



WEB APPLICATION DEVELOPMENT

INCLUDEPICTURE

"/var/folders/5v/sxw2gy254jvbyct5_89szm3r0000gn/T/com.microsoft.Word/WebArchiv
eCopyPasteTempFiles/Data-communication-and-telecom-advisory-1134x300pxl_tcm8-
6949.jpg" * MERGEFORMATINET

PROFESSOR: JORGE EDISON LASCANO

TEAM 5: WORKBOT

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(LIDER), VALERY IVANNOVA NARANJO ZAMBRANO,
ROBERTO CARLOS PALLO YAUTIBUG Y LUIS
SANTIAGO QUINTANILLA CALLE***

2022

PROJECT DESIGN

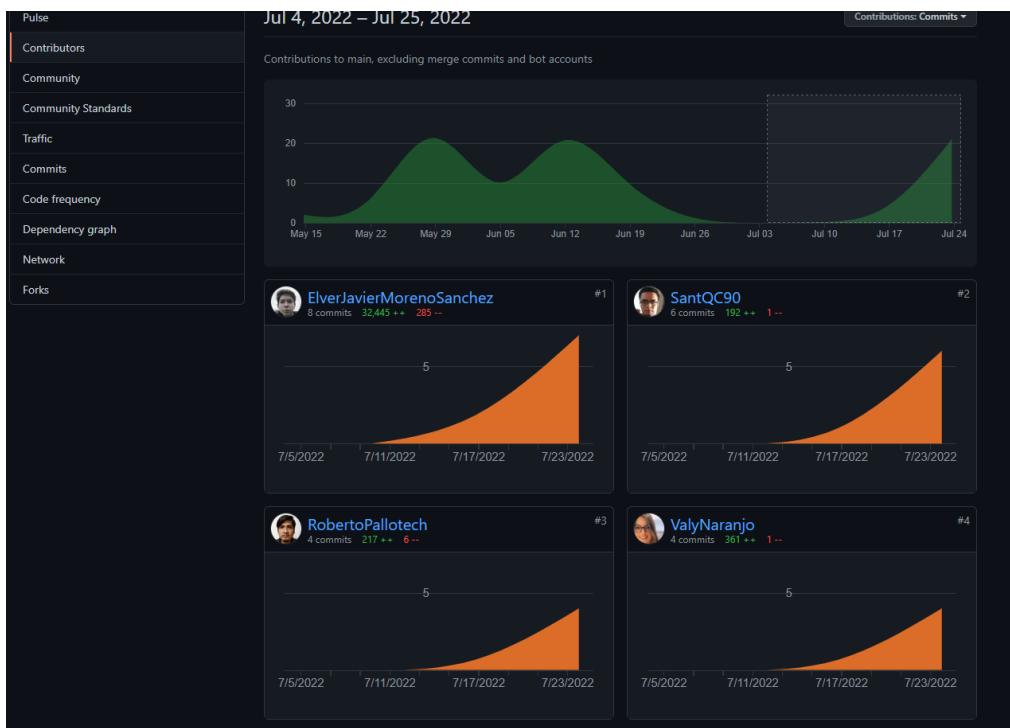
GITHUB LINK:

<https://github.com/ElverJavierMorenoSanchez/ESPE2022-T5-WorkBot.git>

YOUTUBE LINK: <https://youtu.be/U4p3JXKXt0k>

GITHUB REPOSITORY

The screenshot shows the GitHub repository page for 'ESPE2022-T5-WorkBot'. The repository is public and has 124 commits. The main branch has 1 commit. The repository was created by RobertoPallotech and uploaded Sketch web Services. The README.md file contains the project title 'ESPE2022-T5-WorkBot' and a brief description. The repository has 0 stars, 1 watching, and 0 forks. It also lists releases, packages, and contributors.

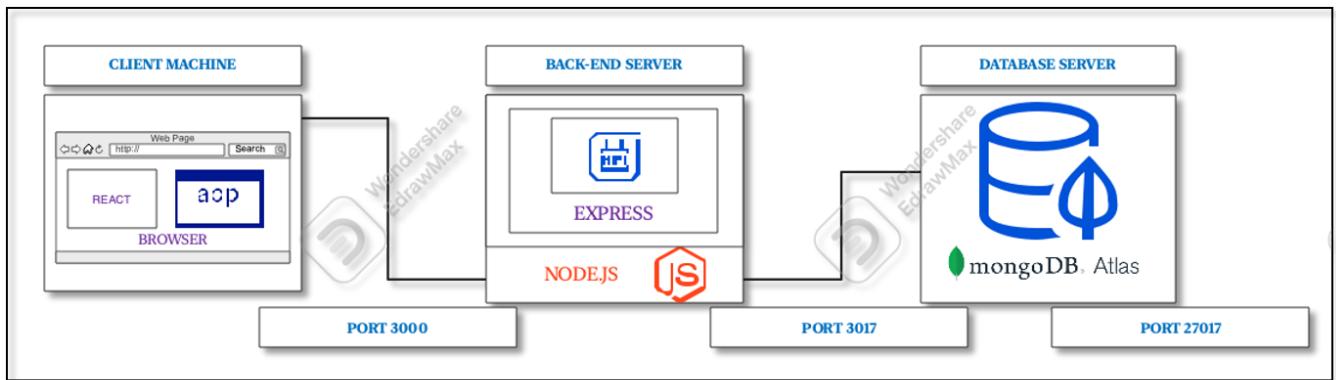


WORK MATRIX

ID	THEME	AS A	NEEDED	SO I CAN	NOTE	PRIORITY	STATUS
RQ-001	Home Page	User and administrator	See to services and information	Attract th user		High	Finished
RQ-002	Login	User and administrator	Register administrator and users	Have a database of the administrator and user		High	Finished
RQ-003	User Page	User	The user can see the products in stock	Make purchases		High	Finished
RQ-004	Add Product	Administrator	Add products to stock with their corresponding information	Products in stock		High	Finished
RQ-005	Product Page	User and administrator	View all products	Have information about the products		High	Finished

ARCHITECTURE

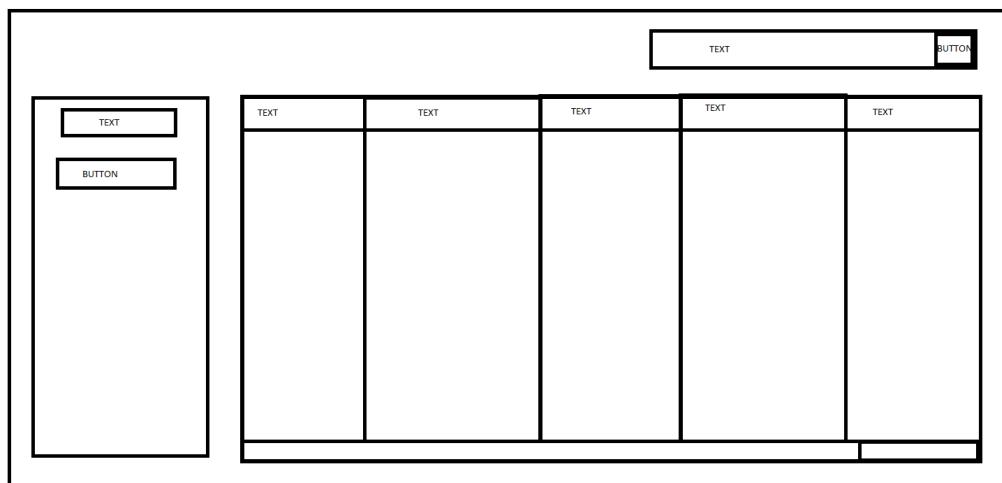
In the architecture of the system, you can see how the connection between the browser (where the React and the App are located) and the back-end server (where the node.js, express, and API were used) and finally with the connection to the MongoDB Atlas Database, for the verification of the users and the added and/or updated products.



