

PA: Product and Presentation

Project Vision

STEAL! is an online marketplace focused on selling Content Distribution Keys (CDKs). It offers a secure, user-friendly platform for gamers seeking affordable game keys, aiming to become the top destination for accessible, high-quality digital gaming.

"SO AFFORDABLE IT'S LIKE STEALING!"

A9: Product

We developed **STEAL!**, an innovative online platform designed to revolutionize the purchase of game CDKs (Content Distribution Keys). Our goal was to create an affordable, user-friendly marketplace that competes with industry giants like Steam, Uplay, and Origin.

Key Features:

1. **Game Recommendations:** The system suggests games based on user's past orders, and also the top-seller games, enhancing discovery based on interests.
2. **Filters and Search:** Users can easily find games with advanced filtering by category, platform, language, player modes and price, alongside a robust full-text search feature.
3. **Wishlist and Notifications:** Users are notified in real time when their wishlist items go on sale or are restocked.
4. **Personalized Profiles:** Customizable user profiles allow users to tailor their experience, complete with profile pictures and purchase histories.
5. **Reward System:** Buyers earn S coins as cashback from purchases, which can be used for discounts on future purchases.
6. **Checkout Options:** Buyers can purchase a single game or an entire shopping cart, supporting multiple payment methods.
7. **Account Management:** Administrators can manage user activity by blocking/unblocking or deleting accounts for security and compliance. They also oversee games, categories, and other metadata to ensure accurate listings and a high-quality user experience.

1. Installation

To start the Docker image available at the group's GitLab Container Registry using the production database, use the following command:

```
docker run -d --name lbaw2435 -p 8001:80  
gitlab.up.pt:5050/lbaw/lbaw2425/lbaw2435
```

For ARM users (e.g., Apple Silicon Macs) you can run the image with:

```
docker run --platform linux/arm64 -d --name lbaw2435 -p 8001:80  
gitlab.up.pt:5050/lbaw/lbaw2425/lbaw2435
```

The application will be available at <http://localhost:8001>

2. Usage

2.1. Administration Credentials

Administration URL: <http://localhost:8001/profile>

Username	Email	Password
admin	admin@example.com	1234

2.2. User Credentials

Type	Username	Email	Password
Buyer Account	buyer1	buyer1@example.com	1234
Seller Account	seller1	seller1@example.com	1234

2.3. Mailtrap Credentials

Gmail	Password
lbaw2435steal@gmail.com	steal12345

3. Application Help

We primarily provide assistance through error messages when users encounter issues, but we have also implemented some static pages to help users in some specific problems, like FAQs or about our feature S-Coins.

The screenshot shows the STEAL! website's FAQ page. At the top, there is a navigation bar with links for Home, Explore, Help, and a search bar. On the right side of the header are icons for notifications (3075), user profile (buyer!), cart, and a bell. Below the header, the main content area has a dark background with white text. It features a title "Frequently Asked Questions" and several questions listed in boxes:

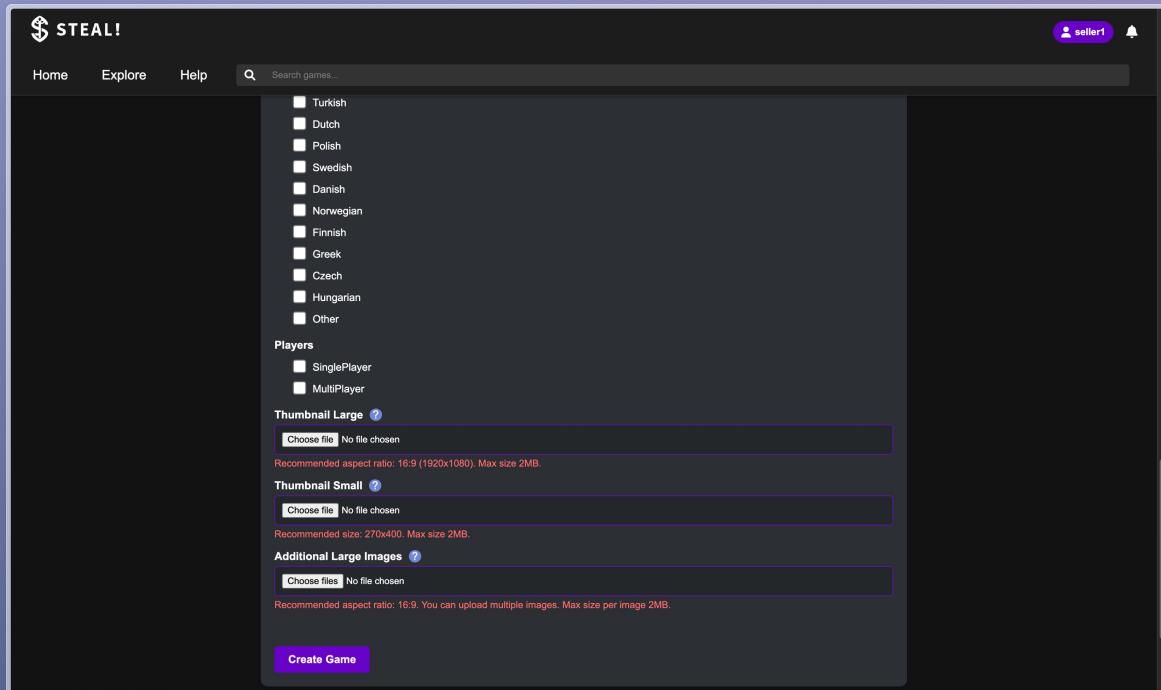
- How do I redeem a CDK?**
To redeem a CDK, you must go to the platform where the game is available and enter the code in the corresponding section.
- What is a CDK?**
A CDK is a code that allows you to download a game from a digital platform.
- What is the difference between a CDK and a game key?**
There is no difference, both terms refer to the same thing.
- How do I know if a CDK is valid?**
You can check if a CDK is valid by entering it in the corresponding section of the platform where the game is available.
- Can I use a CDK more than once?**
No, a CDK can only be used once.
- Can I return a CDK?**

The screenshot shows the STEAL! website's S-Coins management page. At the top, there is a navigation bar with links for Home, Explore, Help, and a search bar. On the right side of the header are icons for notifications (3075), user profile (buyer!), cart, and a bell. Below the header, the main content area has a dark background with white text. It features a title "S-Coins" and a purple button labeled "Manage your S-Coins and learn how they work." A purple banner at the top says "You currently have 3075 S-Coins". Below this, there are two sections: "How S-Coins Work" and "Using S-Coins". The "How S-Coins Work" section contains a bulleted list:

- 1 S-Coin = € 0.01
- For each euro spent, you receive 5 S-Coins.
- Upon registering, you receive 500 S-Coins as a welcome bonus.
- You can use S-Coins to get discounts when buying games.

The "Using S-Coins" section contains a note: "When you purchase games, you can apply your S-Coins to get a discount on the total price. The more S-Coins you have, the bigger the discount you can get!". There is also a note: "⚠ Note: S-Coins CANNOT be refunded". At the bottom of the page is a "Back to Home" button.

We also have info icons to help users know what needs to be done in specific sections. Users can check by hovering the cursor over the icons



4. Input Validation

We ensure robust data validation by implementing both client-side and server-side validation techniques. Additionally, we use JavaScript to restrict input in specific cases.

Validate S-Coins input before shopping cart checkout

```
● ● ●  
1  @if (auth_user() && count($products) > 0)  
2      <!-- Section to choose number of coins to use -->  
3      <div class="coins-section">  
4          <label for="coins_to_use">Use S-Coins</label>  
5          <input type="number" id="coins_to_use" name="coins_to_use" min="0" max="{{auth_user()>buyer->coins}}" value="0">  
6      </div>  
7  @endif
```

```
1 // Add event listener to coins input to update discount and subtotal
2 const coinsInput = document.getElementById('coins_to_use');
3 if (coinsInput) {
4     coinsInput.addEventListener('input', function () {
5         // Ensure only valid numbers are input
6         let coinsToUse = parseInt(coinsInput.value) || 0;
7         const maxCoins = parseInt(coinsInput.getAttribute('max'));
8         const total = parseFloat(document.getElementById('total_price').textContent.replace('€', '')).trim();
9
10        // Calculate the maximum coins that can be used without making the subtotal less than €0.01
11        const maxCoinsAllowed = Math.min(maxCoins, Math.round((total - 0.01) * 100));
12
13        // Prevent negative values and values greater than maxCoinsAllowed
14        if (coinsToUse < 0) {
15            coinsToUse = 0;
16        } else if (coinsToUse > maxCoinsAllowed) {
17            coinsToUse = maxCoinsAllowed;
18        }
19
20        coinsInput.value = coinsToUse;
21
22        // Update the hidden input field value
23        const hiddenCoinsInput = document.getElementById('coins_to_use_hidden');
24        if (hiddenCoinsInput) {
25            hiddenCoinsInput.value = coinsToUse;
26        }
27
28        updateDiscountAndSubtotal(total);
29    });
30 }
```

