

Recruitment training - fullstack project

Project idea

A service / application to manage personal budget

Synopsis

Personal Finance Planner for individual usage

In paying for things people have been moving from using hard cash to using card payments and as the latest method using mobile phone. With cash payments it is usually fairly easy to track your spending or realize the amount of money used to pay for things, but with using card or mobile phone payments the concept of money is somewhat abstractified to the level that it is no longer easy to track your spending. That possibly leads people into financial troubles, including for example unnecessary need for quick loans thus deepening the problem.

My personal experiences about difficulties balancing budget whether while having a full-time job or during unemployment has led me to plan a web-service to aid in planning future spending beforehand and at the same time to be able to review past spending and the difference with budget plan. Also another main point for the service is for the user to be able to analyse past spending and see if there are some categories to cut spending on.

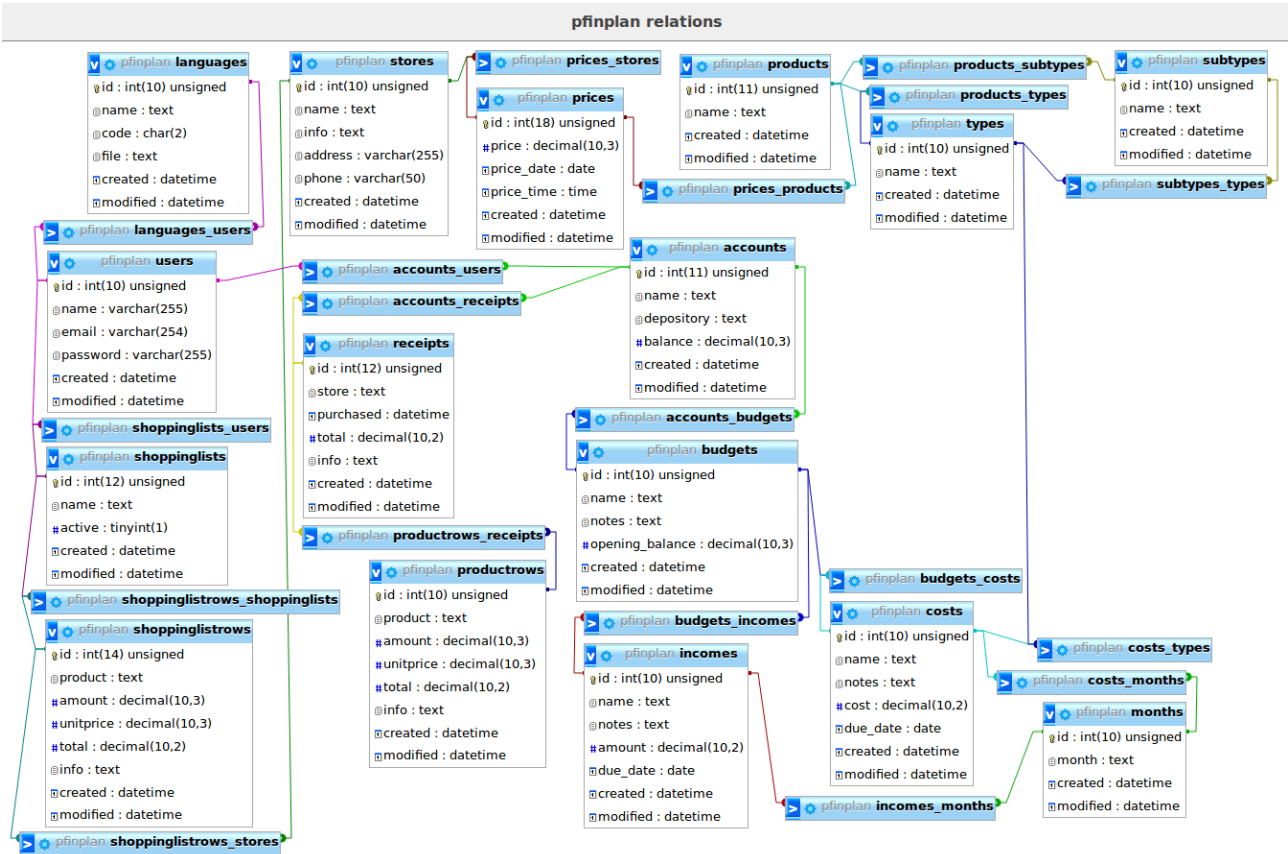
The goal is to aid service user to better handle the money spending and also to help the user to save money. The service is planned to be free to use and as easy to use as possible with both desktop computers and mobile devices.

