TRACKIE

Draft Version 0.1

This document contains user requirements for Trackie.

The purpose of this application

The purpose of this application is to allow tracking someone's income and expenses and generate reports to help improve financial sustainability.

CONTENTS

Functional Requirements and User Stories

A functional requirement defines a function of a system or its component. A function is described as a set of inputs, the behavior, and outputs.

A user story is one or more sentences in the everyday or business language of the end user or user of a system that captures what a user does or needs to do as part of his or her job function.

This document contains a combination of Functional Requirements and User Stories to describe as clear as possible what the final application should do and how it should behave.

In this document Security is considered as an implicit functional requirement.

Terms and symbols

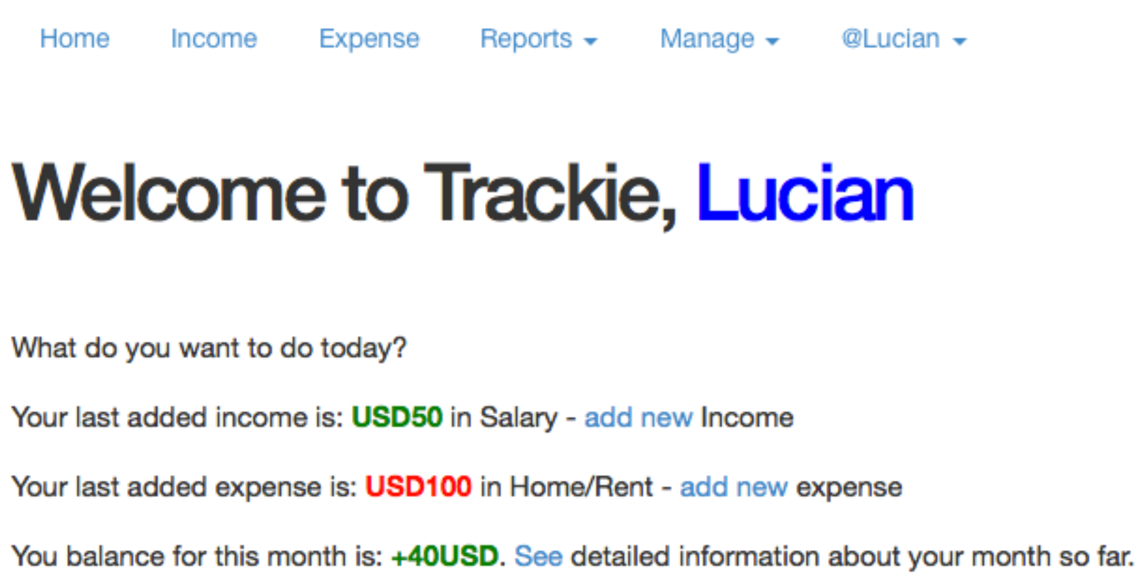
User - is the person who is interacting with application and using it with the purpose to gain a benefit.

Screen - is what the User sees on the display of a computer
< string > - whenever a string is written between < and > means it is a variable and the text there depends on a context or is related to the object of that story.
#{string} - similar with the notation <string>

Welcome Page

1. The Welcome Page content

The welcome page as two elements: a greeting message and a top menu.



2. The Welcome Page Greeting

The greeting is a message for the the logged in user containing the first name of the user like this:

Welcome to Trackie #{**Lucian},**

What do you want to do today?

Your last added income is: #{USD50} in Salary - add new Income

Your last added expense is: #{USD100} in Home/Rent - add new expense

You balance for this month is: #{+40USD}. See detailed information about your month so far.

add new Income - the “add new” text is a link for adding a new income
add new expense - the “add new” test is a link for adding a new expense
See detailed information about your month so far. - the word “see” is a link to the user balance.

3. The Top Menu

The Top menu has the following structure:

- Home
- Incomes
- Expenses
- Reports:
    - Income/Expense Balance
    - Per User balance
- Manage:
    - Income Types
    - Expense Types
    - Users
- My Account (or the name of the person who is logged in)