Validate attributes before updating profile

```

1  public function update(Request $request)
2  {
3      $user = auth_user();
4
5      $rules = [
6          'username' => [
7              'required',
8              'string',
9              'min:5',
10             'max:15',
11             'unique:users,username,' . $user->id,
12             'regex:/^([a-zA-Z0-9._-])+$/',
13         ],
14         'name' => [
15             'required',
16             'string',
17             'min:5',
18             'max:30',
19             'regex:/^([a-zA-Z0-9._-])+$/',
20         ],
21         'profile_picture' => 'nullable|image|mimes:jpeg,png,jpg|max:2048',
22     ];
23
24     if ($user->buyer) {
25         $rules['nif'] = 'nullable|digits:9';
26     }
27
28     $request->validate($rules);
29
30     $user->username = $request->input('username');
31     $user->name = $request->input('name');
32
33     if ($request->hasFile('profile_picture')) {
34         // Delete the old profile picture if it exists and is not the default one
35         if ($user->profile_picture && $user->profile_picture != 'images/profile_pictures/default-profile-picture.png'
36         && File::exists(public_path($user->profile_picture))) {
37             File::delete(public_path($user->profile_picture));
38         }
39
40         // Store the new profile picture
41         $file = $request->file('profile_picture');
42         $path = 'images/profile_pictures/' . uniqid() . '.' . $file->getClientOriginalExtension();
43         $file->move(public_path('images/profile_pictures'), $path);
44         $user->profile_picture = $path;
45     }
46
47     if ($user->buyer) {
48         $user->buyer->nif = $request->input('nif');
49         $user->buyer->save();
50     }
51     $user->save();
52     return redirect()->route('profile')
53         ->withSuccess('Profile updated successfully!');
54 }

```

Note: For profile pictures or game media, we ensure proper image substitution by deleting the old image when updating with a new one. Additionally, if an image is deleted directly from the database (in this project's case, from the file system), our system checks if the file exists. If the file is missing, it will automatically use the path of the default image for display.

5. Check Accessibility and Usability

Accessibility: 16/18 ([view accessibility test](#))

We didn't specifically use <fieldset> nor <legend> but we think we have organized the forms in a easy-to-understand manner.

Some forms errors are not displayed near the inputs/labels to maintain a minimalist and clean appearance.

Usability: 23/28 ([view usability test](#))

We had to define some fixed height and width for images to ensure consistent layout and presentation across different sections of the application.

We also didn't try to optimize the contents for mobile, as our project focused mainly in web part.

6. HTML & CSS Validation

HTML: Game Details Page Report ([view file here](#))

CSS: Game Details Page CSS Report ([view file here](#))

7. Revisions to the Project

We made some changes to the database and relationships to improve functionality and performance. However, overall, the project followed our initial specifications and objectives closely, ensuring that the core features and design principles were maintained.

8. Implementation Details

8.1. Libraries Used

This section includes references to all the libraries and frameworks used in the product, along with their descriptions and links to examples where they are used.

- **Laravel**

- **Reference:** [Laravel](#)
- **Description:** Laravel is a PHP framework used for building web applications with an elegant syntax. It provides tools for routing, authentication, sessions, and caching.
- **Example:** Used throughout the application for routing, database interactions, and authentication. See [routes/web.php](#) for routing examples.

- **Font Awesome**

- **Reference:** [Font Awesome](#)
- **Description:** Font Awesome is a library of icons and social logos that can be easily integrated into web projects.
- **Example:** Used for icons in the user interface. See [resources/views/layouts/app.blade.php](#) for examples of icon usage.

- **Mailtrap**

- **Reference:** [Mailtrap](#)
- **Description:** Mailtrap is a tool for safe email testing in staging and development environments. It captures emails sent from the application and provides a web interface to view them.
- **Example:** Used for testing email functionality. See [config/mail.php](#) for Mailtrap configuration.