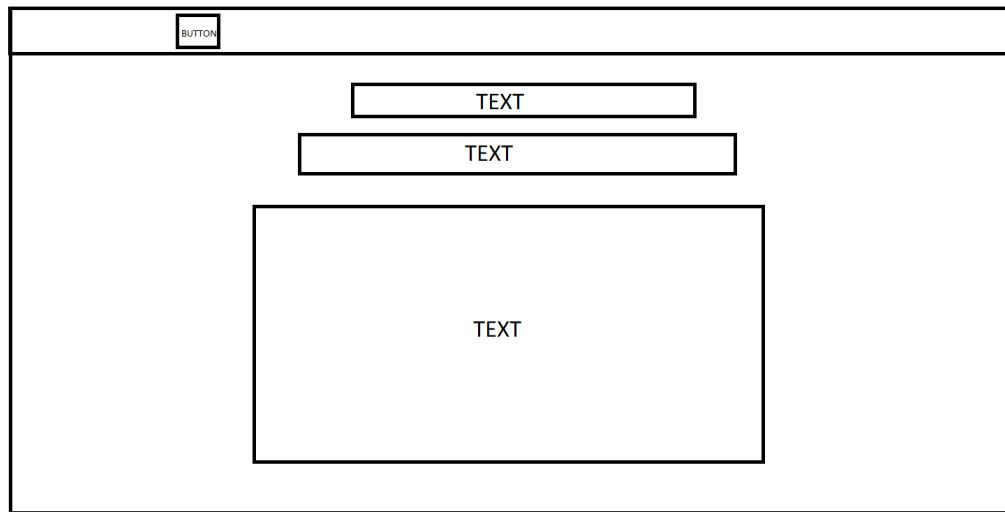
SKETCHES

(1) PUBLIC API CONSUMPTION

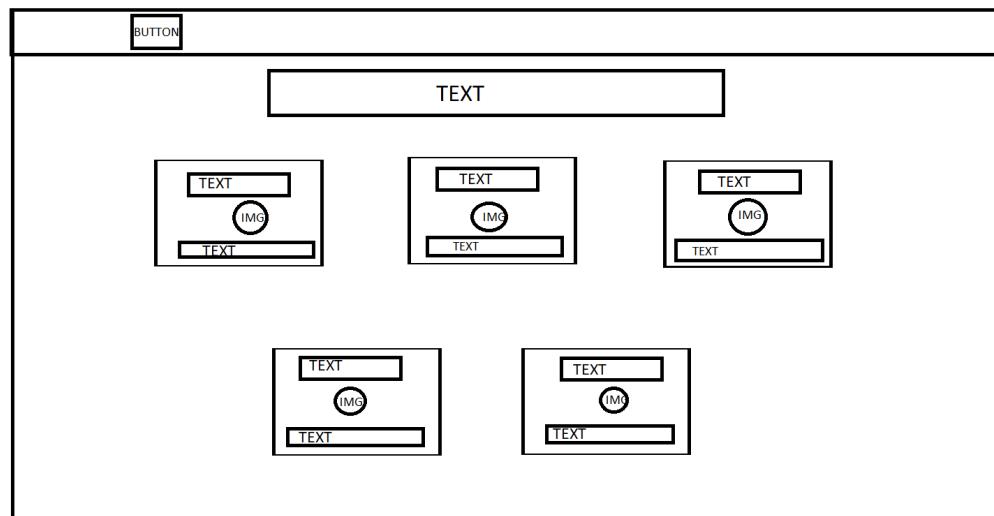
HOME PAGE



ABSTRACT PAGE



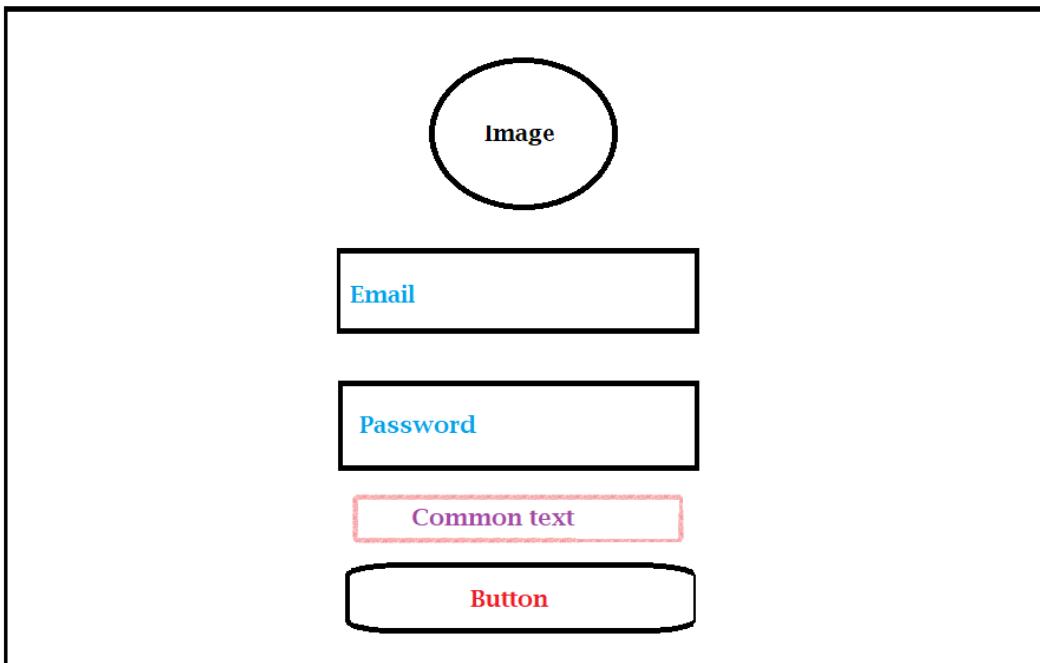
INFO CLIENT COMPUTER PAGE



(2) USER INTERFACES FOR YOUR PROJECT

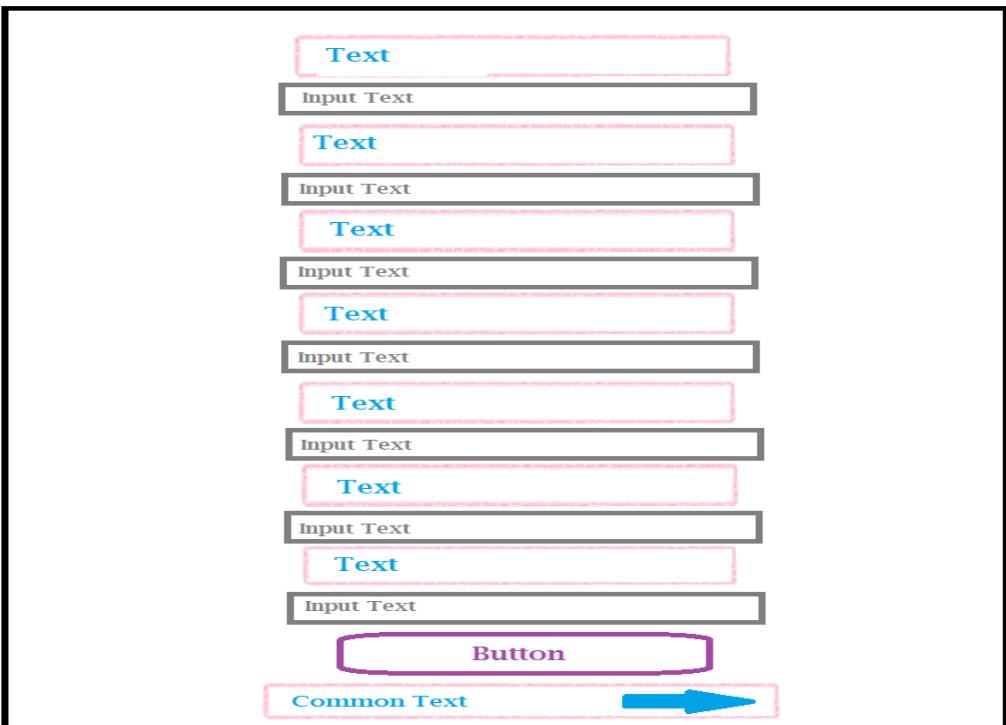
LOGIN PAGE (SIGN IN)

LOGIN PAGE SKETCH



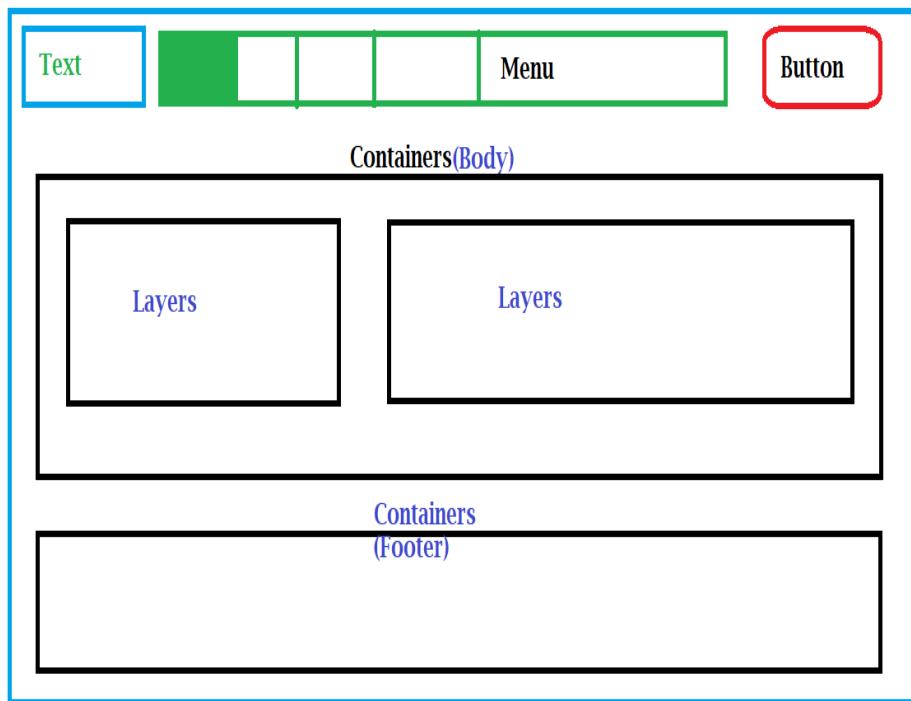
ADD NEW USER (SIGN UP)

FORM PAGE SKETCH



HOME PAGE

HOME PAGE SKETCH



EXECUTION OF THE PROGRAM

(1) PUBLIC API CONSUMPTION

HOME PAGE:

The information is extracted from the public API and sorted into a table with different columns that have information for each article, and links are added to see the summary and the complete document. On the left side are the options, which at the moment only show the information of the client computer, but more options will be added in the future.