I started the project as a personal endeavour to create a self-help tool, and also to hone my skills in software developing and programming. I also wanted to learn new techniques and technologies, in this case CakePHP at the start of the programming.

pfplan relations

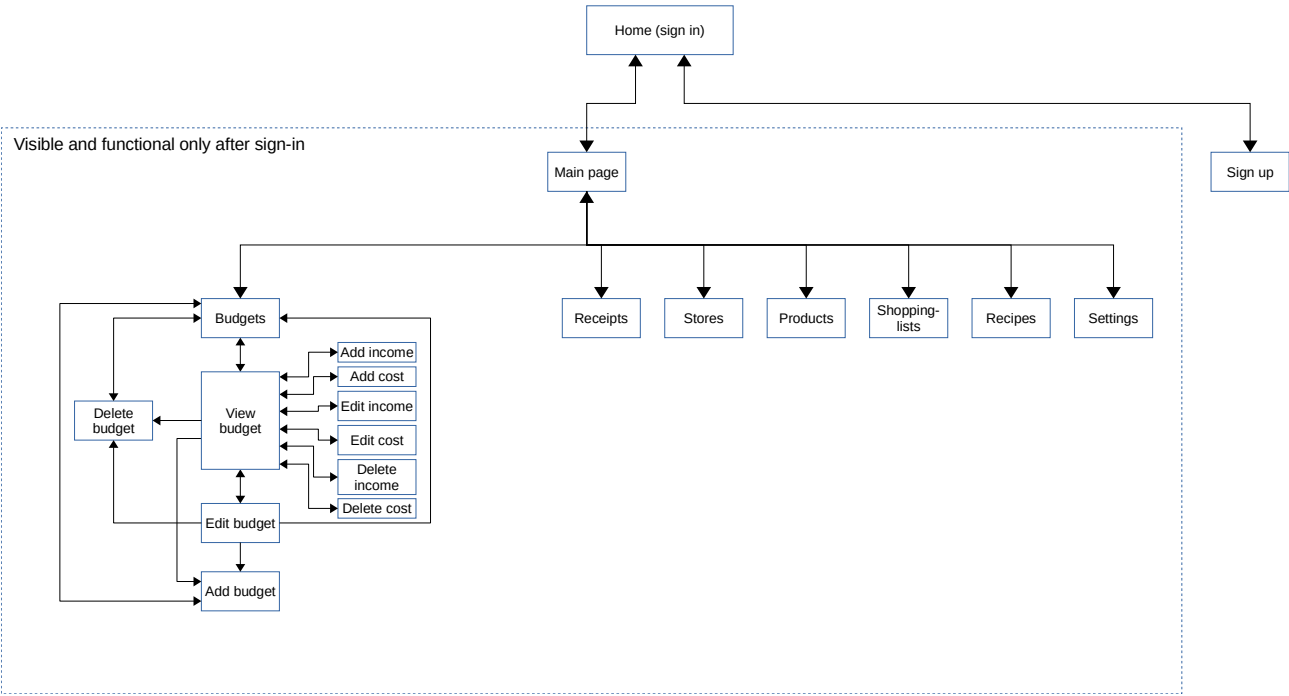
The diagram illustrates the following tables and their fields:

- pfplan_languages**: id (int(10) unsigned), name (text), code (char(2)), file (text), created (datetime), modified (datetime).
- pfplan_languages_users**: (Relationship table)
- pfplan_users**: id (int(10) unsigned), name (varchar(255)), email (varchar(254)), password (varchar(255)), created (datetime), modified (datetime).
- pfplan_shoppinglists_users**: (Relationship table)
- pfplan_shoppinglists**: id (int(12) unsigned), name (text), active (tinyint(1)), created (datetime), modified (datetime).
- pfplan_shoppinglistrows_shoppinglists**: (Relationship table)
- pfplan_shoppinglistrows**: id (int(14) unsigned), product (text), amount (decimal(10,3)), unitprice (decimal(10,3)), total (decimal(10,2)), info (text), created (datetime), modified (datetime).
- pfplan_shoppinglistrows_stores**: (Relationship table)
- pfplan_stores**: id (int(10) unsigned), name (text), info (text), address (varchar(255)), phone (varchar(50)), created (datetime), modified (datetime).
- pfplan_prices_stores**: (Relationship table)
- pfplan_prices**: id (int(18) unsigned), price (decimal(10,3)), price_date (date), price_time (time), created (datetime), modified (datetime).
- pfplan_prices_products**: (Relationship table)
- pfplan_products**: id (int(11) unsigned), name (text), created (datetime), modified (datetime).
- pfplan_products_subtypes**: (Relationship table)
- pfplan_products_types**: (Relationship table)
- pfplan_types**: id (int(10) unsigned), name (text), created (datetime), modified (datetime).
- pfplan_subtypes**: id (int(10) unsigned), name (text), created (datetime), modified (datetime).
- pfplan_subtypes_types**: (Relationship table)
- pfplan_accounts_users**: (Relationship table)
- pfplan_accounts_receipts**: (Relationship table)
- pfplan_receipts**: id (int(12) unsigned), store (text), purchased (datetime), total (decimal(10,2)), info (text), created (datetime), modified (datetime).
- pfplan_productrows_receipts**: (Relationship table)
- pfplan_productrows**: id (int(10) unsigned), product (text), amount (decimal(10,3)), unitprice (decimal(10,3)), total (decimal(10,2)), info (text), created (datetime), modified (datetime).
- pfplan_accounts_budgets**: (Relationship table)
- pfplan_budgets**: id (int(10) unsigned), name (text), notes (text), opening_balance (decimal(10,3)), created (datetime), modified (datetime).
- pfplan_budgets_incomes**: (Relationship table)
- pfplan_incomes**: id (int(10) unsigned), name (text), notes (text), amount (decimal(10,2)), due_date (date), created (datetime), modified (datetime).
- pfplan_incomes_months**: (Relationship table)
- pfplan_budgets_costs**: (Relationship table)
- pfplan_costs**: id (int(10) unsigned), name (text), notes (text), cost (decimal(10,2)), due_date (date), created (datetime), modified (datetime).
- pfplan_costs_types**: (Relationship table)
- pfplan_costs_months**: (Relationship table)
- pfplan_months**: id (int(10) unsigned), month (text), created (datetime), modified (datetime).