- **Google OAuth**

- **Reference:** [Google OAuth](#)

- **Description:** Google OAuth allows users to authenticate with their Google account, providing a secure and convenient way to log in to the application without needing to create a separate account.
- **Example:** Used for another type of login and third-party authentication. See [config/services.php](#) for Google OAuth configuration.

8.2 User Stories

US Identifier	Name	Module	Priority	Team Members	State
US01	Browse Marketplace	Anonymous User	High	Ricardo Yang, Bruno Huang	100%
US02	View Product Details	Anonymous User	High	Ricardo Yang, Bruno Huang, Daniel Basílio	100%
US03	Register Account	Anonymous User	High	Bruno Huang	100%
US04	Sign In Account	Anonymous User	High	Bruno Huang	100%
US05	Add to Shopping Cart	Anonymous User	High	Daniel Basílio	100%
US06	Manage Shopping Cart	Anonymous User	High	Daniel Basílio	100%
US07	Full Text Search	Anonymous User	High	Ricardo Yang	100%
US08	Search Games by Genre/Platform	Anonymous User	High	Ricardo Yang, Bruno Huang	100%
US09	Access Static Pages	Anonymous User	Medium	Ricardo Yang	100%
US10	Delete Own Account	Authenticated User	High	Bruno Huang	100%
US11	Edit Profile	Authenticated User	High	Bruno Huang	100%
US12	Log Out	Authenticated User	High	Bruno Huang	100%
US13	View Profile	Authenticated User	High	Bruno Huang	100%
US14	Update Profile Information	Authenticated User	High	Bruno Huang	100%

US Identifier	Name	Module	Priority	Team Members	State
US15	Change Password	Authenticated User	Medium	Bruno Huang	100%
NEW	Recover Password	Authenticated User	Medium	Bruno Huang	100%
US16	Contact Customer Support	Authenticated User	Low	Ricardo Yang	50%
US17	View Activity History	Authenticated User	Low	-	0%
US18	Checkout Items	Buyer	High	Francisco Magalhães, Bruno Huang	100%
US19	Manage Wishlist	Buyer	High	Daniel Basílio	100%
US20	Add to Wishlist	Buyer	High	Daniel Basílio	100%
US21	Leave Reviews and Ratings	Buyer	Medium	Daniel Basílio, Bruno Huang, Ricardo Yang	100%
US22	Track Purchase History	Buyer	Medium	Francisco Magalhães	100%
US23	Receive Payment and Order Notifications	Buyer	Medium	Francisco Magalhães	100%
US24	Review Purchased Product	Buyer	Medium	Daniel Basílio	100%
US25	Edit or Remove Review	Buyer	Medium	Daniel Basílio	100%
US26	Cancel Order	Buyer	Medium	Francisco Magalhães	100%
US27	Report Inappropriate Reviews	Buyer	Medium	Daniel Basílio, Bruno Huang	100%
US28	Receive Price Notifications	Buyer	Medium	Francisco Magalhães	100%
US29	Multiple Payment Options	Buyer	Low	Francisco Magalhães	100%
US30	Pay With S Coins	Buyer	Low	Bruno Huang	100%
US31	Receive Game Recommendations	Buyer	Low	Bruno Huang	50%
US32	List Games for Sale	Seller	High	Ricardo Yang	100%

US Identifier	Name	Module	Priority	Team Members	State
US33	Manage Product Listings	Seller	High	Ricardo Yang	100%
US34	Manage Product Information and Pricing	Seller	Medium	Ricardo Yang	100%
US35	View Sales History	Seller	Medium	Ricardo Yang	100%
US36	Receive Seller Notifications	Seller	Medium	Francisco Magalhães	100%
US37	Oversee Order Processing	Seller	Medium	Francisco Magalhães	100%
US38	Manage Product Discounts	Seller	Low	Ricardo Yang	50%
US39	Administer User Accounts (Search, View, Edit, Create)	Administrator	High	Bruno Huang	100%
NEW	Manage Game Fields	Administrator	High	Bruno Huang	100%
US40	Block/Unblock or Delete User Accounts	Administrator	Medium	Bruno Huang	100%
US41	Remove or Suspend Products	Administrator	Medium	Bruno Huang	100%
US42	Delete inappropriate reviews	Administrator	Medium	Bruno Huang	100%
US43	Send Notification	Administrator	Low	-	0%
US44	Access to Sales Report	Administrator	Low	Ricardo Yang	100%

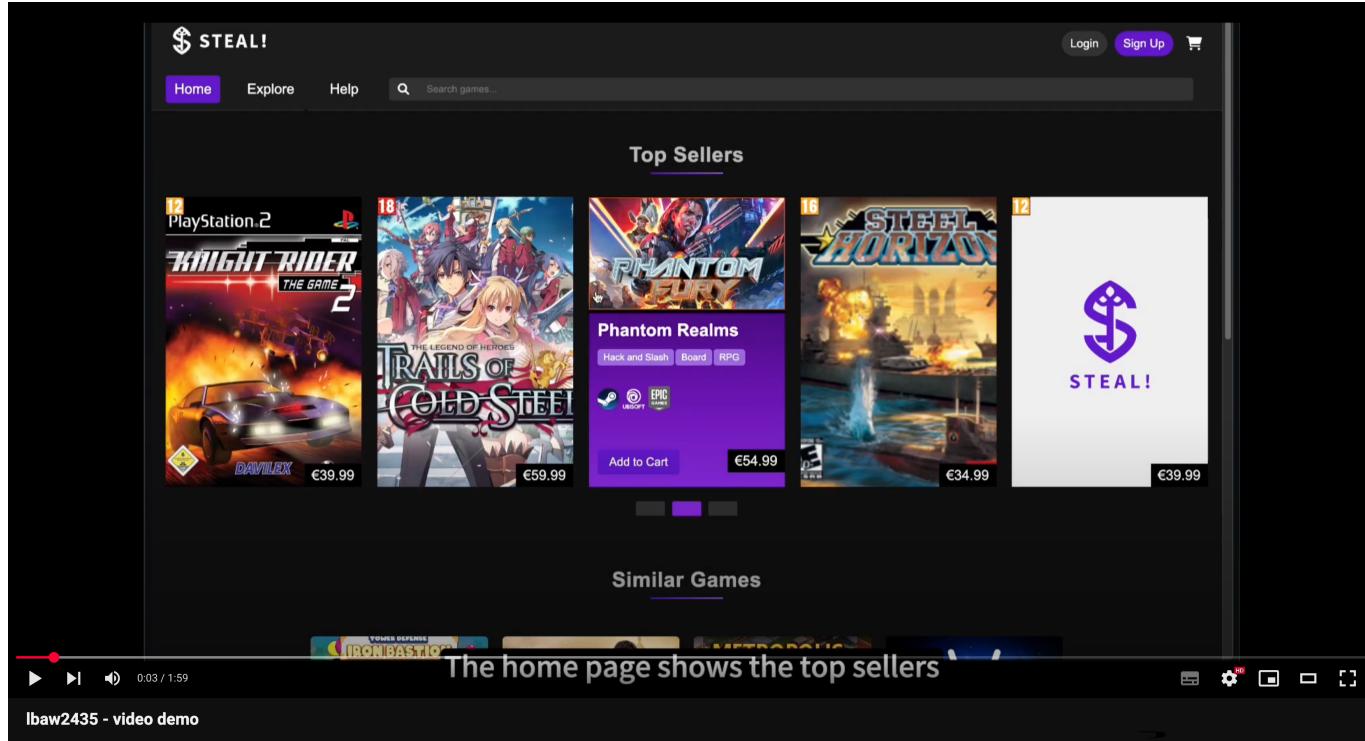
A10: Presentation

1. Product presentation

STEAL! is an innovative online marketplace designed to revolutionize the purchase of game Content Distribution Keys (CDKs). Our platform offers a secure, user-friendly environment for gamers seeking affordable game keys. With a focus on affordability and ease of use, STEAL! aims to become the top destination for accessible, high-quality digital gaming.

The platform features advanced game recommendations based on user preferences, robust search and filtering options, real-time notifications for wishlist items, and personalized user profiles. Additionally, STEAL! includes a reward system where buyers earn S coins as cashback, multiple checkout options, and comprehensive account management tools for administrators to ensure a high-quality user experience.

2. Video presentation



Video Available at <https://youtu.be/bTJrHXjnIQc>

Revision history

Changes made to the first submission:

no changes were made

GROUP2435, 21/12/2024

- Bruno Huang, up202207517@up.pt (Editor)
- Daniel Basílio, up201806838@up.pt
- Francisco Magalhães, up202007945@up.pt
- Ricardo Yang, up202208465@up.pt