The screenshot shows a web browser window with multiple tabs open. The main content area displays a sidebar on the left labeled 'OPCIONES' with a red 'INFORMACION CLIENTE' button. To the right is a table titled 'ARTÍCULOS' with columns for ID, TITULO, AUTORES, and REVISTA. The table lists several articles from PLOS ONE and PLoS Negl. The status bar at the bottom shows system information like weather, battery level, and date.

ID	TITULO	AUTORES	REVISTA
10.1371/journal.pone.0271002	<i>In silico</i> approaches for drug repurposing in oncology. Protocol f	Bruno Raphael Cavalcante,Raiza Di...	PLOS ONE
10.1371/journal.pone.0058675	<i>N</i>-Substituted Benzyl Matrinic Acid Derivatives Inhibit Hepatitis C	Na-Na Du,Zong-Gen Peng,Chong-Wen Bi,S...	PLOS ONE
10.1371/image.pntd.v13.i05	<i>PLoS Neglected Tropical Diseases</i> Issue Image Vol. 13(5) May:		PLoS Negl...
10.1371/journal.pntd.0005478	<i>Taenia solium</i>-cysticercosis and taeniosis: Achievements from th	Hélène Carabin,Andrea S. Winkler,Pierre D...	PLoS Negl...
10.1371/journal.pone.0134754	17 β -Hydroxysteroid Dehydrogenase Type 2 Inhibition: Discovery of Sele	Emanuele M. Gargano,Giuseppe Allegretta,...	PLOS ONE
10.1371/journal.pone.0048048	3-Pyridyl Substituted Aliphatic Cycles as CYP11B2 Inhibitors: Aromatic	Lina Yin,Qingzhong Hu,Rolf W. Hartmann	PLoS ONE
10.1371/journal.pbio.3000251	A 3D-printed hand-powered centrifuge for molecular biology	Gaurav Byagathvalli,Aaron Pomerantz,Soh...	PLoS Biol...
10.1371/journal.pone.0155470	A Blind Test of the Younger Dryas Impact Hypothesis	Vance Holliday,Todd Surovell,Eileen Johns...	PLOS ONE

We can search articles with the name.

The screenshot shows a web browser window with multiple tabs open. The active tab displays a search results page for 'GitHub' on a platform called 'ARTICULOS'. The results are presented in a table with columns for ID, TITULO, AUTORES, and REVISTA. There are 7 results listed, each with a link to the full article. The interface includes a sidebar on the left labeled 'OPCIONES' with a 'INFORMACION CLIENTE' button, and a footer with system status icons.

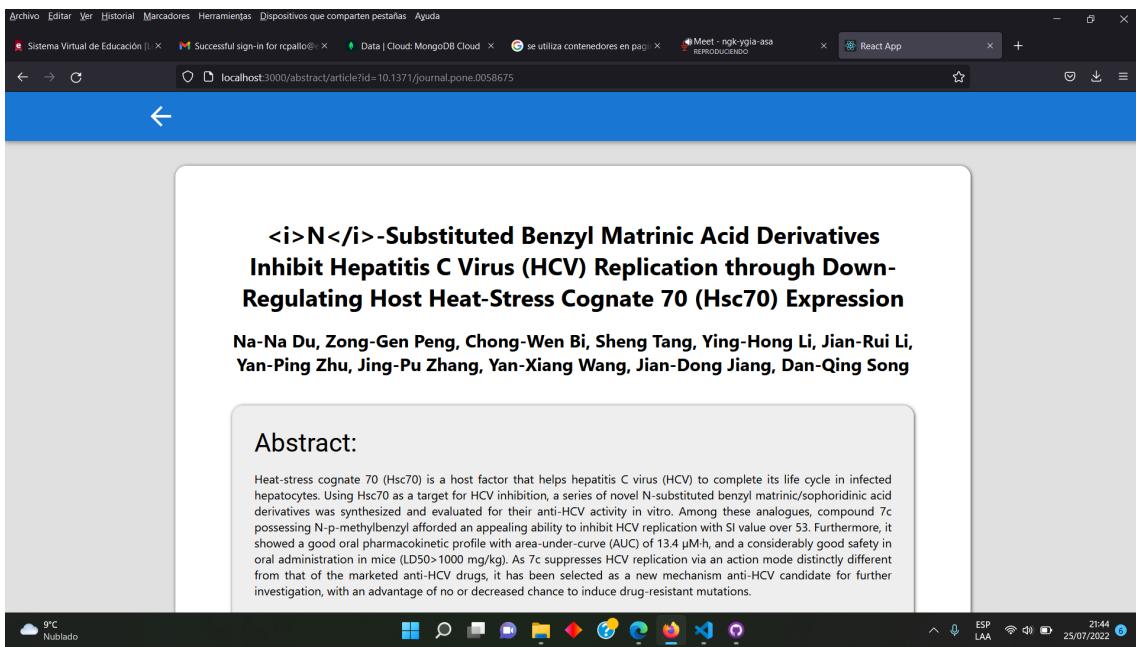
ID	TITULO	AUTORES	REVISTA
10.1371/journal.pcbi.1004668	A Quick Introduction to Version Control with Git and GitHub	John D. Blischak,Emily R. Davenport,Greg ...	PLOS Com...
10.1371/journal.pone.0205898	A large-scale analysis of bioinformatics code on GitHub	Pamela H. Russell,Rachel L. Johnson,Shre... ...	PLOS ONE
10.1371/journal.pcbi.1004947	Ten Simple Rules for Taking Advantage of Git and GitHub	Yasset Perez-Riverol,Laurent Gatto,Rui Wa... ...	PLOS Com...
10.1371/journal.pone.0215059	Status, identity, and language: A study of issue discussions in GitHub	Jingxian Liao,Guowei Yang,David Kavaler,V... ...	PLOS ONE
10.1371/journal.pcbi.1007142	Correction: Ten Simple Rules for Taking Advantage of Git and GitHub	The PLOS Computational Biology Staff ...	PLOS Com...
10.1371/journal.pone.0261262	Emojis predict dropouts of remote workers: An empirical study of emoji	Xuan Lu,Wei Ai,Zhenpeng Chen,Yanbin Ca... ...	PLOS ONE
10.1371/journal.pone.0230250	Multiple social platforms reveal actionable signals for software vulnera	Prasha Shrestha,Arun Sathanur,Suraj Mah... ...	PLOS ONE

if you click link on the left on ID article you will be redirected to a new window.

The screenshot shows a detailed view of a PLOS ONE article titled 'Effect of internet-delivered cognitive behavioral therapy on insomnia in convalescent patients with COVID-19: Protocol for a systematic review and meta-analysis'. The page includes the author list (Yan Chen, Xiang Zhou, Jie Liu, Ru Li, Zihan Jiang, Lina Wang, Shuya Wang, Bo Li), publication date (June 14, 2022), and a DOI link. The article summary discusses the impact of COVID-19 on insomnia and the safety of internet-delivered cognitive behavioral therapy. The right side of the page displays metrics (4 Save, 0 Citation, 229 View, 3 Share) and download options (PDF, Print, Share). Below the abstract, there are sections for 'Introduction', 'Methods and analysis', and 'Conclusion'. A sidebar on the right lists subject areas related to the study.

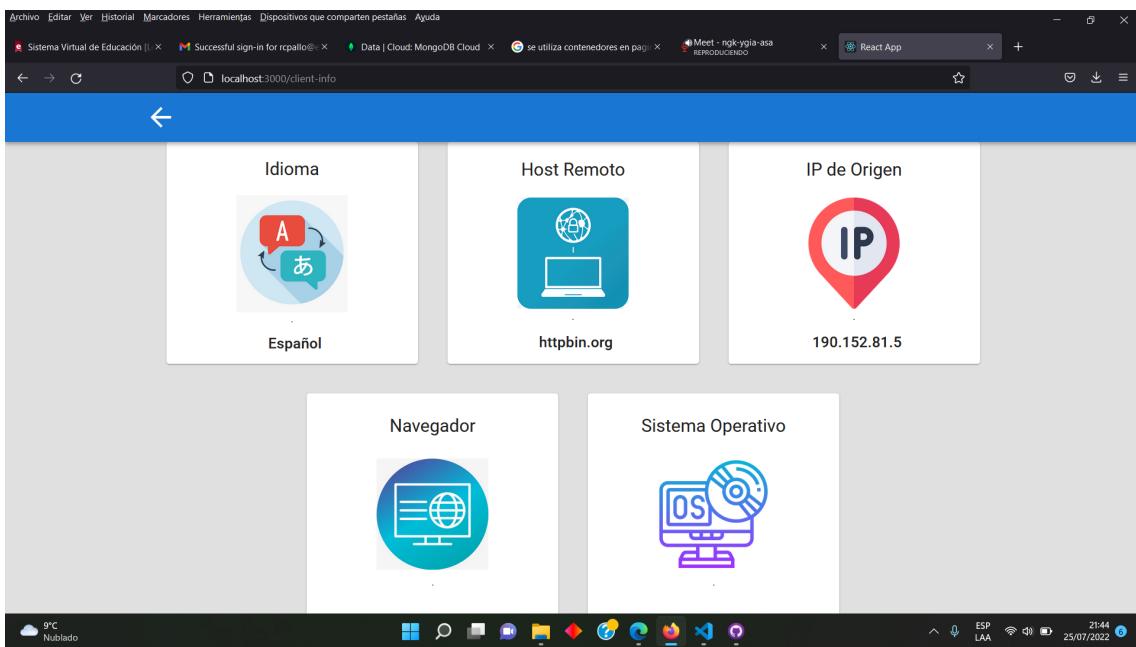
ABSTRACT PAGE:

When clicking the link that is on the left of the title of the article, a new page will open that contains the abstract of the article.



