

MODULE: CS2TP: Team Project

GROUP: CS2TP Group 38

TUTORS: XXXXXXXX, XXXXXXXX

TITLE: Software Requirement and Design Report

**XXXXXXXX xxxxxx229, XXXXXXXX xxxxxx404, XXXXXXXX xxxxxx311,
XXXXXXXXxxxxxxx908, George Hotten xxxxxx352, XXXXXXXX xxxxxx780,
XXXXXXXX xxxxxx855, XXXXXXXXxxxxxxx189, XXXXXXXX xxxxxx465**

15th November 2024

WORD COUNT: 1893 WORDS

**Group 38 Team Project - Software Requirement and Design
Report**

Team No: 38

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Section 1: Team Information:

XXXXXXXX (xxxxxx780) - Frontend + UI Design

- I plan to spend time on researching things I do not understand so I can complete my tasks to a great standard.
- As of now in terms of my contributions, I have created some of the design mockups and made the user accessibility requirement in the non-functional requirements. Furthermore, I added all of the designs into the section 6 design artifacts area along with a brief description for the more important pages. I have also created the logo for the brand using an app called procreate that allows you to make designs and drawings. In the future, I intend to work on Frontend. I will be creating the product page, site-wide CSS, user basket, login and the product display. I will also be making sure that the site is always online and functional.

George Hotten (xxxxxx352) - Backend

- I plan to support my team with my pre-knowledge of Laravel and PHP, and help in the code reviews to ensure the highest quality code for our project. I have been assigned to create the project's 'accounts' database, account backend logic, and password resets with use of SMTP.
- So far, I have created and set up the group's GitHub repository, Trello board and Discord server. I have also created the 'accounts' database schematics. I also contributed towards the report's technologies descriptions and functional requirements.

XXXXXXXX (xxxxxx229) - Frontend

- My plan is to make sure I get all the deadlines we have planned as a group and get them done on time and do all the work to the best of my abilities. I plan to help team members who need it so we can create the best project together.

XXXXXXXX (xxxxxx404) - Backend

- My plan is to provide robust software solutions using PHP and Laravel to ensure high quality functionality by working with my back-end peers. I plan on

spending time improving my skill set in PHP and creating database schemas in processing orders and validating logic. As in terms of my contribution to the backend team, I have created the database schemas and order validation files to allow users to checkout multiple items within an order and get the correct information about a product with foreign keys such as product id and user id. I also created a use case for refunds now I just need to push my schemas onto Github.

XXXXXXXX (xxxxxx189) - Frontend

- I plan to contribute and try my best to make the website look better without affecting the performance in a negative way. Right now I'm working on inventory and I am trying to make it good and reliable.

XXXXXXXX (xxxxxx311) - Frontend + UI Design

- My plan is to be helpful wherever I am needed in the project and if I lack any knowledge then I will go ahead and learn what's needed in order to help the team and meet the deadlines together.
- As of now, I have made the home page, the contact page, about us page and also the sign-up page along with the UI design using HTML and CSS. I have linked all these pages together along with adding the logo to the pages.
- Next would be to get everyone whose work overlaps with mine such as the login page and then the back-end developers to link everything together to create a functioning store.

XXXXXXXX (xxxxxx855) - Backend

- I aim to be an active participant in team discussions ensuring that I am able to support my team members to the best of my abilities. I will listen and respect other people's opinions and will always try my best to contribute positively to the team in order to achieve our end goals.
- So far I have been in charge of the group's reports ensuring that everything is ready for submission for our first deadline. In terms of contributions I have created the project description, two of the non-functional requirements, one of the unique functional requirements and two use cases for this report one of them being unique. In terms of technical contributions I have created the stocks database and have uploaded to GitHub.

XXXXXXXX (xxxxxx908) - Frontend

- My goal is to contribute to the team in a meaningful way and help us meet our deadlines in the most efficient way possible whilst also providing some creative ideas for our project.
- My current contribution to the team project has been adding a functional requirement into the design report which is the user accounts section and I have also created the use case for this requirement.

XXXXXXXX (xxxxxx465) - Frontend

- My focus is on creating an intuitive and visually appealing user interface, ensuring a seamless user experience. I am dedicated to meeting our project deadlines and will proactively support my teammates to ensure our project's success.

