

Web Interface Design



Bootstrap

Angela
Alonso Moro

2º DAW

Content

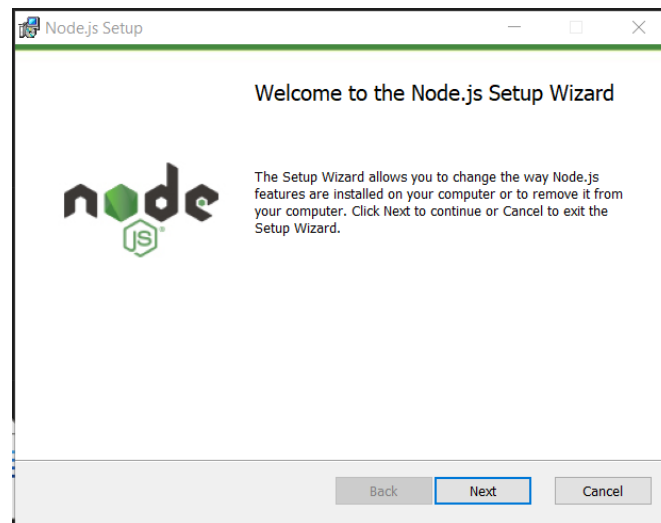
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Project Ideation

This application is a Kakebo through which you can easily keep track of your expenses. To access it is necessary to have an account, once registered on the first screen you have a dashboard with a summary of all annual transactions and spending categories. Through the menu you can navigate to the tables with the different data arranged in tables.

Setting Up the Development Environment:

Install Node.js and npm



Download the installer and install it.

```
Símbolo del sistema
Microsoft Windows [Versión 10.0.19045.3803]
(c) Microsoft Corporation. Todos los derechos reservados.

C:\Users\angy_>node -v
v20.10.0

C:\Users\angy_>npm -v
10.2.3

C:\Users\angy_>
```

It has been installed correctly.

Create a new project and initialize a Git repository

```
PS C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> npm init
This utility will walk you through creating a package.json file.
It only covers the most common items, and tries to guess sensible defaults.

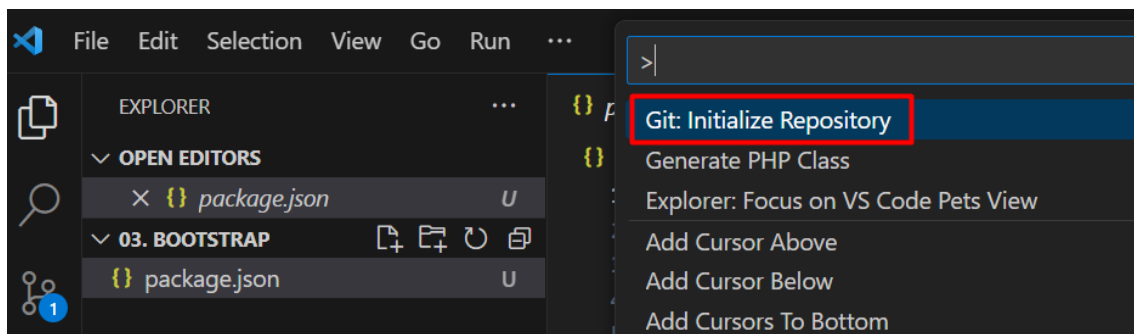
See `npm help init` for definitive documentation on these fields
and exactly what they do.

Use `npm install <pkg>` afterwards to install a package and
save it as a dependency in the package.json file.

Press ^C at any time to quit.
package name: (03.-bootstrap)
version: (1.0.0)
description: Bootstrap website
entry point: (index.js)
test command:
git repository:
keywords:
author: Angela Alonso Moro
license: (ISC)
About to write to C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap\package.json:
{
  "name": "03.-bootstrap",
  "version": "1.0.0",
  "description": "Bootstrap website",
  "main": "index.js",
  "scripts": {
    "test": "echo \"Error: no test specified\" && exit 1"
  },
  "author": "Angela Alonso Moro",
  "license": "ISC"
}

Is this OK? (yes) y
```

Creation of the project.