INFO CLIENT COMPUTER PAGE:

If you want to know the information of your computer, you can click on the button that is in the options section. By doing so, you will be sent to a new page that has the information of your PC, such as the IP, the language, etc.



(2) USER INTERFACES FOR YOUR PROJECT

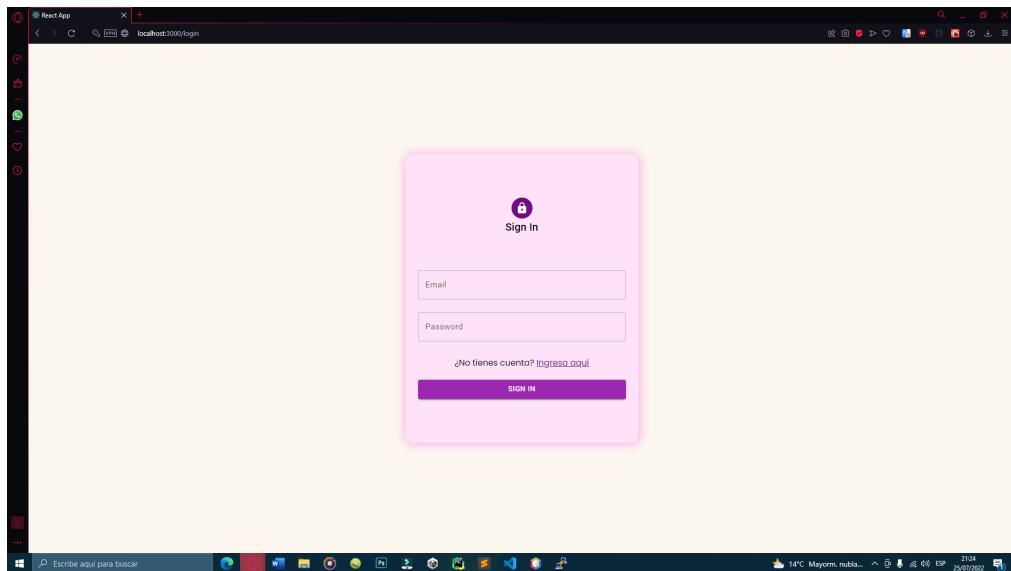
RUN SERVICE

On the server we start our service to be able to make use of our URIs

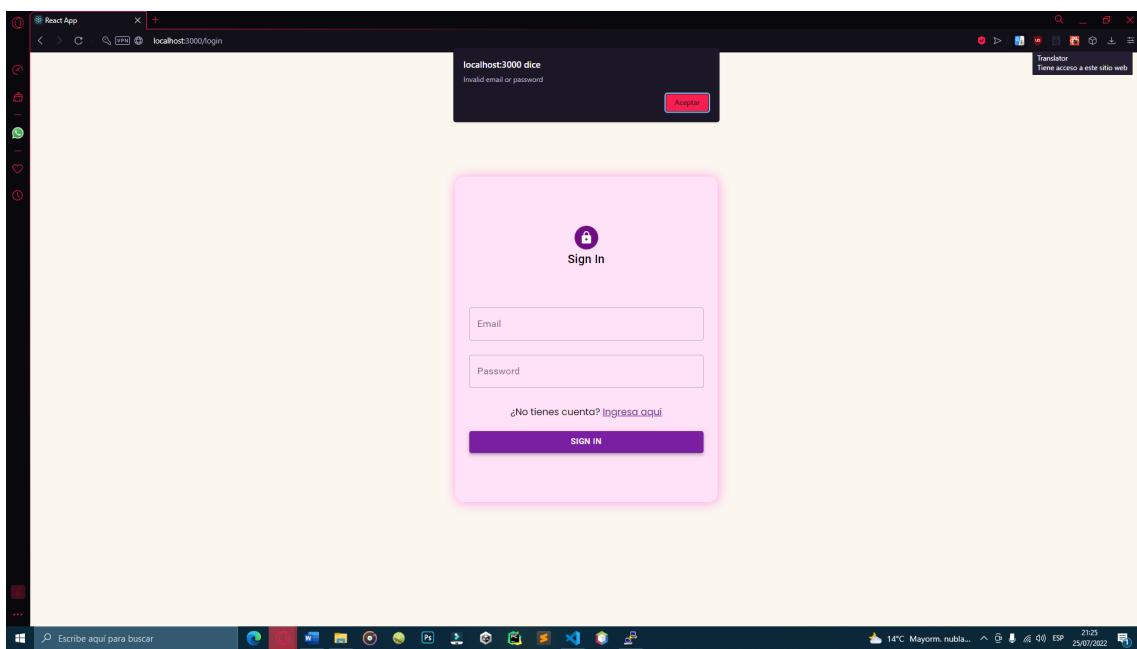
```
Last login: Tue Jul 26 01:34:59 2022 from 181.199.46.142
ubuntu@ip-172-31-56-68:~$ cd team5WorkBot/
ubuntu@ip-172-31-56-68:~/team5WorkBot$ cd workbotservices/
ubuntu@ip-172-31-56-68:~/team5WorkBot/workbotservices$ cd src/
ubuntu@ip-172-31-56-68:~/team5WorkBot/workbotservices/src$ node index.js
Server listen on port 3017
Database is connected
```

LOGIN PAGE:

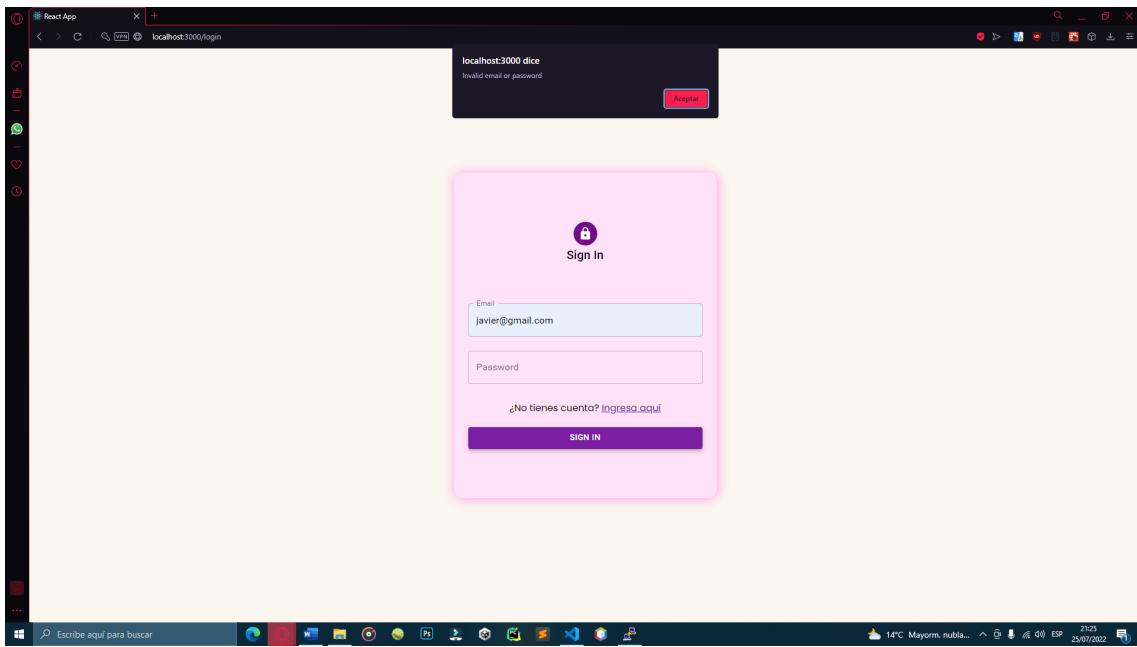
[Login to the site](#)



