*I have spent (quite a lot) time for creating this plan, please consider it carefully. This is my idea of how our web ACTUALLY works. Any improvements are welcome.*

*Sincerely, Mike Ng.*

**Introduction:**

I have created this idea integrating the resources I have researched and shared with you guys through the doc.

Link:

https://docs.google.com/document/d/1hEver4RdVAgBy3Byvqfac\_uSzVkhR0choh0lCm4dO1E/edit

**Input:**

1.Income:

User enter all sources of their income here. This includes 2 sections, Stable source and Unstable source. The **interface** should include (green is Mike’s note for developers, not include in the interface please):

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Enter your income here:

I. Stable sources (you earn this every month)

-Name:

-Description (not necessary):

**-**Amount:

(remember a button “Add” or a “+” button to add the info above)

II. Unstable sources (you DO NOT earn this every month. We will cut off 50% value due to instability. We call this unstable “fee”)

-Name:

-Description (not necessary):

**-**Amount (estimated):

(remember a button “Add” or a “+” button to add the info above)

(insert ONE board of income data here)

Your total income (this may be updated as you add more): …

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2.Expenses:

User enter all of their expected expenses here. This includes 3 sections, Needs, Wants, and Savings and Debts. The **interface** should include (green is Mike’s note for developers, not include in the interface please):

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Enter your expected expenses here:

I. Needs (pay this or you die)

-Name:

-Description (not necessary):

(remember a button “Add” or a “+” button to add the info above)

II. Wants (pay for your humanly desire)

-Name:

-Description (not necessary):

(remember a button “Add” or a “+” button to add the info above)

III. Savings and Debts (pay like an intelligent human)

-Name:

-Description (not necessary):

(remember a button “Add” or a “+” button to add the info above)

(insert THREE boards of expenses data here, ONE for each section)

(in each board user will have a column called “Priority”, which is looked like below)

Needs Board:

|  |  |  |
| --- | --- | --- |
| Name | Description | Priority |
| Food and Drink | I live to eat, no joke (or eat to live) | 1 |
| Accommodation | Pay or I need to sleep in trash can | 2 |
|  |  |  |

(How to input Priority? What is a Priority value? To make it simple, if you have 6 items in one section. The most important things will have Priority 1, next is 2, …until 6 (the least favorite thing you want to spend money on). Long story short: the lower Priority number, the more important. This Priority is chosen in the BOARD not in the input section)

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3.Budgeting Style:

User choose from 2 options: Normal Saving and Progressive saving. The **interface** should include (green is Mike’s note for developers, not include in the interface please):

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(insert options for users using dropdown, checked circle, or anything…)

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4.A button (really, just a button)

The **interface** should include (green is Mike’s note for developers, not include in the interface please):

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Click here to show your budget planning right now! (this is a button)

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**Algorithms:**

This is a very short cheat sheets of the calculations:

**a)** Total outcome = sum all stable + ½ \* sum all unstable

**b)** Planning for section (Note: Our solutions, in their essence, are all zero-based solutions. I think so):

-Normal (originally 20/30/50 solution):

Needs = 50% Total outcome

Wants = 30% Total outcome

Savings and Debts = 20% Total outcome

-Aggressive (originally 60% solution):

Needs = 60% Total outcome

Wants = 10% Total outcome

Savings and Debts = 30% Total outcome

**c)** Planning for each item (now this is interesting, and no webs have done this I think):

Each item = Section value \* Item individual ratio

Item individual ratio = (Number of Items + 1 – Item Priority) / sum all Priority

This deems very interesting (and reasonable as well). I will give an **example** below, inspect it carefully:

**-Total income:** $10000

**-Budgeting Style:** Normal

**-Planning Sections:**

Needs: $5000

Wants: $3000

Savings and Debts: $2000

**-Planning Items (I only show example for Needs, specifically 2 items of Needs):**

Needs Board

|  |  |  |
| --- | --- | --- |
| Name | Description | Priority |
| Food and Drink | I live to eat, no joke (or eat to live) | 1 |
| Accommodation | Pay or I need to sleep in trash can | 3 |
| Internet | Me connect. Me happy | 2 |
| Gas | Cook my food. Homemade food is delicious | 4 |

Food and Drink:

Item individual ratio = (Number of Items + 1 – Item Priority) / sum all Priority

Number of Items: 4

Item Priority: 1

Sum all Priority: 1 + 2 + 3 + 4 = 10

* Item individual ratio = (4 + 1 – 1) / 10 = 2 / 5
* Item value = Needs \* Item individual ratio = $5000 \* (2 / 5) = $2000
* We spend $2000 for Food and Drink

Accommodation:

Item individual ratio = (Number of Items + 1 – Item Priority) / sum all Priority

Number of Items: 4

Item Priority: 3

Sum all Priority: 1 + 2 + 3 + 4 = 10

* Item individual ratio = (4 + 1 – 3) / 10 = 1 / 5
* Item value = Needs \* Item individual ratio = $5000 \* (1 / 5) = $1000
* We spend $1000 for Accommodation

**Outputs**

(insert a detailed plan of budgeting using Algorithms above)

**Future features (if possible):**

**-Saving data in one web session:**

When user go around tabs of our website, users’ inputs and plans are still remembered.

**-Making use of back-end, mostly database (using firebase – recommended):**

+ **User can have an account** in our page (involved register/login). This account helps each users’ data (inputs and plans) are saved on our database. This helps user avoid entering inputs again and again when using our websites multiple times.

+ **Considering unexpected spending:**

In the Input interface, there will be ONE more section named “Unexpected Spending”. User can enter new, unexpected spending here (includes name, description, amount).

This will give an alert on the home page “New changes in Plan due to unexpected overspending. Click here to re-plan your budget”. Click the link re-directs user to the Budget Planning tab.

In the Budget Planning tab, the Total outcome is automatically Old Total outcome minus New overspending amount. Other algorithms are the SAME.

User can click the old button “Click here to show your budget planning right now!” to reset to a new planning. (this is implementation of Rolling Framework in the doc)

+ **Recommend plans on the start of each month:**

At the start of each month, web asks users if he/she wants web creating plans for them (by the notifications in home page). If users want this feature, web askes if users’ income do increase or decrease in this month and by how many percents. Then, web suggests new plan by just multiply this new percents with old plan. (this is implementation of Incremental Framework in the doc)

Example:

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Alert!

New month is here. If you want us to suggest you a nice plan, let us know if your income has increased or decreased by how many percents (+ for increase and – for decrease)

(I input here) -1.1%

Click here to see your plan! (I click this)

(I am then re-directed to Budget Planning tab and being shown new plan)

(insert new plan here in Budget Planning tab with all old numbers \* 98.9%)

(note that 98.9% = 100% - 1.1%)

**-New features TBA**

**Conclusion:**

That is my idea. Let me know what you guys think in Discord.