Initialization of the local repository.

```
PS C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> git remote add origin https://github.com/angelamoro/Bootstrap-website.git
PS C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> git add.
git: 'add.' is not a git command. See 'git --help'.

The most similar command is
  add
PS C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> git add .
warning: LF will be replaced by CRLF in package.json.
The file will have its original line endings in your working directory.
PS C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> git commit -m "Add GitHub repository"
[master (root-commit) 835e5ae] Add GitHub repository
 1 file changed, 11 insertions(+)
 create mode 100644 package.json
PS C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> git push origin master
fatal: HttpRequestException encountered.
Error al enviar la solicitud.
Counting objects: 3, done.
Delta compression using up to 16 threads.
Compressing objects: 100% (2/2), done.
Writing objects: 100% (3/3), 399 bytes | 399.00 KiB/s, done.
Total 3 (delta 0), reused 0 (delta 0)
To https://github.com/angelamoro/Bootstrap-website.git
 * [new branch] master -> master
PS C:\Users\angy_OneDrive - Educacyl\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> █
```

Linking the local repository to the online repository

Install Bootstrap through npm

```
PS C:\Users\angy_OneDrive - Educacy1\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> npm install bootstrap@5.3.2
added 2 packages, and audited 3 packages in 2s

2 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
PS C:\Users\angy_OneDrive - Educacy1\DAW\2º\3. DIW - Diseño\Tareas\03. Bootstrap> █
```

Install sass through npm

```
PS C:\xampp\htdocs\daw\Bootstrap> npm install saas
added 1 package, and audited 27 packages in 3s

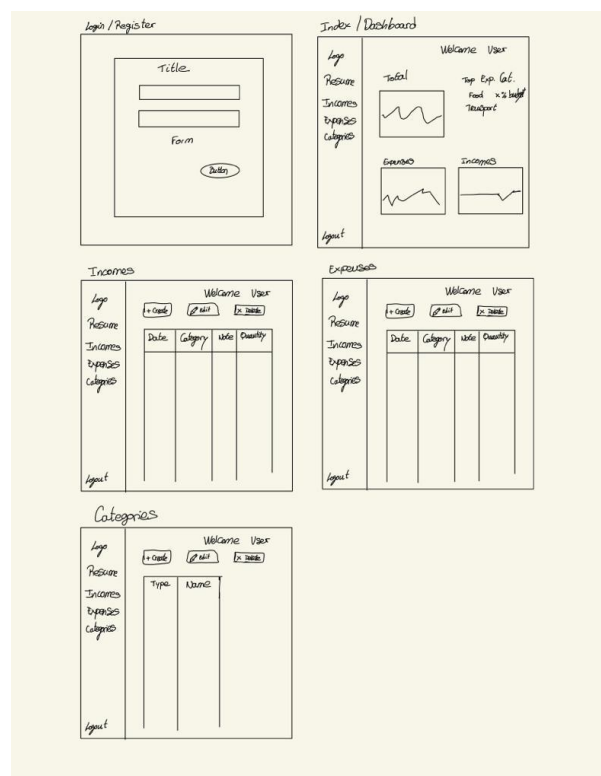
4 packages are looking for funding
  run `npm fund` for details

found 0 vulnerabilities
PS C:\xampp\htdocs\daw\Bootstrap> █
```