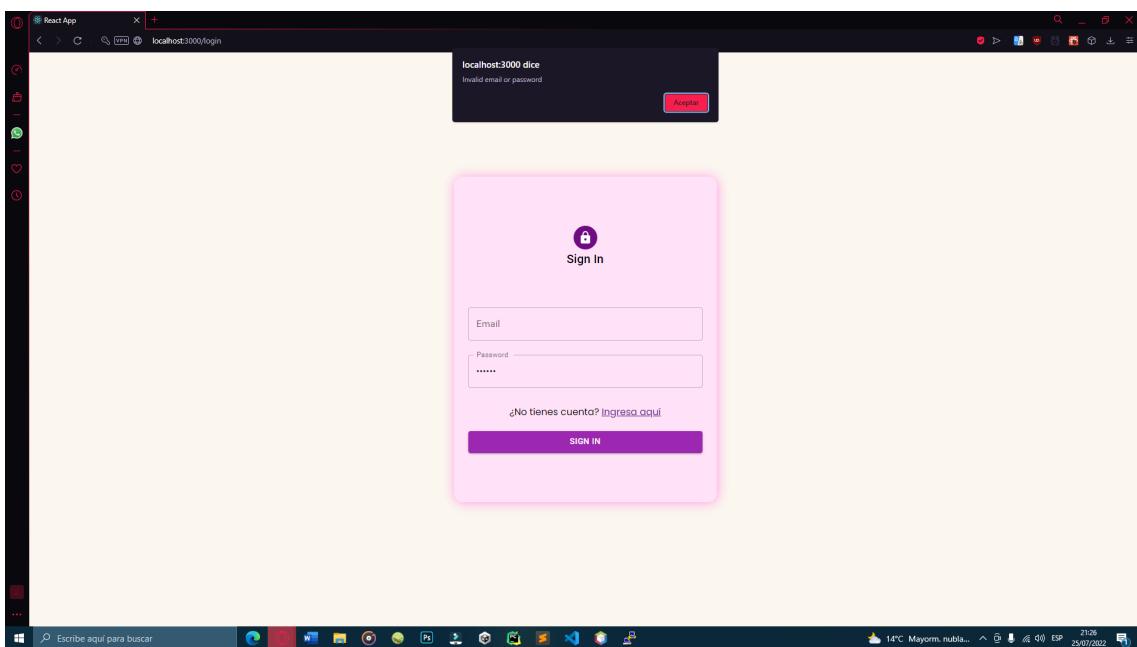
When we do not enter the data correctly we are shown an alert.



Mail Entry incorrectly

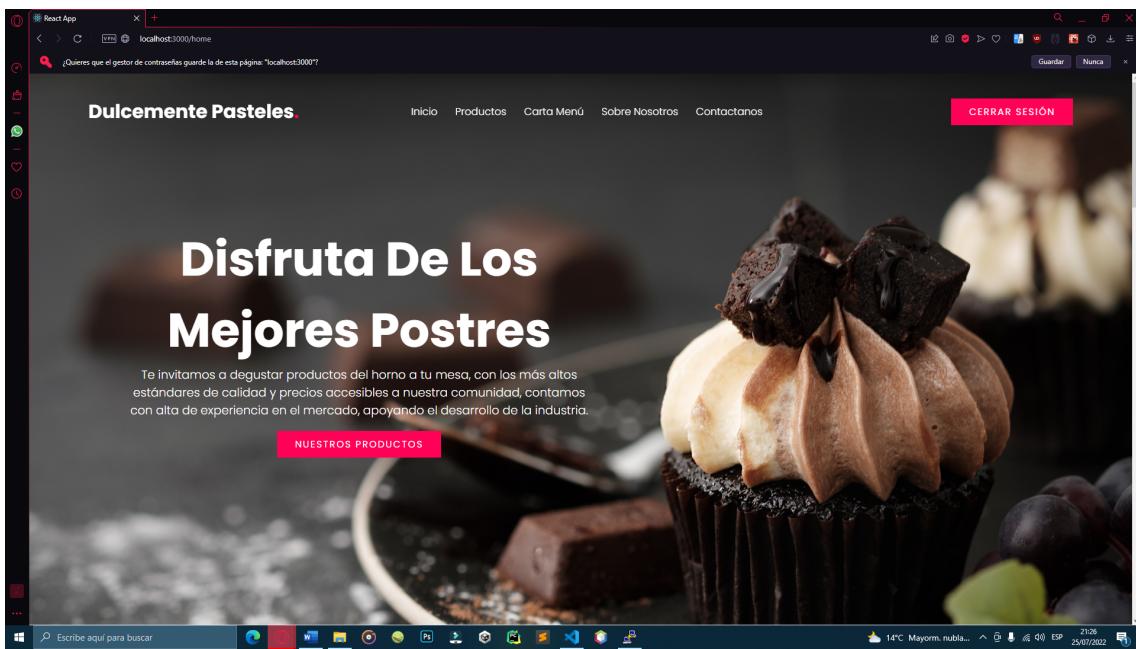


Password input incorrectly



Successful entry

The image represents the implemented design of the main page where we can see the distribution of the different components With a menu at the top where we can navigate the different pages of our Sweets and Cakes Sales system.



SHOW INFO IN SERVER

Here we can see all requests that have been made for the services.

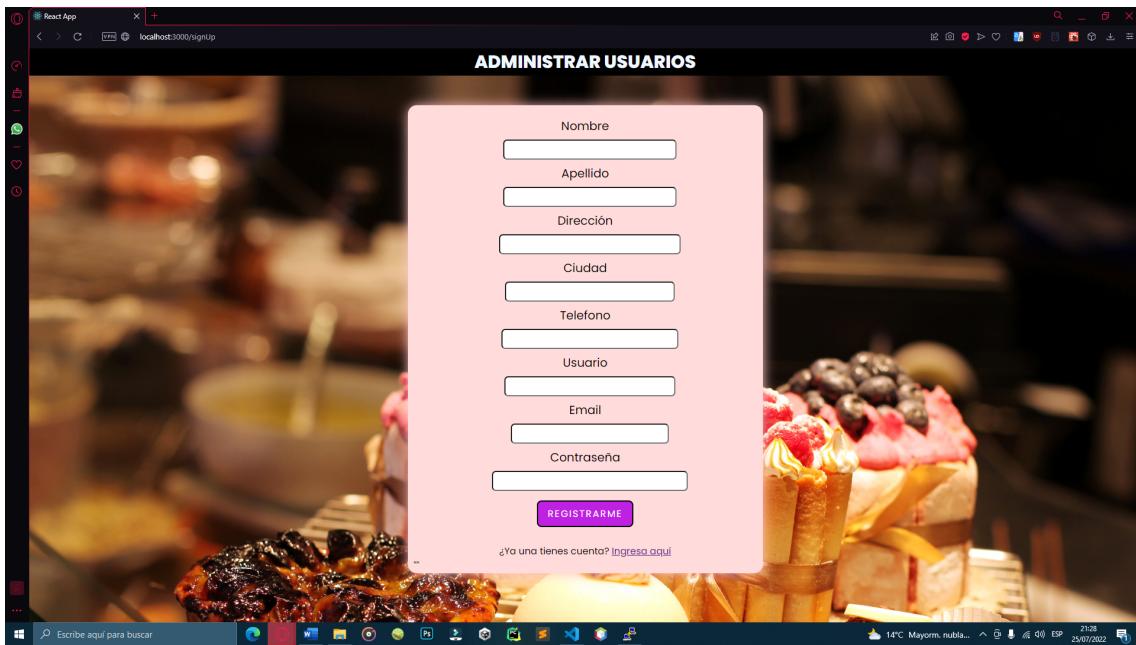
```
Server listen on port 3017
Database is conected
OPTIONS /auth/signIn 204 1.879 ms - 0

POST /auth/signIn 401 11.458 ms - 52
OPTIONS /auth/signIn 204 0.291 ms - 0
javier@gmail.com
POST /auth/signIn 401 1.829 ms - 52
OPTIONS /auth/signIn 204 0.159 ms - 0
230300
POST /auth/signIn 401 1.079 ms - 52
OPTIONS /auth/signIn 204 0.208 ms - 0
javier@gmail.com 230300
POST /auth/signIn 200 298.271 ms - 183
OPTIONS /products 204 0.267 ms - 0
GET /products 304 249.591 ms - -
```

NEW USER PAGE (SIGN UP)