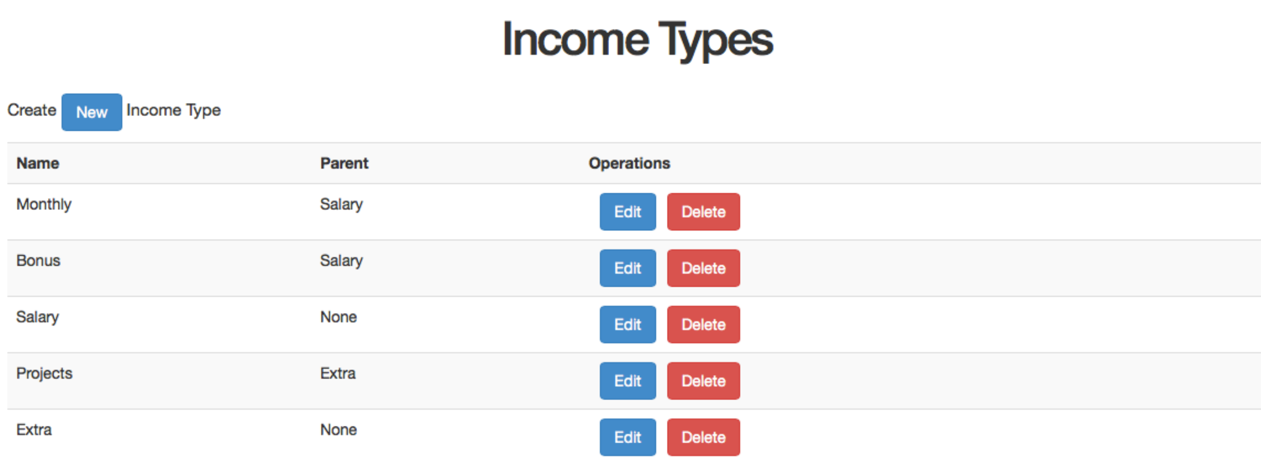
Income

An income is an amount of money earned by a user at a specific time.
Each income will have at least the following information:
- Type of income (there will be some predefined types but the user has the possibility to define his/her own types)
- Amount
- Currency

Income Type

1. User clicks on a link to "Income Types"

The Income Type index page has two areas: top and bottom.



The Top will display the following information:

```
Title: Income Types
A button to add new Income Type.
```

Bottom Area shows:

`The list of Income Types already saved.`
`This list contains unique identifier for each Income Types, names of the Income Types and links for each row to Edit or Delete it.`

The head of this table will be:

`ID`
`Name`
`Parent`
`Operations`

The operations column contains two action buttons for each Income Type:

`Edit`
`Delete`

2. In the income types index page User clicks on button New Income Type

A new page is displayed containing a form to add New Income Type.

The form contains the following elements:

`Name - text field`
`Parent - a dropdown menu displaying all income types who are not children of any other income type`
`Create - submit button`

When User press on Create button, the form is validated.
The name of the Income Type should not be more then 50 chars.

If there are errors, they will be displayed on the screen.

If there are no errors, the user is redirected to Income Types screen and he sees a message saying

"Income Type #{name} was saved!".

3. In the income types index page User clicks on an Edit Button

The Edit screen is very similar with the New Income Type screen with difference that the fields Name and Parent are already populated.
The Name field contains the name of the income type which is edited.
The Parent dropbox displays the name of the parent if there is any.
The screen has a Save button.
When User press the Save button if there are errors they will be displayed.
If there are no errors then the user is redirected to Income Type Index page and the following message is displayed there:

Income Type #{name} was saved!

4. In the income types index page User clicks on an Delete Button

When User clicks on a Delete button for a specific Income Type a popup window is shown displaying the following question:

Press Ok to Delete the Income Type "#{Salary}"?

The Windows will have buttons OK and Cancel.
If User clicks on OK then the Income Type is deleted and user is redirected to Income Type Index Page and the following message is displayed:

Income Type #{Salary} deleted!

Incomes

1. The Incomes Index Page

This page will display a table showing in descending order (from the newest one at the top to the oldest one at the end) all added Incomes for the current month.

The table contains the following information:

ID

Income Type

Amount

Note

Created At (or Added At)

Link to Delete the Income

At the top of the table there is a place where the following information is displayed:

Total from beginning of the month: 1213 RON

2. Adding new Income

In the Index page there is a text and a button saying:

Add NEW Income

The word NEW is the link.

When the User pressed this button a form is displayed with the following information:

Income Type

Amount

Note

Add button

The field Note is a field with multiple rows and columns.

The field Income Type is a drop down containing all the Income Types added (with the relation child/parent visible shown).

This field has a default value saying

Choose income type

All fields are required, except the "Note" field.

After pressing the Add button two cases might arise:

1. If all the fields are filled correctly then a message is displayed saying 1

You added XXX to your Income this month

and the user sees the same form so that he can add more incomes.

2. If there is an error then an appropriate error message is displayed and the form is showed with the errors fields marked in a specific way (with red for example).

