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Online Game Shop

Os Project

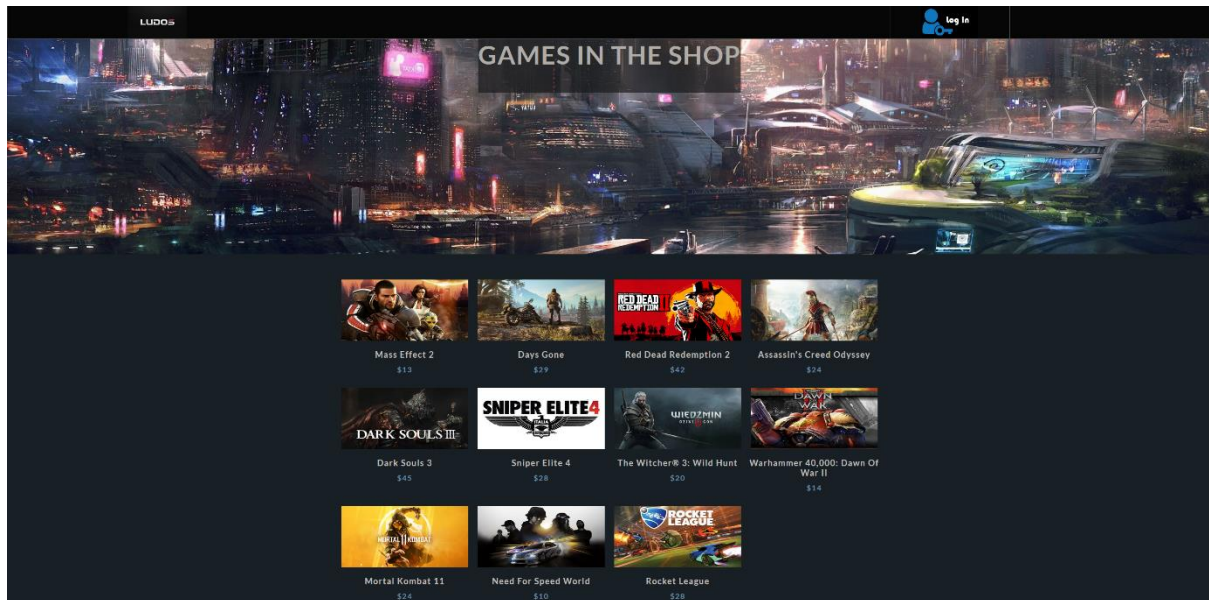
In our pursuit of improving code maintainability and harnessing the power of a modern web framework, our team embarked on the journey of migrating an old game shop project from PHP to Django. The original PHP project, although functional, had become cumbersome to maintain and lacked the flexibility required for future enhancements. By undertaking this migration, we aimed to leverage the benefits of Django's Python web framework, which offered a more organized and scalable approach to web development. With Django's robust features such as the automatic admin interface generation, and built-in security measures, we anticipated a smoother development experience and improved overall performance. This migration allowed us to streamline the codebase, enhance functionality, and adopt a more efficient development workflow, ultimately paving the way for a more robust and extensible game shop application.

The primary objective of our team was to create a dynamic online game shop with the old website, which could adapt and display the latest products and information based on the contents of the database. By utilizing PHP, we implemented a system where the website's pages were dynamically generated, ensuring that the content remained up-to-date without the need for manual updates. This dynamic approach allowed for a seamless user experience, as visitors could explore the latest game releases, prices, and availability in real-time. In the subsequent redevelopment of the website using Django in Python, our goal was to preserve the core functionality and extend it further. By leveraging Django's powerful ORM (Object-Relational Mapping) capabilities, we were able to streamline the process of interacting with the database, simplifying data retrieval and manipulation. Consequently, the new Django-powered website, also employs dynamic content generation, ensuring that users continue to experience the same level of interactivity and real-time information updates as the original website.