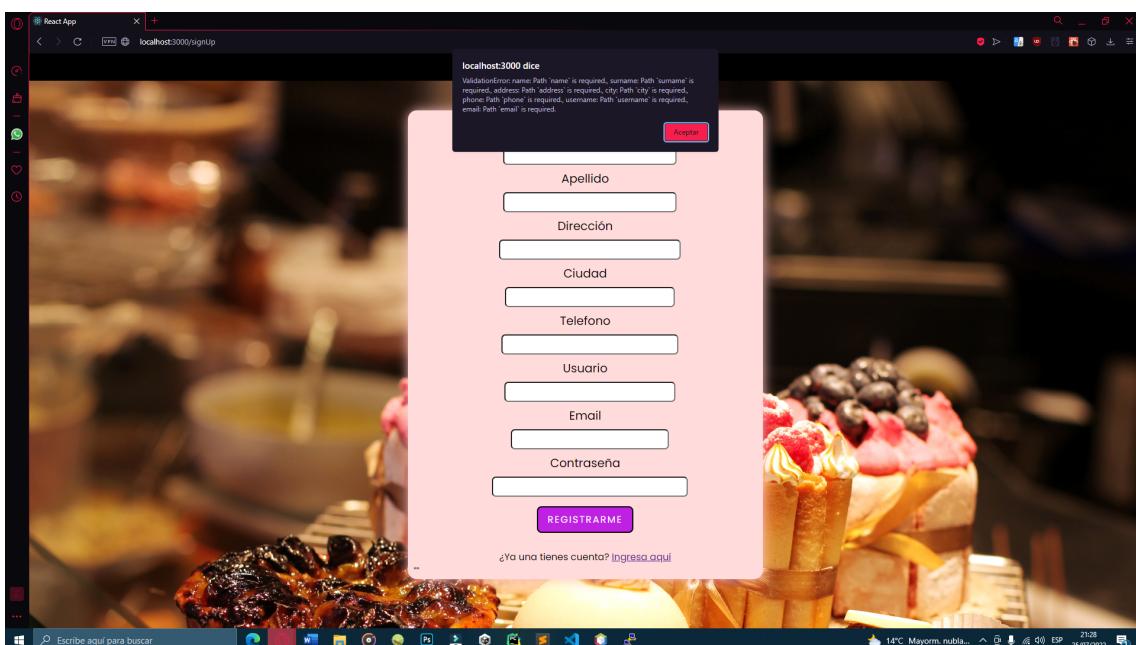
User administration

In the image below, you can see what the new user login page looks like.



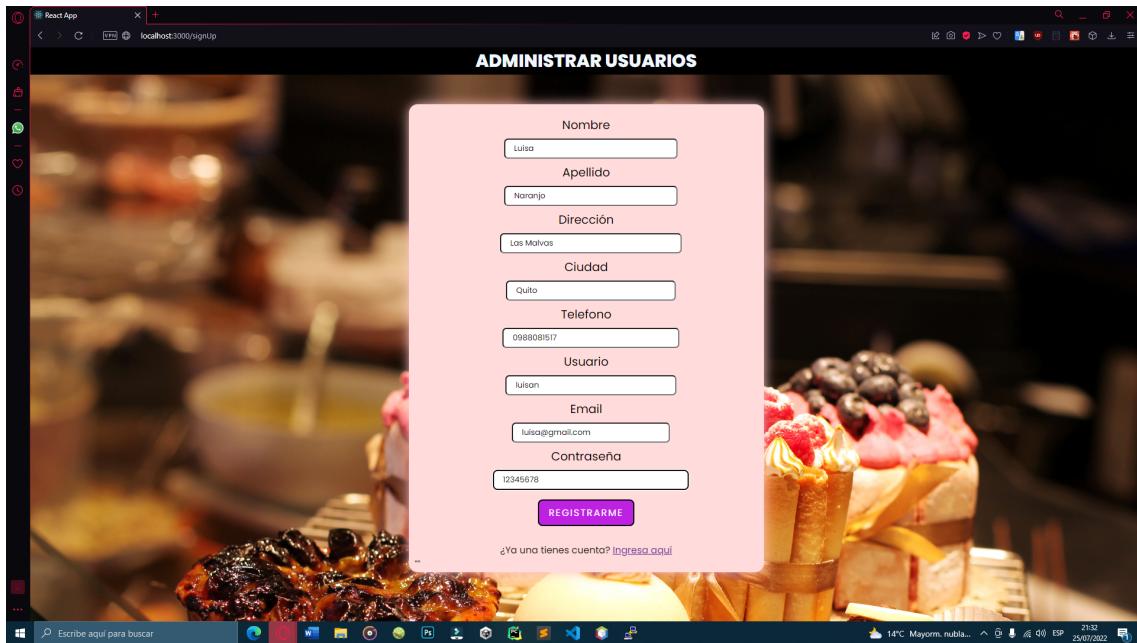
User administration on the local host

In the image below, you can see what the new user login page looks like in the application- The data fields are not entered correctly.



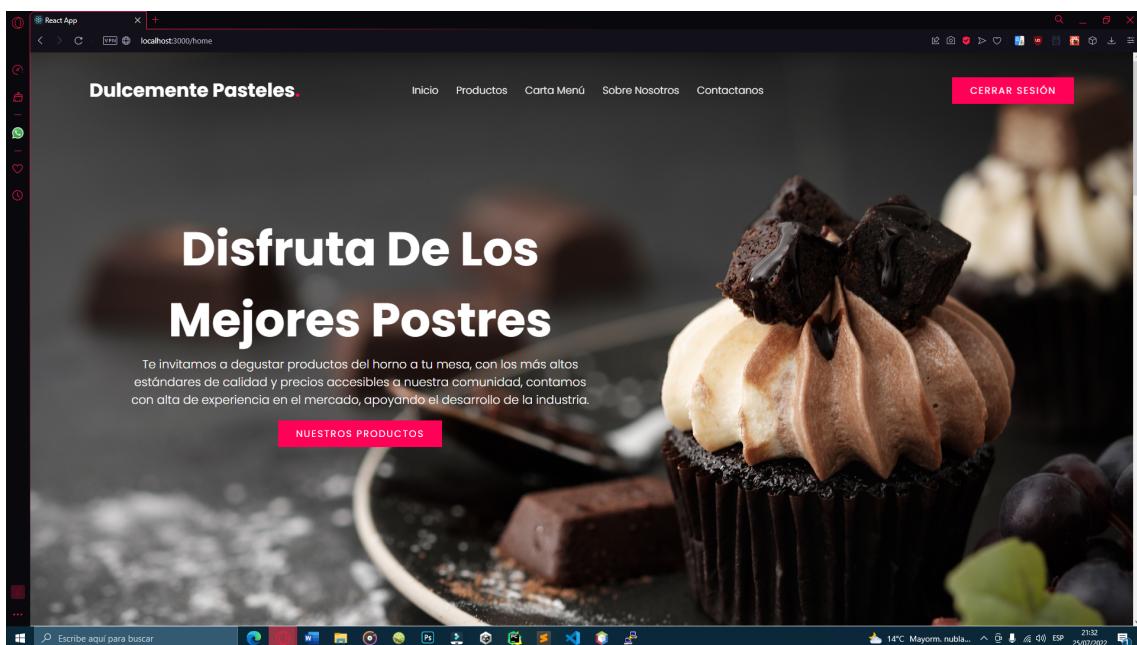
User data entry

In the image below, you can see the entry of the new user's information, such as: name, surname, address, city, telephone, user, email and password.



Successful user login

In the image below you can see the successful login of the new user created.



Successful entry of the user in the database

Observation in the MongoDB Atlas database, the successful creation of the new user in the application.

The screenshot shows the MongoDB Atlas interface for the database 'BakeryDulcementePasteles'. The 'User' collection is selected. A red box highlights the second document in the list, which represents a newly created user named 'Luisa'.

User Document Details:

```
_id: ObjectId("62df5254462d84613dd7b88b")
name: "Luisa"
surname: "Naranjo"
address: "Las Malvas"
city: "Quito"
phone: "0988881517"
username: "luisan"
email: "luisa@gmail.com"
password: "$2a$10$SB0OCINxxePXiPA2tEHurOMDLYq.Q7ztTQq@VbAw2g6XrcsyP71"
> roles: Array
```

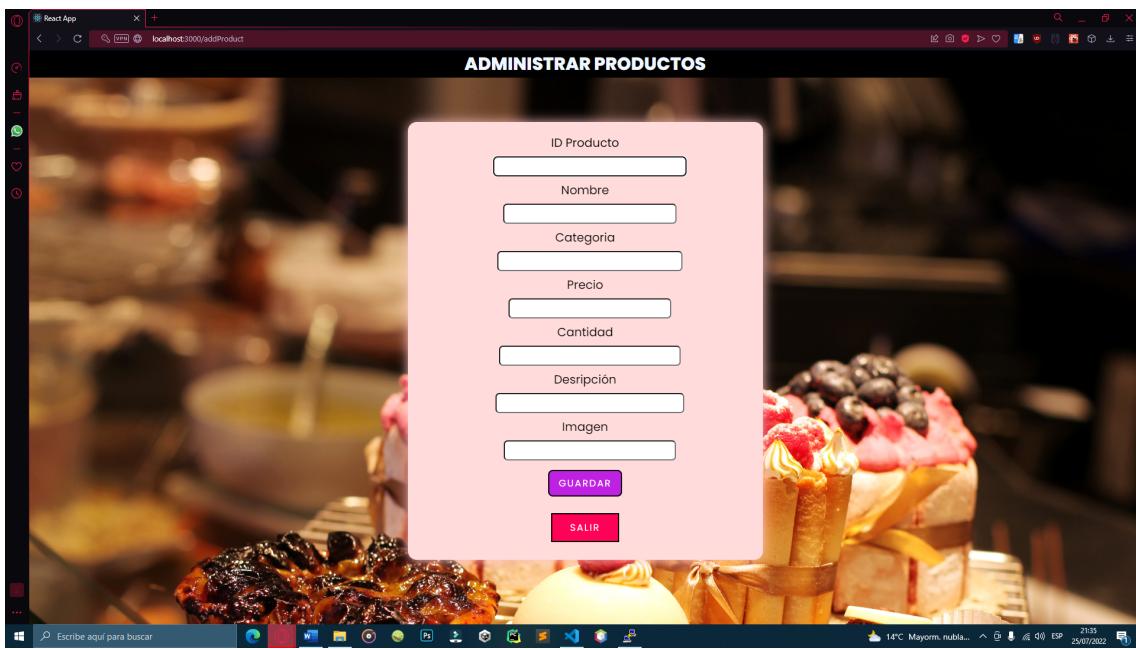
You can see the requests that have been made to the service.

```
OPTIONS /auth/signUp 204 0.220 ms - 0
POST /auth/signUp 500 385.308 ms - 277
OPTIONS /auth/signUp 204 0.183 ms - 0
POST /auth/signUp 200 505.100 ms - 183
OPTIONS /products 204 0.185 ms - 0
GET /products 304 242.176 ms - -
OPTIONS /auth/signUp 204 0.188 ms - 0
POST /auth/signUp 200 502.025 ms - 183
OPTIONS /products 204 0.346 ms - 0
GET /products 304 242.264 ms - -
```