For case 2 the following errors might appear:

- If the user didn't choose an Income Type the error message is saying

"Please choose Income Type"

- If the user didn't filled the Amount the error message is saying:

"Please write the amount of money earned"

3. Deleting Income

When User is pressing the Delete link corresponding to a specific Income in the Income Index the Income is deleted and the following message is displayed:

"Income 120 RON from Salary is deleted. Press Undo to add it back"

In this text Undo is a link and when user is pressing this link the income is added back to the Incomes list with the same values as before (including the original value of Created At)

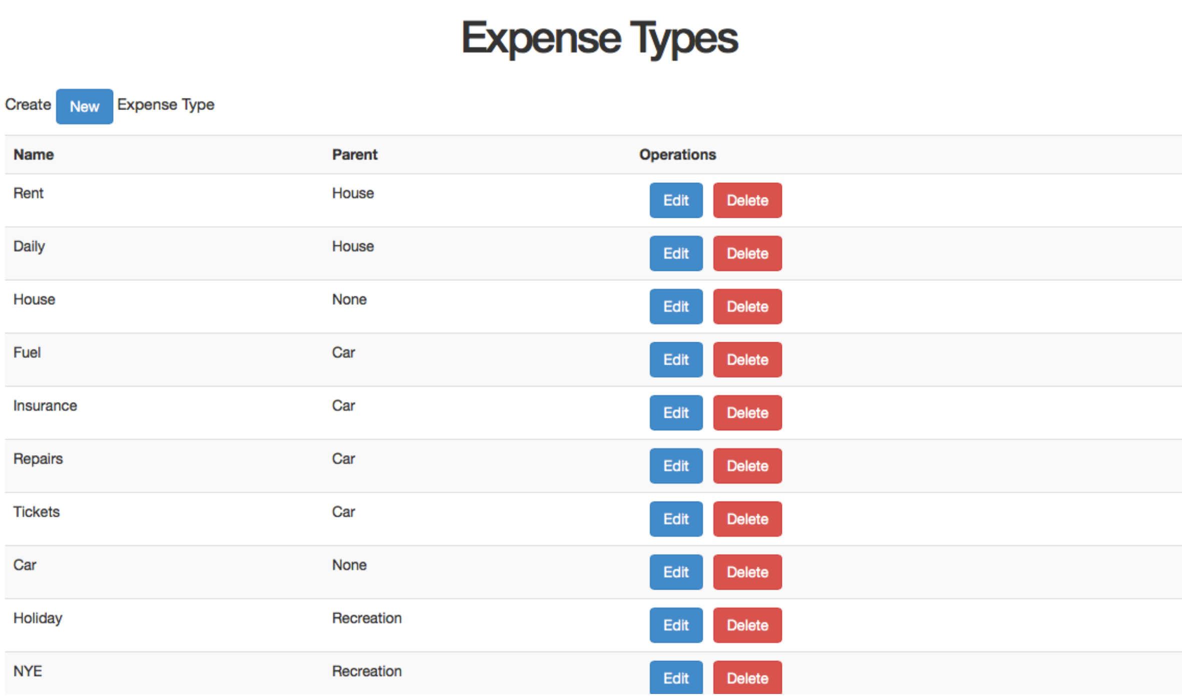
Expense

An expense is an amount of money spent by a user at a specific time.
Each expense will have at least the following information:
- Type of expense (there will be some predefined types but the user has the possibility to define his/her own types)
- Amount
- Currency

Expense Type

1. User clicks on a link to "Expense Types".

The Expense Type index page has two areas: top and bottom.



Expense Types

Create New Expense Type

Name	Parent	Operations
Rent	House	Edit Delete
Daily	House	Edit Delete
House	None	Edit Delete
Fuel	Car	Edit Delete
Insurance	Car	Edit Delete
Repairs	Car	Edit Delete
Tickets	Car	Edit Delete
Car	None	Edit Delete
Holiday	Recreation	Edit Delete
NYE	Recreation	Edit Delete

The Top will display the following information:

Title: Expense Types
A button to add new Expense Type.

Bottom Area shows:

The list of Expense Types already saved.
This list contains unique identifier for each Expense Types, names of the Expense Types and links for each row to Edit or Delete it.

The head of this table will be:

ID
Name
Parent
Operations

The operations column contains two action buttons for each Expense Type:

Edit
Delete

2. In the expense types index page User clicks on button New Expense Type

A new page is displayed containing a form to add New Expense Type.

The form contains the following elements:

Name - text field
Parent - a dropdown menu displaying all expense types who are not children of any other expense type
Create - submit button

When User press on Create button, the form is validated.
The name of the Expense Type should not be more then 50 chars.

If there are errors, they will be displayed on the screen.

If there are no errors, the user is redirected to Expense Types screen and he sees a message saying

"Expense Type #{name} was saved!”.