Project title and brief description:

Project Title: Crep Culture

Project Logo:



Project Description:

Crep Culture is a resale platform that specialises in highly sought after trainers and sneakers from renowned brands such as Nike, Adidas, Jordan and Yeezy. Tailored towards sneakerheads and collectors, Crep Culture offers exclusive and authenticated trainers, ensuring customer access to limited edition releases and sought after styles. With an emphasis on quality, style and reliability, Crep Culture aims to become the number one online marketplace for sneakerheads and casual shoppers alike, reshaping the sneaker resale industry with a flawless online purchasing experience and outstanding customer service.

Project Technologies:

Crep Culture will be developed using Laravel and PHP at both the frontend and backend. For the database, MySQL will be used. We have chosen to use Laravel and PHP as our core technologies due to the ability to seamlessly integrate the

backend with the frontend, removing the need to make API calls to another server. Laravel also allows us to securely interface with the MySQL database, automatically preventing attacks such as SQL injection.

Section 3: Functional Requirements:

Curated Outfits:

For most items, the website will provide the user with curated outfits based on the shoe's design and colours. This helps the users envision different ways they can style their look, and assist in picking outfits with matching colours. The user will have the option to pick from styles such as casual and going out. On the backend, there will be 1-3 different curated outfits to go with each style.

Shoe Investment Tracker:

The website will have a “Shoe Investment Tracker” allowing sneakerheads to monitor the values of shoes they own or want to treat them like investments. Users can add shoes to their watchlist allowing them to follow the historical price of the shoe with alerts for any changes in the price. Each shoe will display a score of how much the shoe is expected to increase or decrease in value, aiding users to make their decisions on whether to purchase a shoe or not.

Order Processing Logic:

The user will proceed to checkout and authorise payment for the items in their basket. While no actual transaction will occur, the system will simulate order confirmation as if payment was successfully completed. Back-end functionality will handle sending an order status update via email by using the address provided at registration or checkout as a guest—to confirm that the order has been processed and shipped.

Order Enquiries:

The system shall provide a chat box interface where users can inquire about existing orders. Users can access the chat box through a link in their confirmation email, directing them to the help page, or by navigating directly to the help page on the website. The chat box will come with predefined questions and responses when users click on common inquiries such as order status, shipping updates and return policies, this ensures efficiency as the user does not need to type out questions which ensures faster and automated responses and reducing wait time

User Accounts:

The system will allow the user to create accounts that will be loaded and stored on a backend database. Users of the website will then be able to access and view their previous orders. When placing an order the user will be prompted to enter their

username and password and the back-end authentication process will verify this process.

Section 4: Non-functional Requirements:

Usability:

The website will be designed to ensure seamless usability for all users. It will be fully optimised for major browsers, such as Chrome, Firefox, Safari, and Edge, to deliver a consistent experience. Additionally, it will be mobile-responsive, providing smooth navigation across different devices and screen sizes, ensuring accessibility for mobile users.

Reliability:

In terms of reliability, the site will prioritise continuous uptime, especially during peak product releases, and will maintain daily backups of user transactions and account data to safeguard against potential data loss (in accordance with the Data Protection Act 2018).

Maintainability:

The code of the site should be easy to read and understand so modifications can be made to improve the site and when an error happens it can be easily identified to fix and we should always test the code when it's changed to see the difference and see if something needs fixing.

Security:

All sensitive data will be encrypted during storage and transmission. Payments will be secured, with no sensitive info stored without proper safeguards put in place. Strong authentication (including 2FA authentication) and user access controls will be put in place to ensure no unauthorised access to data. An incident response plan will quickly address data breaches, minimising damage and ensuring a swift recovery, with continuous monitoring to detect and mitigate risks.

Accessibility:

The site will have a user-friendly interface and will be somewhat accessible to all kinds of people with features like Accessibility Mode, colour contrast and alt text to improve inclusivity. Accessibility Mode will offer high-contrast colours and resizable text to support those with visual impairments, following WCAG 2.2 guidelines. Proper contrast ratios and descriptive alt text which includes descriptive images will enhance readability and assist screen readers.