ADD PRODUCT PAGE

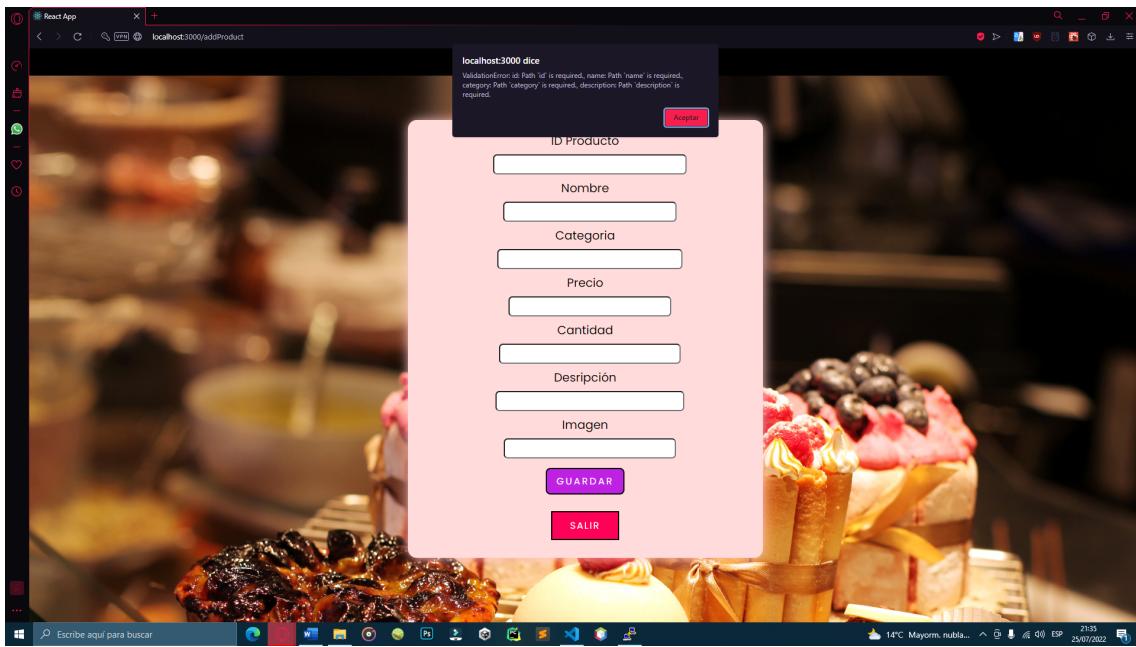
[Manage products](#)

The image shows the main page for product entry.



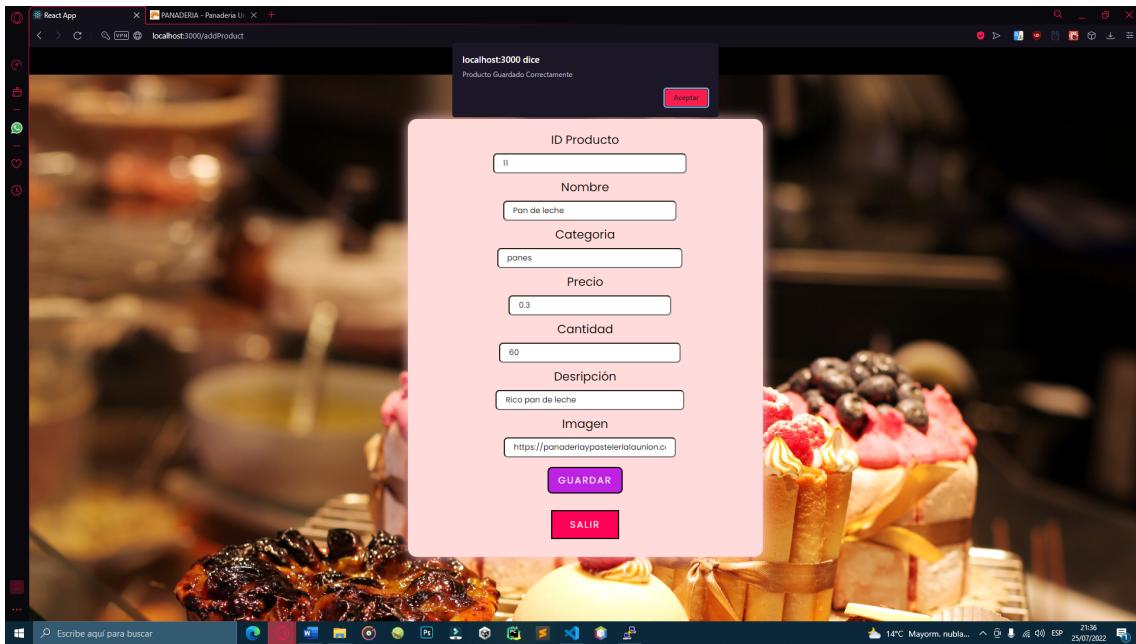
Manage products on the local host

The image shows that the fields required to enter products cannot be left empty.



Entering product information

Entry of product information to verify its connection with the database and the server.



Entering product information into the database

It is observed that the data entered on the web page were successfully entered into the database

The screenshot shows the MongoDB Compass interface. On the left, there's a sidebar with a tree view of databases and collections. Under the 'BakeryDulcementePasteles' database, the 'Products' collection is selected. The main pane displays the contents of the 'Products' collection. A specific document is highlighted with a red box. The document details are as follows:

```

_id:ObjectId("e2dd67a129d07d7afa7b7b22")
id:10
name:"MOLDE CAJETIN"
category:"galletas"
description:"Pan en forma de cajetin"
price:3
quantity:50
imgUrl:"https://panaderiaypasteleriaunión.com/wp-content/uploads/2020/08/caj..."

_id:ObjectId("62df533c462d84613dd7b878")
id:11
name:"Pan de leche"
category:"panes"
description:"Rico pan de leche"
price:0.3
quantity:60
imgUrl:"https://panaderiaypasteleriaunión.com/wp-content/uploads/2020/08/pan..."

```

Finally you can see the request that have been made to the server.

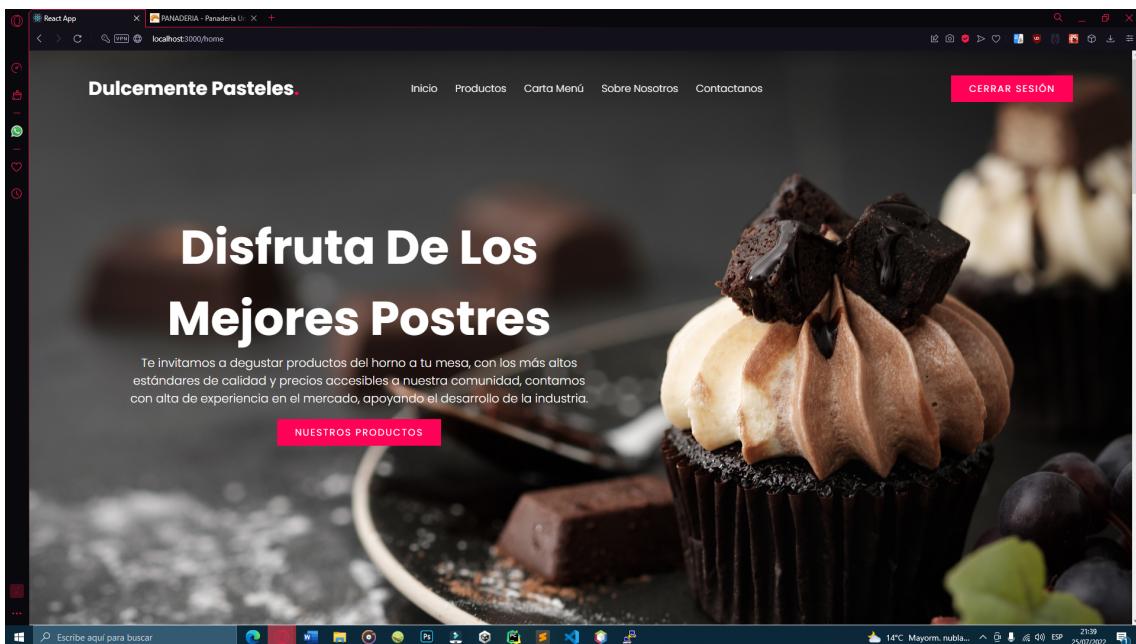
```

OPTIONS /auth/signIn 204 0.223 ms - 0
admin@gmail.com admin123
POST /auth/signIn 200 257.278 ms - 183
OPTIONS /products 204 0.207 ms - 0
POST /products 500 366.584 ms - 175
OPTIONS /products 204 0.222 ms - 0
POST /products 201 493.957 ms - 238