3. In the expense types index page User clicks on an Edit Button

The Edit screen is very similar with the New Expense Type screen with difference that the fields Name and Parent are already populated.
The Name field contains the name of the expense type which is edited.
The Parent dropbox displays the name of the parent if there is any.
The screen has a Save button.
When User press the Save button if there are errors they will be displayed.
If there are no errors then the user is redirected to Expense Type Index page and the following message is displayed there:

Expense Type #{name} was saved!

4. In the expense types index page User clicks on an Delete Button

When User clicks on a Delete button for a specific Expense Type a popup window is shown displaying the following question:

Press Ok to Delete the Expense Type ”#{Rent}”?

The Windows will have buttons OK and Cancel.
If User clicks on OK then the Expense Type is deleted and user is redirected to Expense Type Index Page and the following message is displayed:

Expense Type #{Salary} deleted!

Expenses

1. The Expenses Index Page

This page will display a table showing in descending order (from the newest one at the top to the oldest one at the end) all added Expenses for the current month.

The table contains the following information:

ID

Expense Type

Amount

Note

Created At (or Added At)

Link to Delete the Expense

At the top of the table there is a place where the following information is displayed:

Total from beginning of the month: 1000 RON

2. Adding new Expense

In the Index page there is a text and a button saying:

Add NEW expense

The word NEW is the link.

When the User pressed this button a form is displayed with the following information:

Expense Type

Amount

Note

Add button

The field Note is a field with multiple rows and columns.

The field Expense Type is a drop down containing all the Expense Types added (with the relation child/parent visible shown). This field has a default value saying "Choose expense type".

All fields are required, except the "Note" field.

After pressing the Add button two cases might arise:

1. If all the fields are filled correctly then a message is displayed saying:

> "You added 500RON to your Rent Expenses this month"

and the user sees the same form so that he can add more expenses.

2. If there is an error then an appropriate error message is displayed and the form is showed with the errors fields marked in a specific way (with red for example).

For case 2 the following errors might appear:

- If the user didn't choose an Expense Type the error message is saying

> "Please choose Expense Type"

- If the user didn't filled the Amount the error message is saying:

> "Please write the amount of money spent"

3. Deleting Income

When User is pressing the Delete link corresponding to a specific Expense in the Expenses Index the expense is deleted and the following message is displayed:

> "Expense 500RON for Rent is deleted. Press Undo to add it back"

In this text Undo is a link and when user is pressing this link the expense is added back to the Expenses list with the same values as before (including the original value of Created At)

User Management

The purpose of the User management is to allow to multiple users form the same location (house, company) to add Incomes and Expenses to a general budget.
This means the user management system should support creating users and some hierarchical relations between them.

1. Creating new Account (Uninvited)

This is the most simple path of creating a new account.
The user enters the website and presses:

> Registration

When pressing this link a registration form is displayed.
The registration form contains the following information:
Username
Name
Email
Password
Password Confirmation
A **Register** button.

Success registration

When pressing the Register button if all the information is correct then the following steps will occur:

1. The user sees in the response page the text:

> Your account was created! Please check your email john@doe.com and click on the confirmation link to activate your account!

2. The user receives an email with a Activation Link:

Subject of email:

Activate your Trackie account!

Body:

Hello John,

Please click on the following link to activate your account!

Activate account

Or if you cannot click on it copy paste the following URL in your browser address bar:

http://trackie.com/13qwsdadhahdgfahsfda

Thank you,

Trackie Team!

3. After pressing the Activate link the User is automatically logged in in his/her account. This automatically logged in can happen only at the first click on the link. If user presses multiple times then the user is redirected to the Log in screen where the following message is displayed:

Your account is already activated! Login in the system with your username and password!

Errors in the Registration form

If there are errors in the registration form, the user is informed about them.
If the username has less then 4 characters:

The username should have more then 4 characters.

If the username has more then 50 characters:

The username you are trying to use has more then 50 characters. Probably you will have a hard time to remember it so please choose one with fewer characters.

If the password has less then 8 chars:

The password you wrote is unsecured. It has less then 8 chars. Please write a password longer then 8 chars.

If the password does not have at least one uppercase chars or does not contain at least one non-alphanumeric character:

The password you wrote is unsecured. It should have at least one uppercase characters or one non-alphanumeric character (~!@#$%^&*()_+,.<>/?;':"[]{}\|-=`)

If the password does not match confirmation password:

The password and confirmation password does not match. Please write the same password in both fields.

For all errors the referring field is marked in a specific way for user to quickly identify where the error is. The mark can be a red border and a red color for the font inside the form field.

2. User Login

The home screen contains a section for user login.

Reports

To be defined