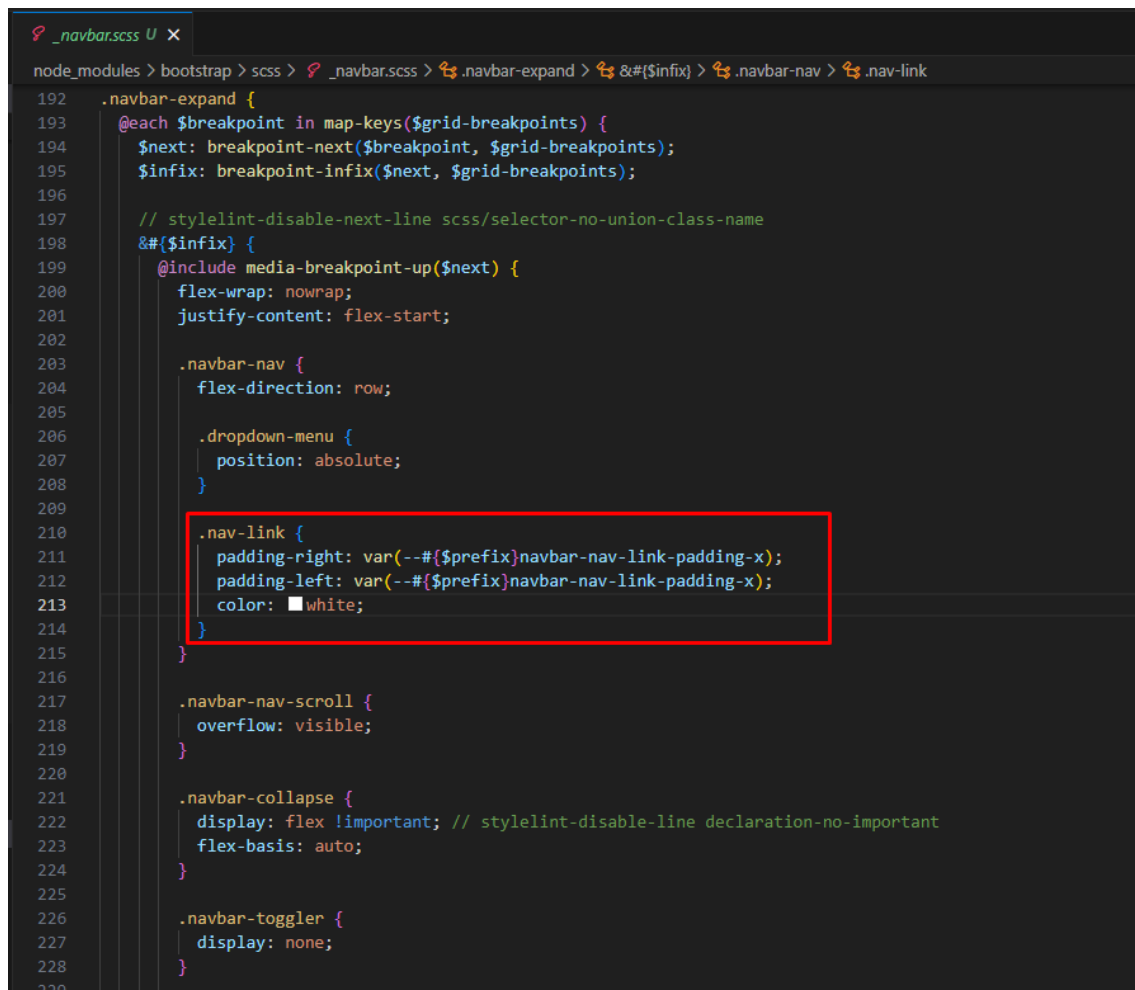
Designing the Dashboard:

My Kakebo consists of interactive charts, tables and buttons through which to register your incomes and expenses.

Mockup of the desired design



Customizing the Bootstrap Theme:

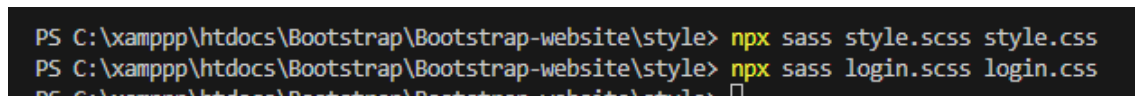


```

192 .navbar-expand {
193   @each $breakpoint in map-keys($grid-breakpoints) {
194     $next: breakpoint-next($breakpoint, $grid-breakpoints);
195     $infix: breakpoint-infix($next, $grid-breakpoints);
196
197     // stylelint-disable-next-line scss/selector-no-union-class-name
198     &#{$infix} {
199       @include media-breakpoint-up($next) {
200         flex-wrap: nowrap;
201         justify-content: flex-start;
202
203         .navbar-nav {
204           flex-direction: row;
205
206           .dropdown-menu {
207             position: absolute;
208           }
209
210           .nav-link {
211             padding-right: var(--#{$prefix}navbar-nav-link-padding-x);
212             padding-left: var(--#{$prefix}navbar-nav-link-padding-x);
213             color: white;
214           }
215         }
216
217         .navbar-nav-scroll {
218           overflow: visible;
219         }
220
221         .navbar-collapse {
222           display: flex !important; // stylelint-disable-line declaration-no-important
223           flex-basis: auto;
224         }
225
226         .navbar-toggler {
227           display: none;
228         }
229

```

I have modified the bootstrap navbar component in its sass file. To the rest of the components of the web I have added style by combining the Bootstrap classes with the ones I have created through sass.