```

HOME PAGE:

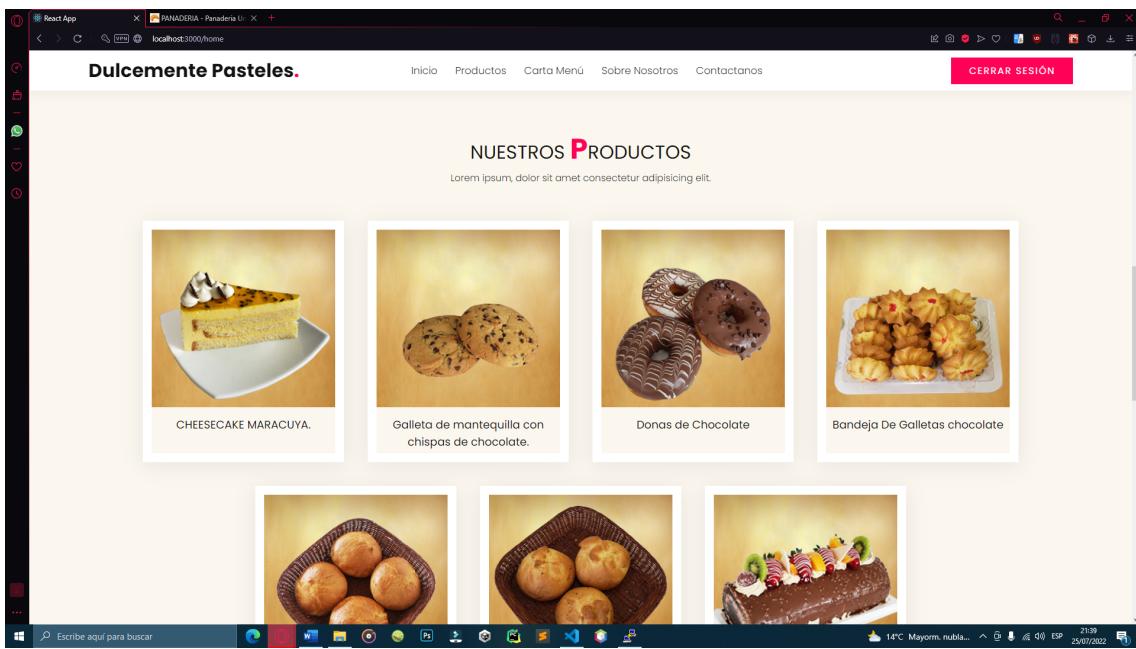
Displays the successful operation of the application, in this case, the home page.



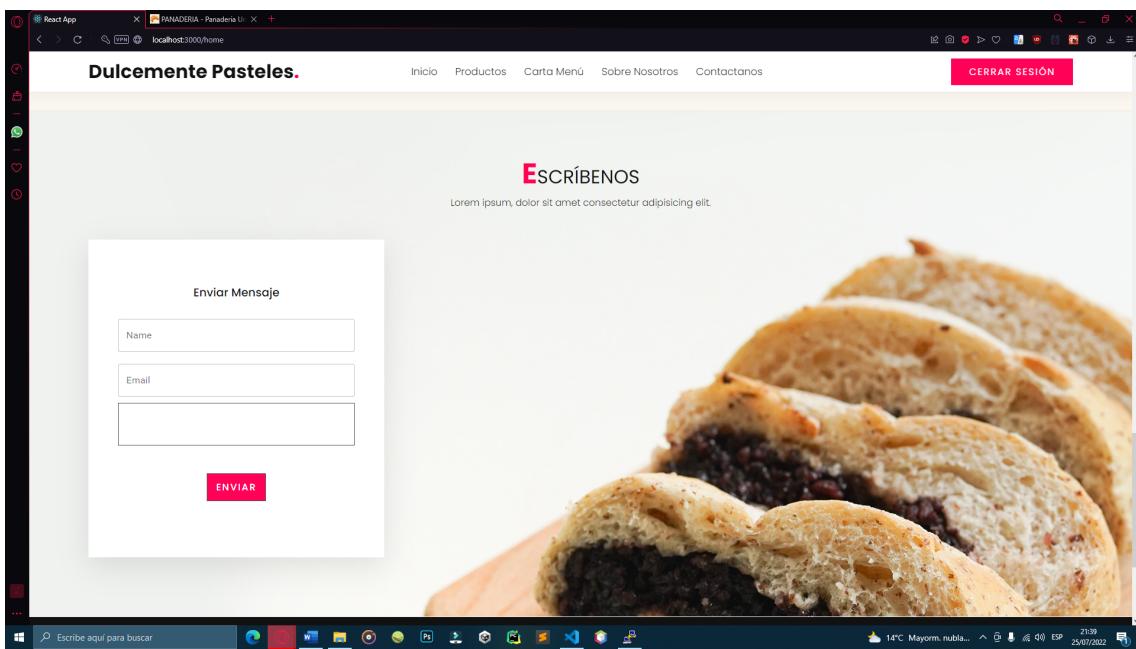
Shows the successful operation of the application, in this case, the description of the Dulcemente Pasteles application.



It shows the successful operation of the application, in this case, our products, such as: cakes, pies, bread, biscuits and more.

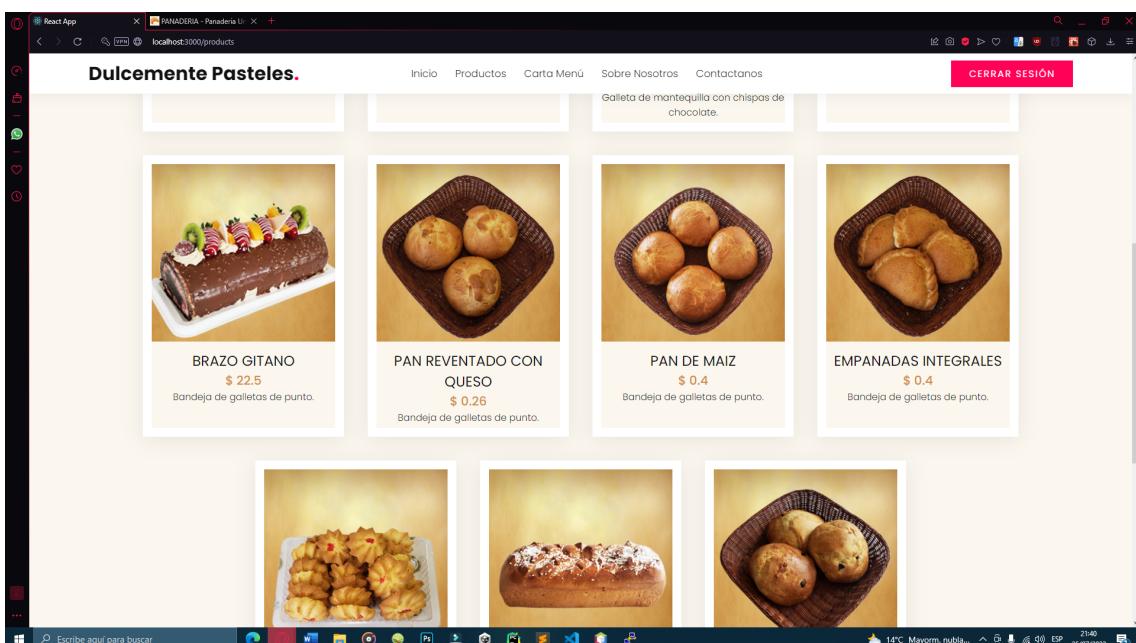


It shows the successful operation of the application, in this case, where you can write to us in case of suggestions, complaints, requests and/or congratulations.



PRODUCTS PAGE:

It shows the successful operation of the application, in this case, the description of the products to be sold, such as the price and the name of the product.



In the following image, you can see the requests that have been made to the service.

```
OPTIONS /auth/signIn 204 0.223 ms - 0
admin@gmail.com admin123
POST /auth/signIn 200 257.278 ms - 183
OPTIONS /products 204 0.207 ms - 0
POST /products 500 366.584 ms - 175
OPTIONS /products 204 0.222 ms - 0
POST /products 201 493.957 ms - 238
```

```
OPTIONS /products 204 0.175 ms - 0
GET /products 200 242.977 ms - 2957
OPTIONS /products 204 0.227 ms - 0
GET /products 304 242.589 ms - -
```