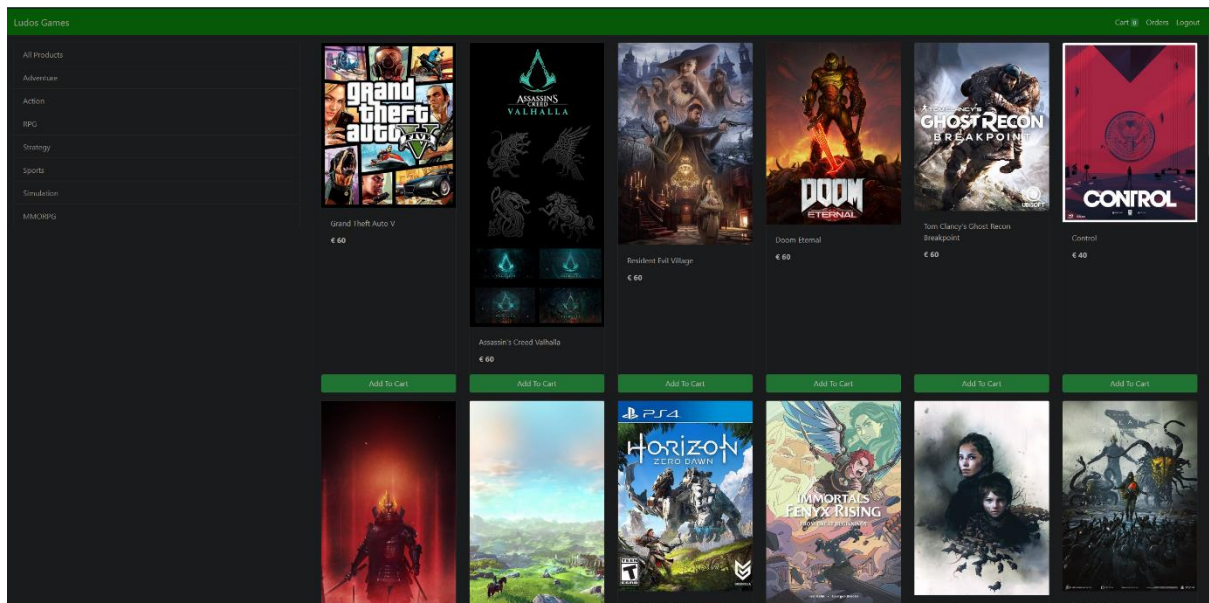
The old php based game store can be found on github:

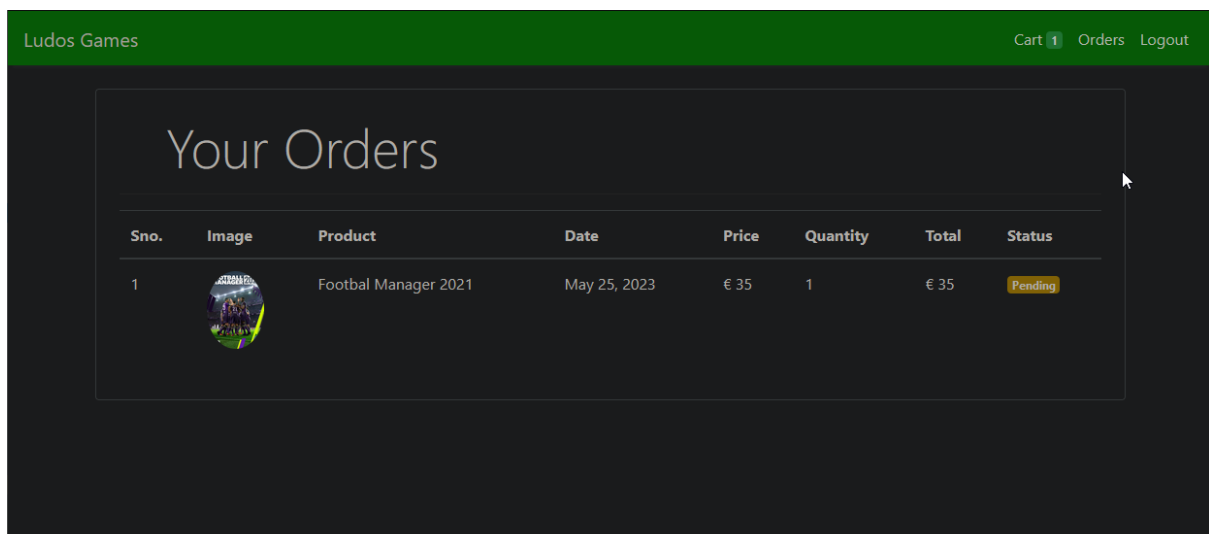
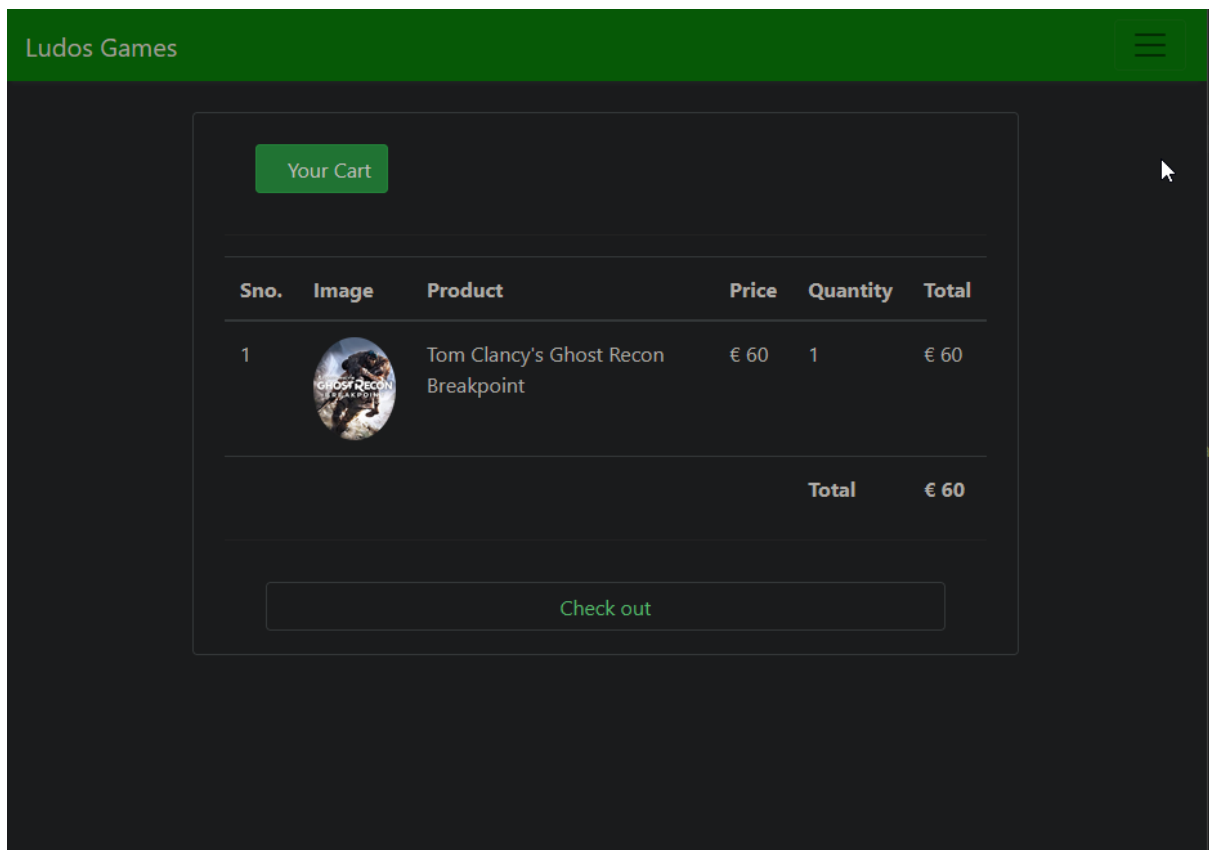
<https://github.com/RuseCristian/GameStoreSite>

Front Page of the old website



Django Game Store





As we migrated the old game shop project from PHP to Django, our focus was on achieving a cleaner and streamlined design, in line with Django's emphasis on maintainability. With Django's structured approach, we were able to effectively organize the codebase, improving readability and facilitating easier maintenance. As part of the migration, we also implemented an orders tab within the game shop application. This addition allowed us to create a dedicated section where users could view the status of their orders and track their purchase history. This enhancement further enhanced the functionality of our project, providing a convenient way for users to stay informed about their orders. These design improvements and the incorporation of the orders tab contributed to creating a more efficient and user-friendly experience within our project.

One of the notable advantages of migrating to Django was the inherent responsiveness of the framework itself. Unlike our previous PHP website, where we struggled to make the entire site responsive, Django provided built-in tools and features that simplified the process. Django's template system, combined with its support for responsive CSS frameworks such as Bootstrap, allowed us to create a responsive layout effortlessly. With Django's responsive design capabilities, the website automatically adjusted to different screen sizes and devices, ensuring an optimal user experience across desktops, tablets, and mobile devices. This significantly reduced the time and effort required to make the entire website responsive, enabling us to focus on other aspects of the project.

We have implemented a threaded search function, which enables users to perform searches across multiple categories simultaneously. Each category is assigned to a separate thread, allowing for parallel processing and enhancing the efficiency of our search system. This technical feat significantly reduces the overall search time and improves the responsiveness of our system. Users can effortlessly explore various categories and obtain nearly instant results. The implementation of threading has successfully optimized our search functionality, resulting in a more efficient and effective user experience.