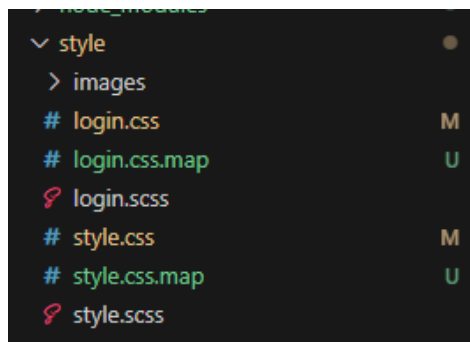


```

PS C:\xampp\htdocs\Bootstrap\Bootstrap-website\style> npx sass style.scss style.css
PS C:\xampp\htdocs\Bootstrap\Bootstrap-website\style> npx sass login.scss login.css
PS C:\xampp\htdocs\Bootstrap\Bootstrap-website\style>

```

To be able to apply the style of the files in scss format it is necessary to compile them to css code.

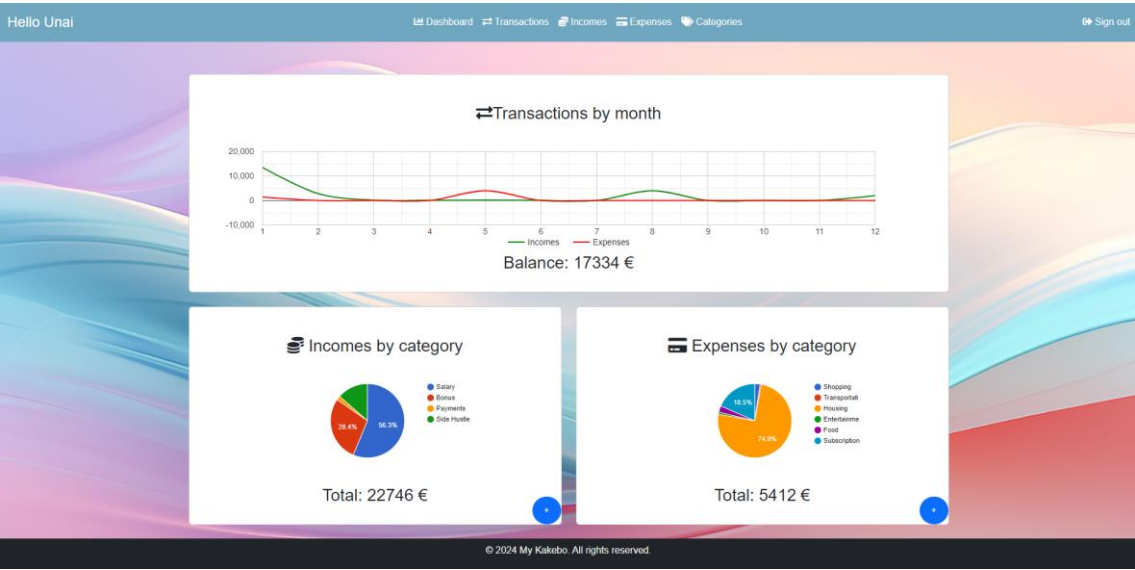


```

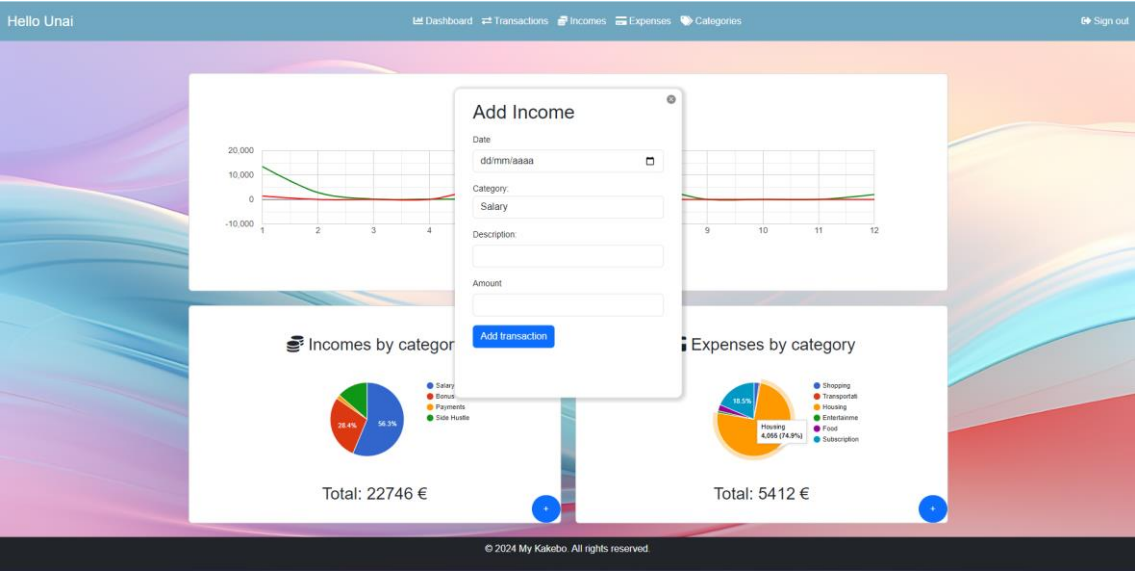
node_modules
├── style
│   ├── images
│   ├── # login.css
│   ├── # login.css.map
│   ├── login.scss
│   ├── # style.css
│   ├── # style.css.map
│   └── style.scss