Navigation map

Budgets:



UI mockups

Login screen:

Personal Finance Planner

NAVIGATION

Register

Login

Email

Password

LOGIN

Main menu:

The image shows a main menu layout. On the left is a vertical sidebar with a dark teal header containing the text 'Main menu'. Below the header, the sidebar has a light gray background and contains the text 'NAVIGATION' in bold and 'Logout' below it. To the right of the sidebar is a grid of menu items, each represented by a teal square button with a white square icon in the top-left corner and a text label in the center. The items are arranged in three rows: the first row has 'Budgets', 'Receipts', and 'Stores'; the second row has 'Products', 'Shopping lists', and 'Recipes'; the third row has a single 'Settings' item on the left.

Budgets listing:

Main menu			
NAVIGATION	Budgets		
Main menu			
Logout			
ACTIONS			
New Budget			
	ACTIVE		
	Name	Current balance	Actions
	My brand new budget	€ 291,32	Delete
	Sloth mode	€ -24,50	Delete
	The discipline test	€ 386,50	Delete
	INACTIVE		
	Name	Current balance	Actions
	First test	€ 134,62	Delete
	More adjustments	€ -79,28	Delete
	< previous next >		
	Page 2 of 3, showing 5 record(s) out of 14 total		

Budget details:

Main menu

NAVIGATION

Main menu

Budgets

Logout

ACTIONS

New Budget

Edit Budget

Delete Budget

My brand new budget

Opening balance

Incomes total

Costs total

Closing balance

€ 32,00

€ 773,48

€ 684,17

€ 121,31

Current balance

€ 291,32

2017	Mon	Tue	Wed	Thu	Fri	Sat	Sun
26	26	27	28	29	30	1	2
						€ 32,00	€ 32,00
27	3	4	5	6	7	8	9
	€ 412,26	€ 412,26	€ 412,26	€ 412,26	€ 412,26	€ 412,26	€ 412,26
28	10	11	12	13	14	15	16
	€ 412,26	€ 412,26	€ 412,26	€ 412,26	€ 291,32	€ 291,32	€ 291,32
29	17	18	19	20	21	22	23
	€ 291,32	€ 291,32	€ 291,32	€ 291,32	€ -85,48	€ -85,48	€ -85,48
30	24	25	26	27	28	29	30
	€ -85,48	€ -85,48	€ 121,31	€ 121,31	€ 121,31	€ 121,31	€ 121,31
31	31	1	2	3	4	5	6
	€ 121,31						

Incomes

Name	Amount	Due date	Actions
Apartment rent	€ 380,26	2017-07-03	Delete

Alternative budget view with details on transactions of one day:

Main menu

NAVIGATION

Main menu

Budgets

Logout

ACTIONS

New Budget

Edit Budget

Delete Budget

My brand new budget

2017	Mo	Tu	We	Th	Fr	Sa	Su
26	26	27	28	29	30	1	2
27	3+	4	5	6	7	8	9
28	10	11	12	13	14	15	16
29	17	18	19	20	21	22	23
30	24	25	26	27	28	29	30
31	31	1	2	3	4	5	6

Opening balance

€ 32,00

Incomes total

€ 773,48

Closing balance

€ 121,31

Costs total

€ 684,17

Current balance

€ 291,32

Before:

€ 412,26

Some sock money

+ € 186,43

Insurance

- € 307,37

After:

€ 291,32

Incomes

Name	Amount	Due date	Actions
Apartment rent	€ 380,26	2017-07-03	Delete
Some sock money	€ 186,43	2017-07-14	Delete
Balancing act	€ 206,79	2017-07-26	Delete