create budget

User fills in form, sends a put request to api\_url/budget, the web-server makes a transaction with the database, and on success, returns a HTTP\_OK (200) response, on failure throws an exception, and raises a HTTPError (500).

Example use case: Add transaction

Example use case: View analytics pages

## Design Mock-up