Section 5:Textual Use Cases:

Creating User Account:

Brief Description	The system allows users to create accounts which will be stored in a backend database. Users are required to login with a username and password for authentication.
Actors(s)	New User/Potential Customer
Main success scenarios	
Basic Flow	
<ol style="list-style-type: none">1. The user accesses the sign up page on the website.2. The system asks the user to enter their details, including a username and password and any other required information.3. The user submits the account sign up form.4. The system stores the user's information in the backend database and confirms the account has been created.5. The user logs in by entering their username and password.6. The system verifies the credentials using the backend authentication process.	
Alternate Flows	
Title	Description
Account Creation Failure	<p>If the user fails to create an account due to invalid or missing information, the following occurs:</p> <ol style="list-style-type: none">1. The system notifies the user of the reason for the account creation failure (e.g. username taken, missing fields)2. The system provides guidance on correcting the errors.3. The system asks the user to re-enter valid information into the correct fields and resubmit the account creation form.4. The Basic Flow resumes from step 3 after successful form submission.
Login Failure	<p>If the user fails to log in due to incorrect username or password, the following happens:</p> <ol style="list-style-type: none">1. The system notifies the user of the incorrect login information.2. The system prompts the user to re-enter their username and password.3. If a user has forgotten their password they may request a new password through email.4. The Basic Flow resumes from step 5 after the user enters the correct credentials.
Pre-Conditions	
Title	Description
Account should not exist	The user must not already have an account on the website with the credentials they are trying to provide.
Post-Conditions	
Title	Description
Success	The user's account is created or is authenticated allowing them to continue to use the website.
Failure	The user is unable to create an account or log in due to missing or incorrect information.

Order Processing Logic:

Brief Description	The user proceeds to checkout and authorises payment for items in their basket. The system confirms the order and provides an order status update through email.
Actors(s)	User (Registered User)
Main success scenarios	
Basic Flow	
<ol style="list-style-type: none">1. The user adds items to their basket and proceeds to checkout.2. The system prompts the user to review their basket and order total.3. The user confirms the items and authorises payment for the total amount.4. The system confirms a successful payment transaction, even though no actual transaction occurs.5. The system generates an order confirmation and updates the order status to "Processed".6. The system sends an order status update through email to the address provided during registration or entered at checkout.7. The user is redirected to an order confirmation page showing the order details.	
Alternate Flows	
Title	Description
Payment Authorisation Failure	<p>If the user fails to authorise payment due to incorrect payment details or system issues, the following occurs:</p> <ol style="list-style-type: none">1. The system notifies the user of the reason for the failed payment.2. The system provides suggestions for resolving the issue (e.g. re-entering payment details or trying a different payment method).3. The system prompts the user to re-enter valid payment details.4. The Basic Flow resumes from step 3 after the user successfully authorises payment.
Pre-Conditions	
Title	Description
Items in basket	The user has items in their basket and proceeds to checkout.
Post-Conditions	
Title	Description
Success	The user's order is confirmed and an email with an update is sent to the user's provided email address.
Failure	The user is unable to complete the order due to a failed payment or system error and no order confirmation is generated.

Curated Outfits Feature:

Brief Description	The system provides curated outfit suggestions based on the design and colours of selected shoes. Users can view different styling options with 1-3 curated outfits available for each style on the backend.
Actors(s)	User (Registered User)
Main success scenarios	
Basic Flow	
<ol style="list-style-type: none">1. The user selects a pair of shoes on the website.2. The system analyses the design and colours of the selected shoes.3. The system provides the user with different styling options to choose from which the user can then select from.4. The system retrieves 1-3 curated outfits from the backend database that match the selected style and complement the design and colours of the shoes.5. The user can then view these outfits or choose a different styling option or view alternative shoes.	
Alternate Flows	
Title	Description
No Curated Outfits Available	If no curated outfits are available for the selected style of shoe design, the following occurs: <ol style="list-style-type: none">1. The system notifies the user that curated outfits are not available for the selected style or design.2. The system can suggest alternative styles or similar shoes with available outfits if possible.3. The Basic Flow resumes from step 4 if the user decides to view similar styles or alternatives.
Pre-Conditions	
Title	Description
Shoes Selected	The user has selected a pair of shoes to view curated outfits and styling suggestions for.
Post-Conditions	
Title	Description
Success	The user views curated outfits that match the selected shoes and helps with styling choices.
Failure	There are no curated outfits available for the selected shoes or style.