```

Advanced Features and Improvements

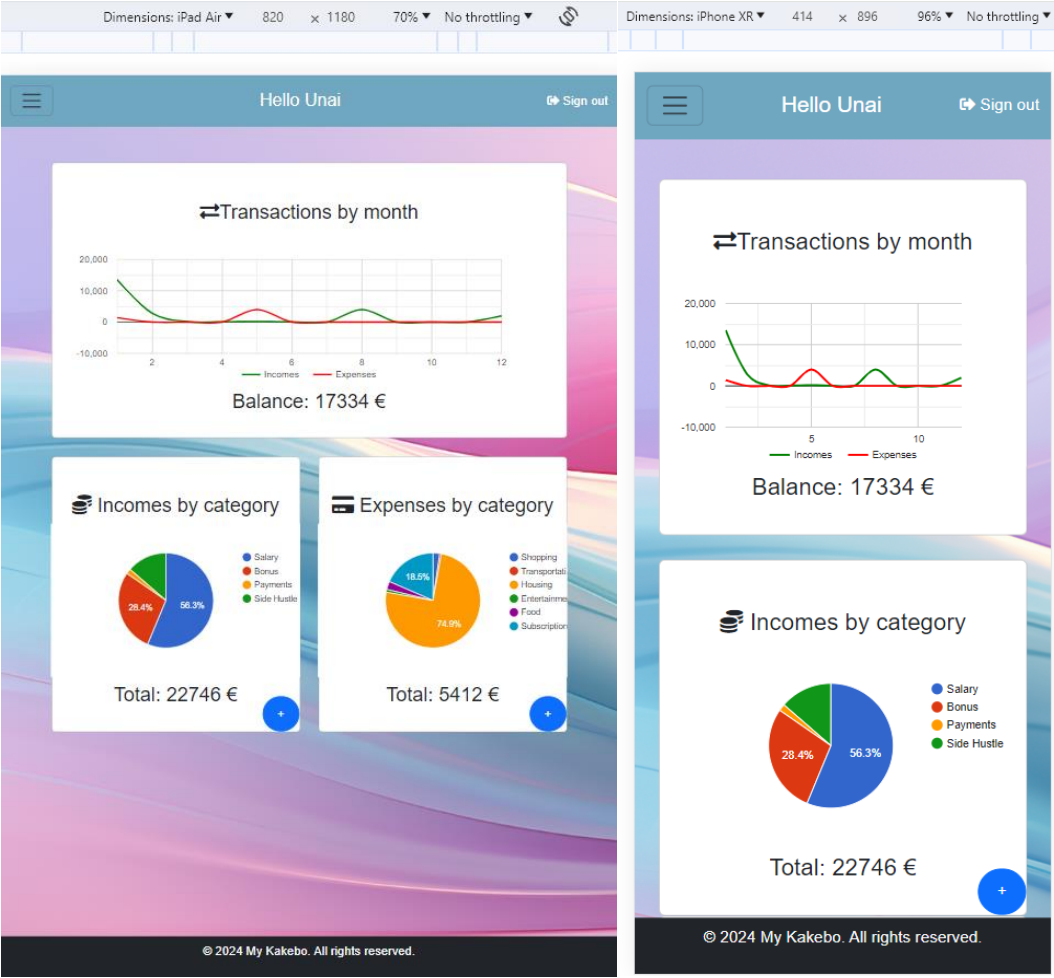
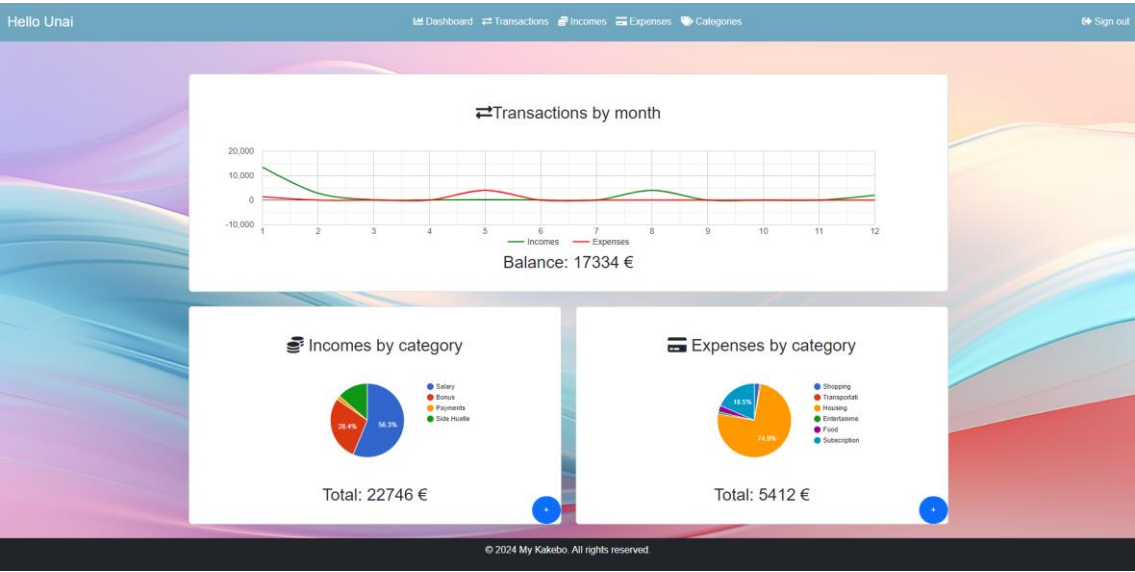


