

Code Home

A10: Product

Our main goal (and motivation) is to solve people's questions by providing a connection between those who need help and those that have the knowledge. The website works like a forum where the users who need help can post questions (by creating a new thread). To post a question, a user must be registered. The questions will be listed in the CodeHome platform for whoever has knowledge to answer them. To answer a question, a user must be registered as well.

It is possible to view questions and answers even without being registered.

The CodeHome platform is also aimed to provide information to people that don't know this website, they may end up visiting it while searching for a specific question on a search engine. They can quickly and easily find the solution to their problem.

The thematic of the Q&A platform is about software development (programming).

1. Installation

Link to the **Github** release with the final version of the code:

<https://github.com/up201504196/lbaw1751/releases>

Docker commands:

```
docker run -it -p 8000:80 -e DB_DATABASE=lbaw1751 -e DB_USERNAME= lbaw1751 -e DB_PASSWORD= nn45cc12 lbaw51/lbaw1751
```

2. Usage

Product available at: <http://lbaw17GG.lbaw-prod.fe.up.pt>

2.1 Administration URL

Username	Password
admin	Test1234

2.2 User Credentials

Type	Username	Password
Normal user	user	Test1234
Banned	banned	Test1234

3. Application Help

The online help is used to help the user with some relevant information, for example when the user hovers a button or a link (that we already tried to make intuitive, with a name and an icon). This Help was also used in some forms that can be more difficult to fill, to prevent mistakes, indicating for example all the required fields in the forms.

An example is the ban user form, at <http://lbaw1751.lbaw-prod.fe.up.pt/users/57/ban>, where the user is told that a ban must be permanent or have a duration of more than one day.

4. Input Validation

Input validation was done by validating the given values depending on the situation, with ranges, patterns and comparatives values being considered at the 3 different stages of verification.

Passwords are checked at the client's side using JavaScript and regular expressions to validate if the password meets our security standards, these same standards are checked server side, during both registration, login and password resets.

On the other hand, dates due to their complexity, are left to the database software and server side to verify and are not verified client side. For example, we always make sure that the date of the end of a ban occurs after the date of beginning of the ban.

While all inputs are verified, no other special cases justify explanation. Security specific verifications are not required as Laravel handle character escaping to protect against XSS and the usage of SQL Injection safe functions mitigates the requirement for such verifications.

5. Check Accessibility and Usability

The results of the accessibility and usability are in the pdf's files "Accessibility (Web)" and "Usability (Web)".

6. HTML & CSS Validation

The results of the HTML and CSS validation are in the pdf's files "HTML validation report – homepage", "HTML validation report - question page", "CSS validation report – homepage", "CSS validation report - question page". As is shown on the results our website has no HTML errors, in both pages. The CSS errors correspond to bootstrap, and not our CSS code, our code has just some warnings, but they are just about proprietary properties that assure the best experience between browsers.

7. Revisions to the Project

Most of the features described in the user stories were successfully implemented. Some features related to the topic of comments and editing posts were not implemented as all the team members agreed that the time spent on those features, would be better utilized on developing more relevant features. Advanced search parameters were also not implemented because of a lack of time, mostly due to the difficulty in search queries, mostly in performing sub-query's using Laravel's query builder.

The team opted for investing more time efficiency of the search system, performing as much as it could at database level to avoid bringing large data sets to php. The team also invested some time in the following (and more relevant) additional features: password recovery, since it is very important in every website.

8. Implementation Details

8.1. Libraries Used

In the project it was used **Bootstrap** and **Laravel** frameworks, as well as the **JScroll** library.

The **JScroll** lets the user scroll indefinitely until there is no more content to show. It is used in our frontpage to display questions. After 3 questions scrolled, the plugin uses the Laravel paginate to get 3 more until there are no more left.

8.2. User Stories

For the **Code Home** platform, consider the user stories that are presented in the following sections.

User

Identifier	Name	Priority	Team Members	State
US01	View Question Thread	High	Davide	100%
US02	Filter Questions by Name	Medium	Dinis	100%
US03	View Question Score	High	Davide e Diogo	100%
US04	View Answer Score	High	Davide e Diogo	100%
US05	View User Overall Score	High	Davide e Diogo	100%
US06	View Comments to Questions and Answers	High		0%
US07	View User Profiles	Medium	Davide	100%
US08	Filter Questions by Tags	Medium	Dinis	100%
US09	Filter Questions by Question Score	Medium	Dinis	100%
US10	Filter Questions by Author Score	Medium		0%
US11	Filter Questions by a Mix of Other Methods	Medium		0%
US12	View Thread's Number of Views	Medium		0%
US13	Secure Environment	Medium	Tiago	100%
US14	Access homepage	High	Davide, Dinis, Diogo e Tiago	100%
US15	Access about	High	Dinis	100%
US16	Access FAQ	High	Dinis	100%
US17	View contacts	High	Davide	100%

Table 2: User user stories

Visitor

Identifier	Name	Priority	Team Members	State
VS01	Register in the Platform	High	Tiago	100%
VS02	Log in to the platform	High	Tiago	100%
VS03	Register with the Google platform	High	Tiago	100%
VS04	Log in with the Google platform	High	Tiago	100%
VS05	Password recovery, by email sending	High	Diogo	100% - new feature, not referenced in A2

Table 3: Visitor user stories

Authenticated

Identifier	Name	Priority	Team Members	State
AS01	Post New Question	High	Davide	100%
AS02	Post New Answer	High	Diogo	100%
AS03	Edit Previously Posted Question	High		0%
AS04	Edit Previously Posted Answer	High		0%
AS05	Change Profile Photo	High	Davide	100%
AS06	Change Name	High	Davide	100%
AS07	Vote on an Answer	High	Diogo	100%
AS08	Add a Profile Description	High	Davide	100%
AS09	Edit Profile Description	High	Davide	100%
AS10	Log Out	High	Diogo	100%
AS11	Change Password	High	Davide	100%
AS12	Close Account	Medium	Dinis	100%
AS13	Add Comment	High		0% - removed from architecture
AS14	Remove Question	High	Tiago	100%
AS15	Remove Answer	High	Tiago	100%
AS16	Remove Comment	High		0% removed from architecture
AS17	Mark Answer as Correct	High	Tiago	100%
AS18	Close Question Thread	High	Davide	100%

AS19	List of Questions	High	Dinis	100%
AS20	List of Answers	High	Dinis	100%
AS21	Question's Number of Views	Low	Tiago	100%

Table 4: Authenticated user stories

Banned

Identifier	Name	Priority	Team Members	State
BS01	Log in Attempt	High	Davide	100%

Table 5: Banned user stories

Administrator

Identifier	Name	Priority	Team Members	State
SAS01	Remove Comments	High		0% removed from architecture
SAS02	Remove Questions	High	Tiago	100%
SAS03	Close Questions	High	Davide	100%
SAS04	Change Questions' Tags	High		0%
SAS05	Warn Users	High		0%
SAS06	Ban Users	High	Dinis	100%
SAS07	Unban Users	High	Dinis	100%
SAS08	Edit Users' Profile	High	Davide	100%
SAS09	Mark Answers as Correct	High	Tiago	100%

Table 6: Administrator user stories

Group

- Davide Henrique Fernandes da Costa, up201503995@fe.up.pt
- Dinis Filipe da Silva Trigo, up201504196@fe.up.pt
- Diogo Afonso Duarte Reis, up201505472@fe.up.pt
- Tiago José Sousa Magalhães, up201607931@fe.up.pt