Refund Request Process:

Brief Description	The refund inquiry feature allows users to view the status of returns or create a request for a refund through a chatbot interface that models real-world solutions to user requests.
Actors(s)	User – requests information on processed orders for refunds
Main success scenarios	
Basic Flow	
<ol style="list-style-type: none">1. The user accesses the help page through the link on the confirmation email or navigates to the webpage.2. The system chatbot holds a list of common inquiries such as return policies and shipping updates.3. The user selects refund status from the list.4. User authenticates by entering order ID.5. If successful, the system retrieves existing order information and displays a refund option status if possible.6. The user initiate's refund.7. The system confirms the request and sends a tracking link.	
Alternate Flows	
Title	Description
User Fails Authentication	If the user fails to provide an order ID then they get up to 3 attempts otherwise they will not be able to pass
Pre-Conditions	
Title	Description
Authentication Required	Must have a valid order ID to process a refund for security and order prompts.
Post-Conditions	
Title	Description
Success	The user successfully initiates a refund and a tracking link is sent via email.
Failure	Directed to customer support.

Shoe Investment Tracker:

Brief Description	The website provides a Shoe Investment Tracker feature that allows users to track the values of shoes they own or wish to follow as investments. Users can add shoes to their watchlist, monitor prices and receive alerts on price changes.
Actors(s)	User (Sneakerhead / Potential Investor)
Main success scenarios	
Basic Flow	
<ol style="list-style-type: none">1. The user opens the website's Shoe Investment Tracker page.2. The system shows a list of shoes along with basic information such as current price and trends.3. The user selects a shoe to track and adds it to their watchlist.4. The system retrieves and displays the historical price data for the chosen shoe.5. The system calculates and displays a value score, indicating whether the shoe is expected to increase or decrease in value.6. The user can then decide to receive alerts on any price changes for shoes in their watchlist.7. The user can then use the information provided to them from the tracker to make any informed decisions on buying or selling shoes.	
Alternate Flows	
Title	Description
Shoe Not Available For Tracking	If a selected shoe is not available in the Shoe Investment Tracker database, the following occurs: <ol style="list-style-type: none">1. The system notifies the user that tracking is not available for the chosen shoe.2. The system will recommend similar shoes that are available for tracking if possible.3. The user can choose an alternative shoe to add to their watchlist, resuming the Basic Flow from step 3.
Pre-Conditions	
Title	Description
User Logged In	Users must be logged into their account to access the tracker.
Post-Conditions	
Title	Description
Success	The user successfully tracks shoes, receives alerts, and views the score of chosen shoes in order to aid their decisions.
Failure	The user is unable to add to the watchlist, view price trends, or set up alerts due to unavailable data or problems with the system.

Section 6: Project Management:

Links:

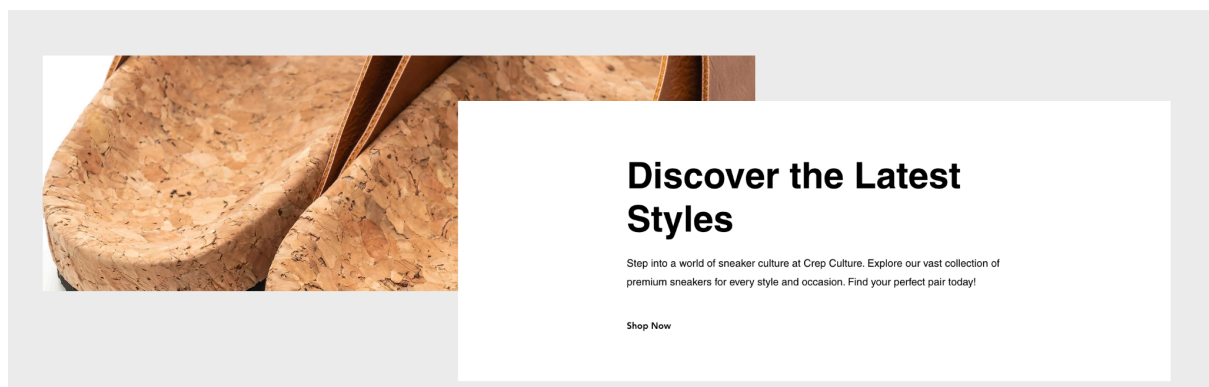
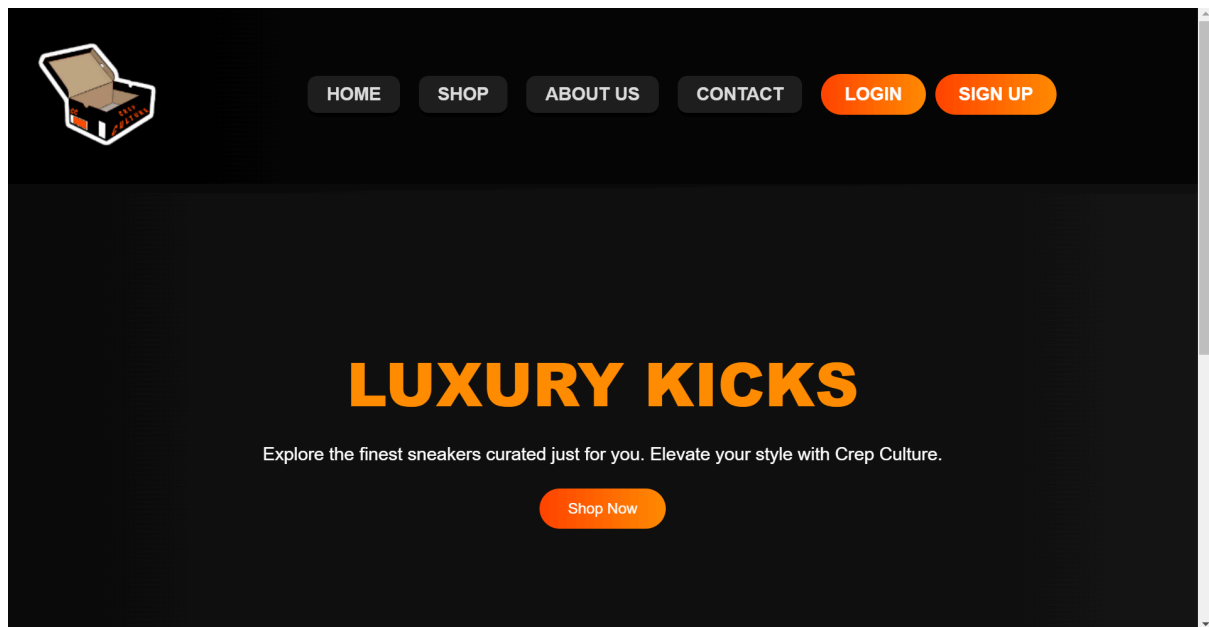
Link to Github repository: <https://github.com/georgeataston/cs2tp>

Link to Trello board: removed for privacy

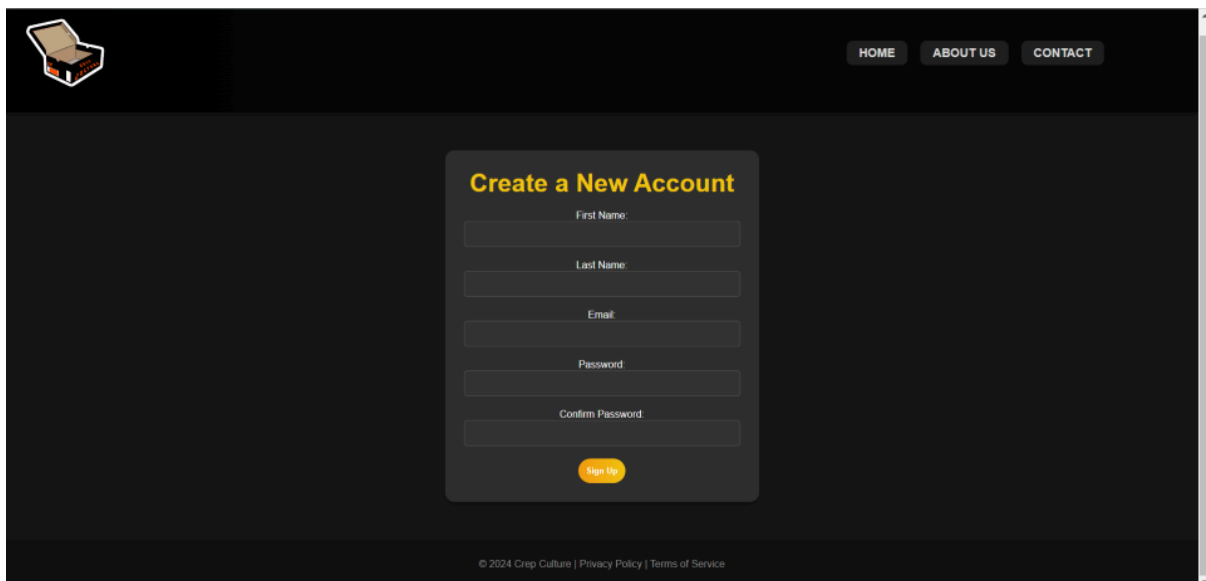
Design Artifacts:

Homepage:

When creating the homepage, we came up with two different colour schemes and researched different websites to get inspiration from to keep in mind our layout. The initial screenshot is the more finalised design we are going with as it was created later on compared to the other design. That's why it has the logo of the brand and more features compared to the original design.



Login Page:



A screenshot of a login page with a dark background. In the top left corner is a logo of an open shoe box. In the top right corner are three navigation buttons: 'HOME', 'ABOUT US', and 'CONTACT'. The main content area features a 'Create a New Account' form with the following fields: 'First Name', 'Last Name', 'Email', 'Password', and 'Confirm Password'. A yellow 'Sign Up' button is at the bottom of the form. The footer contains the text '© 2024 Crep Culture | Privacy Policy | Terms of Service'.

HOME ABOUT US CONTACT

Create a New Account

First Name:

Last Name:

Email:

Password:

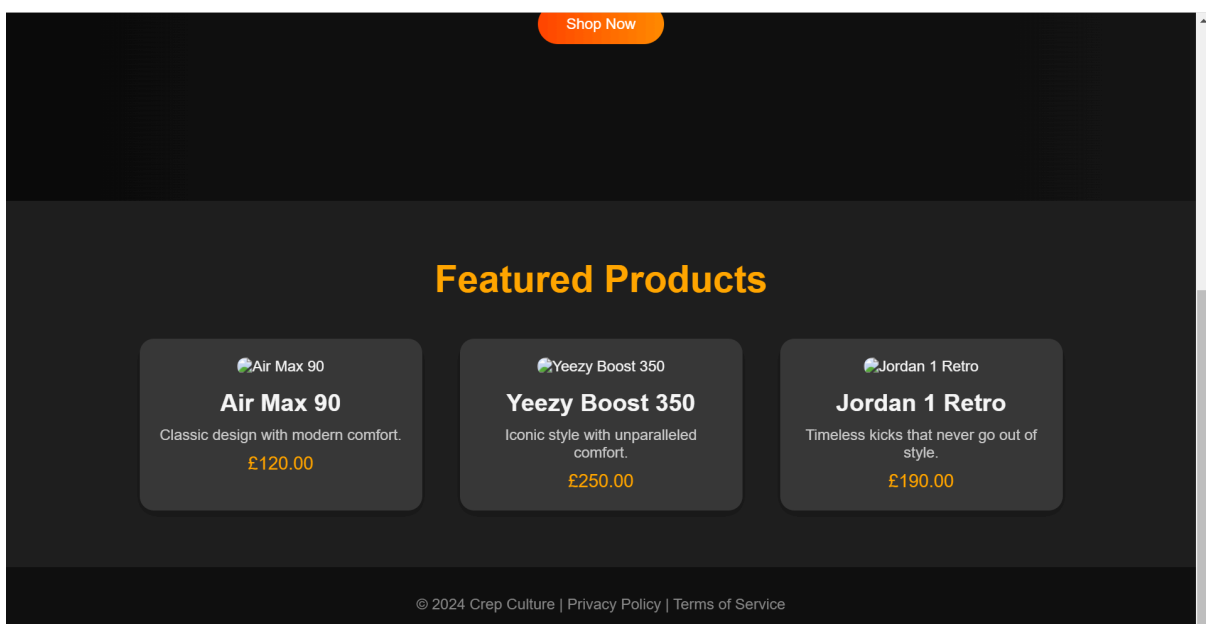
Confirm Password:

Sign Up

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Product Page:

In terms of what we had in mind when creating these pages, the initial design contains the more important details such as the filtering systems and browsing features.