My kakebo has interactive charts. To record income and expenses, click on the + button to open the popup with the form that collects the data.

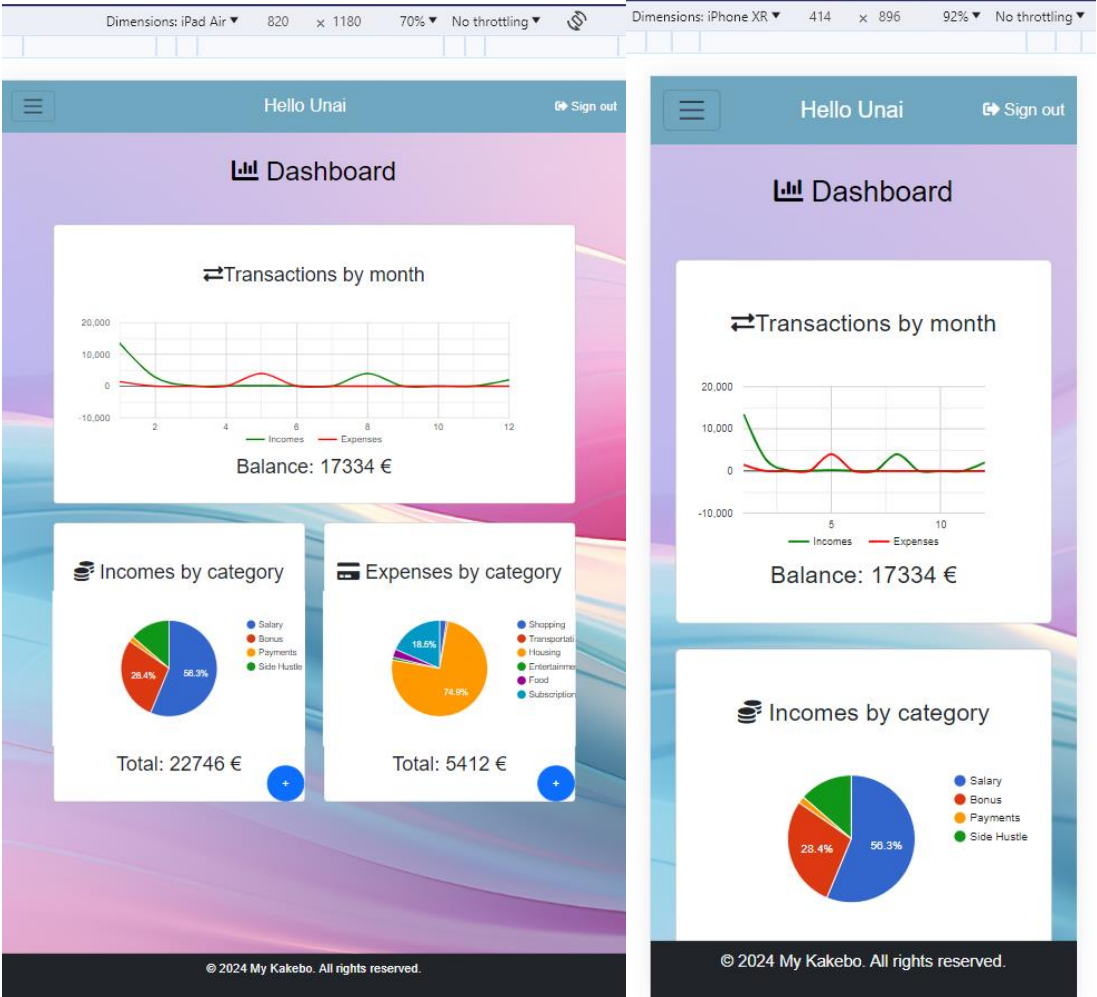
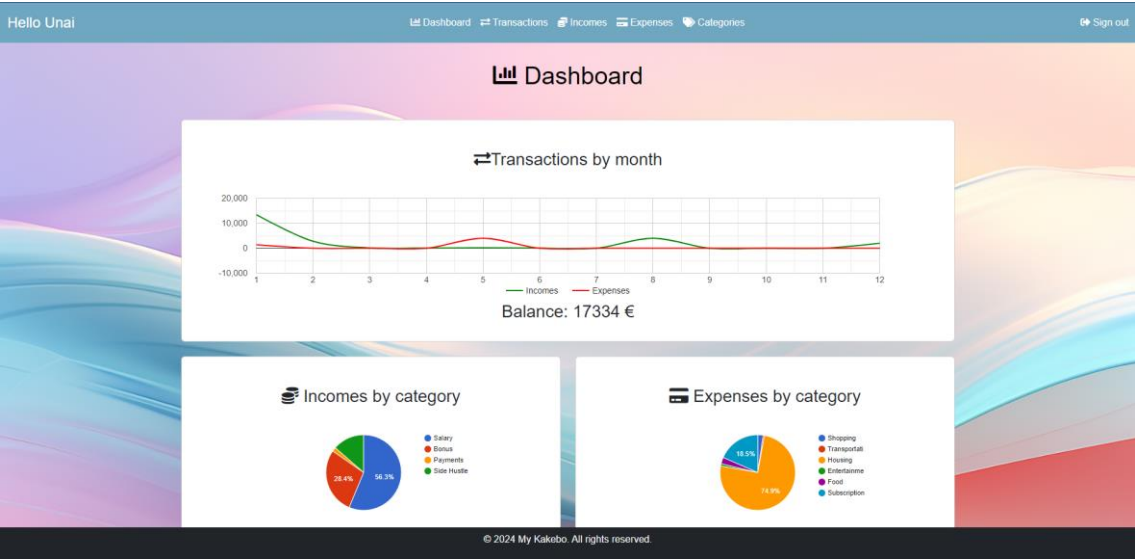


Testing and Optimization:

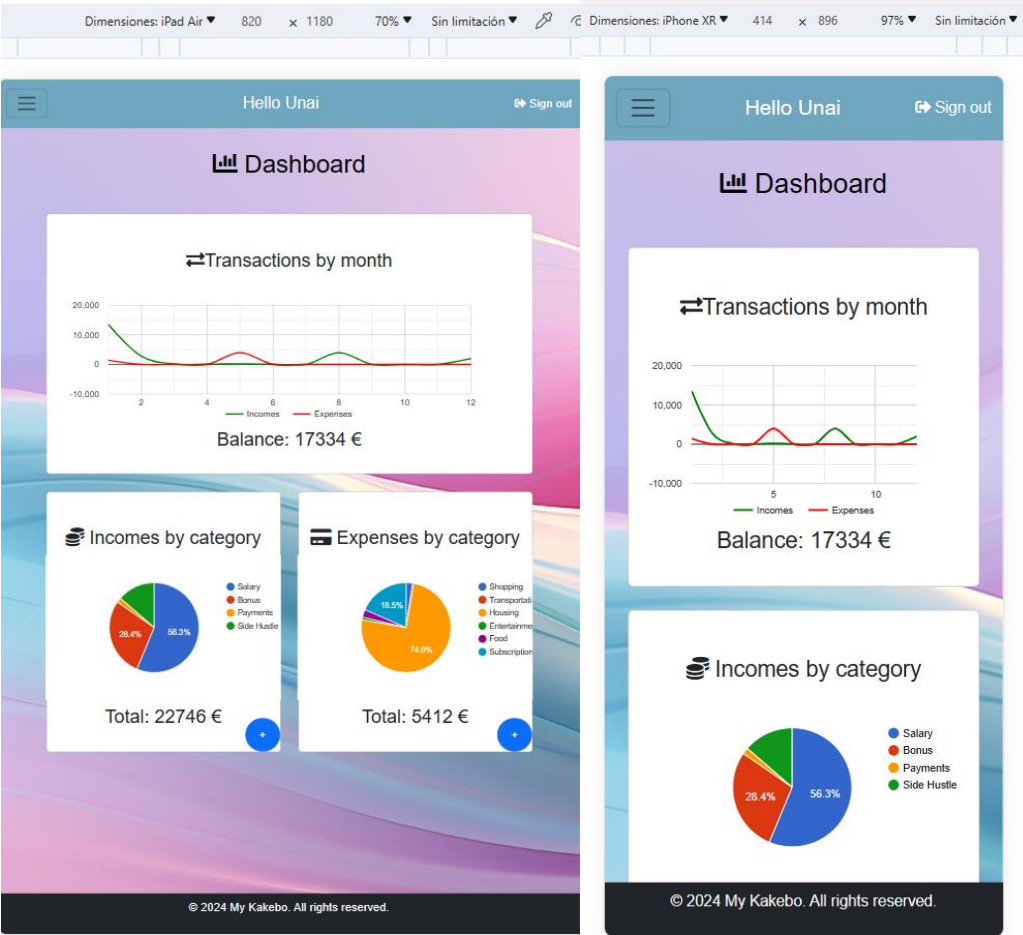
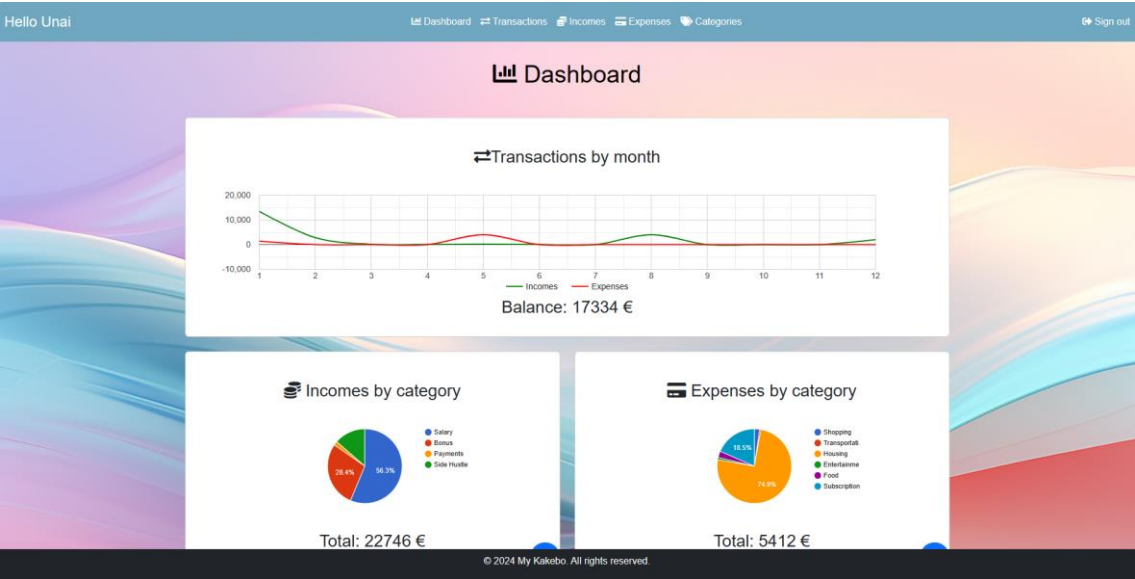
Google Chrome



Vivaldi



Microsoft Edge



Bibliography

- Get started with Bootstrap. Available at.
<https://getbootstrap.com/docs/5.3/getting-started/introduction/> (Accessed: 18 January 2024).
- Google Charts. Available at:
<https://developers.google.com/chart/interactive/docs/gallery?hl=es-419>
(Accessed: 18 January 2024).