A screenshot of a product page with a dark background. At the top, there is a yellow 'Shop Now' button. Below it, the section is titled 'Featured Products'. There are three product cards: 'Air Max 90' with a description 'Classic design with modern comfort.' and price '£120.00'; 'Yeezy Boost 350' with a description 'Iconic style with unparalleled comfort.' and price '£250.00'; and 'Jordan 1 Retro' with a description 'Timeless kicks that never go out of style.' and price '£190.00'. The footer contains the text '© 2024 Crep Culture | Privacy Policy | Terms of Service'.

Shop Now

Featured Products

Air Max 90

Air Max 90

Classic design with modern comfort.

£120.00

Yeezy Boost 350

Yeezy Boost 350

Iconic style with unparalleled comfort.

£250.00

Jordan 1 Retro

Jordan 1 Retro

Timeless kicks that never go out of style.

£190.00

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Black and Red Retro Sneakers

£90.00

Size

Select ▼

Quantity

1

Add to Cart



Vintage style sneakers with a pop of red



Browse by

[All Products](#)

Athletic Shoes

Casual Shoes

Sneakers

Filter by

Product type

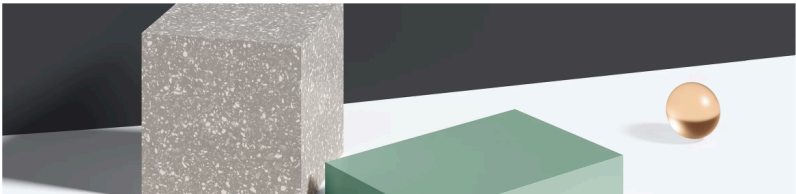
☐ Casual Shoes

☐ Sneakers

☐ Athletic Shoes

Price

Size



All Products

This is your category description. It's a great place to tell customers what this category is about, connect with your audience and draw attention to your products.

9 products

Sort by: Recommended ▼



Running Sneakers
£90.00



Trail Running Shoes
£100.00

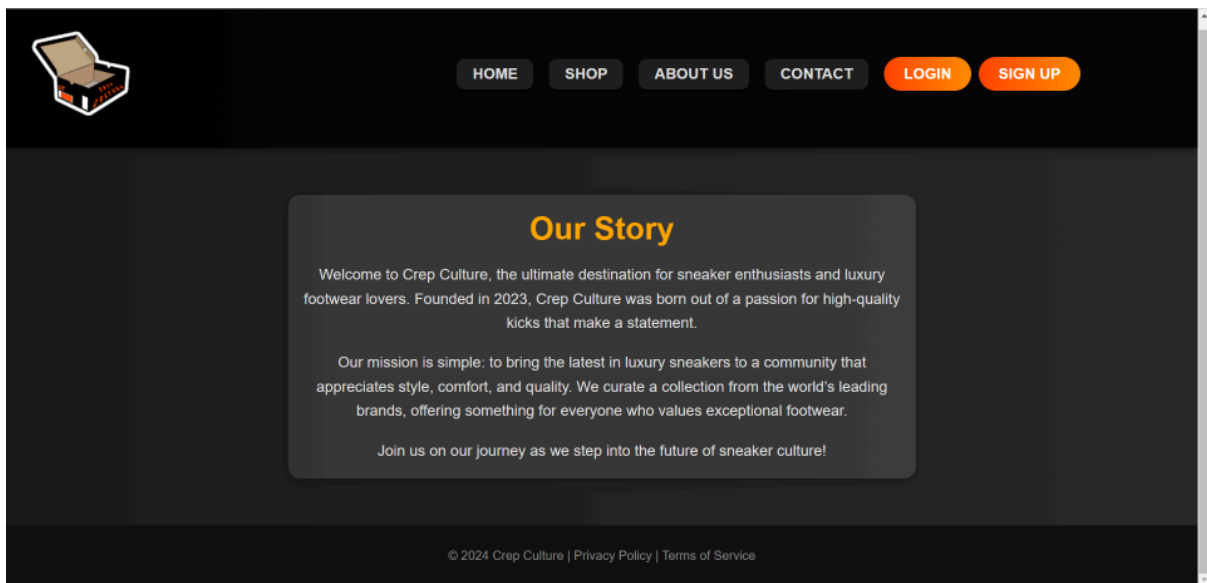


Chunky Platform Sneakers
£100.00



Denim Low Top Sneakers
£70.00

About Us Page:



Contact Us Page:

