

Sheep Culture in Inner Mongolia: The Lifeline of the Grassland

Report

TEAM 5

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1 Abstract

We are a well-known enterprise dedicated to the production and sale of woolen products clothing and sheep milk products. We are located in Inner Mongolia Autonomous Region of China, which is world-renowned for its high-quality wool and sheep's milk production area, with a unique natural environment and abundant sheep resources. Our wool products apparel series are made from high quality wool through exquisite craftsmanship. Our products include wool sweaters, cashmere scarves, wool socks and so on, with a variety of styles to suit different seasons and occasions. We focus on the comfort, warmth and quality of our products and endeavour to provide consumers with high quality wool products. In addition to our wool apparel, we manufacture and sell a wide range of goat's milk products, including goat's milk powder, goat's milk yoghurt and goat's milk soap. Our goat milk products are made from high-quality Inner Mongolian goat milk, scientifically formulated and finely processed. Our business is committed to quality first and customer first. We are constantly innovating and improving the quality of our products to provide consumers with high quality wool products and goat milk products. Whether it's enjoying personalised service, managing orders, or participating in the user community, the registration and login features are key to getting more value and convenience for you. We encourage you to register as a member and explore more exciting possibilities with us. We are always committed to meeting consumer needs for comfort, health and environmental protection, bringing warmth and beauty to people's lives.



2 Project idea

2.1 Business story

One of the initiator of our business is from Inner Mongolia, and having grown up in Inner Mongolia since childhood, she has a deep affection for the local grassland culture as well as the culture of sheep products. Based on her love and reverence for sheep and her understanding of the importance of the sheep industry chain to local economic development, the founder has created a brand of sheep products with raw materials that belong to Inner Mongolia. Wool coats, blankets, wool felts and sheep's milk products are all specialities of Inner Mongolia with unique cultural and historical values. Our business is committed to promoting local sheep products to the whole country and even the world. Thus, the four founders set up the enterprise and began our own entrepreneurial path.



2.2 Value and belief

2.2.1 Passing on the grassland culture

The company understands that sheep products from Inner Mongolia represent the essence of grassland culture, and they hope to pass on this valuable culture through their efforts, so that more people can understand and respect the grassland way of life and traditional handicrafts in Inner Mongolia.

2.2.1 Caring for natural lambs

The company understands the importance of protecting the natural ecosystem, they

are committed to choosing only high quality local wool to ensure that the sheep grow in a healthy environment and conditions, and also to promoting sustainable production methods to protect the ecological balance of the grassland.

2.2.3 Innovation and Quality

The company focuses on product innovation and quality, they introduce advanced production technology and design concepts, insist on striving for excellence, and continuously improve product quality and craftsmanship to bring consumers higher quality and more tasteful sheep products.

2.2.4 Cultural communication and exchange

The enterprise hopes to carry out cultural communication and sharing with domestic and foreign consumers through its products and services, so that more people can understand the sheep culture and grassland style of Inner Mongolia, and promote the exchange and integration of Chinese and foreign cultures.

2.2.5 Caring social responsibility

The enterprise actively participates in social welfare activities, cares for the disadvantaged, supports local public welfare and environmental protection projects, and uses its practical actions to give back to the society and transmit love and warmth.

2.3 business goal

2.3.1 Providing high quality Inner Mongolian sheep products

The enterprise is committed to providing high quality, all-natural Inner Mongolian sheep products, including mutton, wool and other sheep products. The products are manufactured under strict farming standards and quality control to meet consumer demand for quality and health.

2.3.2 Build brand influence

The company will endeavour to build a representative brand in the Inner Mongolia sheep products industry. We will enhance brand awareness and recognition through innovative marketing strategies, including advertising, promotional activities, social media and exhibitions.

2.3.3 Expanding domestic and international markets

Our enterprise is committed to expanding domestic and international markets, opening up new sales channels and markets by establishing long-term and stable relationships with domestic and international partners, and increasing the sales and market share of its products.

2.3.4 Strengthening sustainable development

We will focus on sustainable development and committed to promoting

environmental awareness, adopting sustainable farming methods to reduce the impact on the environment, and actively participating in community building and public welfare to give back to society.

2.4 Future diections

2.4.1 Strengthen the corporate image and brand building

Our enterprise will show the corporate image and brand value of the window. Through the vivid and interesting sheep image of the website interface, to attract consumers and show the core values, mission and vision of the enterprise. Enhance brand recognition and reputation by showcasing the enterprise's achievements in social responsibility, environmental protection, and innovation capability.

2.4.2 provide more comprehensive information

Our business website will endeavour to provide more comprehensive, accurate and real-time information about the enterprise. So that employees, customers, suppliers and other parties can better understand the company's product information, background culture and development.

2.4.3 Provide online customer service

Our company will provide consumers with convenient online customer service functions, which are convenient for customers to make enquiries, order enquiries, and feedback. Through the establishment of a customer service platform, timely answer customer questions, solve problems and enhance customer satisfaction and loyalty.

3 Market Background

3.1 Factor advantages

Inner Mongolia as China's important green agricultural and livestock products production and processing base, with unique livestock resources, the Bureau of the development of the sheep industry's strong market potential. In order to implement the spirit of the 20th CPC National Congress, Inner Mongolia's grassland animal husbandry industry is constantly orientated towards ecological priority and green development, guaranteeing a stable supply of sheep industry products, and at the same time promoting a stable increase in the income of herdsmen as well as improving their quality of life.

Inner Mongolia as China's important green agricultural and livestock products production and processing base, has a unique livestock resources, the Bureau of the development of sheep industry market potential is strong. Inner Mongolia grassland animal husbandry is constantly oriented towards ecological priority, green development, to ensure a stable supply of sheep industry products, while promoting steady growth in income to improve the quality of life of herdsmen. 2023 on the development of the industry in Inner Mongolia Autonomous Region carried out a press conference on the theme of "promoting the transformation of high quality and efficiency of agriculture and animal husbandry". The person in charge further introduced the situation of promoting the high-quality and high-efficiency transformation of the agricultural and animal husbandry industry, the implementation of arable land protection and construction action, support for the implementation of 3.95 million mu of high-standard farmland construction and 19.2 million mu of black soil conservation farming. This year, it will continue to focus on milk, cattle and grass sources, increase the supply of high-quality milk sources, encourage the construction of new large-scale dairy farms, and promote the expansion of high-quality dairy cows. For the 3,000-head large-scale farms built after 2021, subsidies will be given based on the amount of new cow stock. Supporting the expansion of dairy cattle breeding. Support feed storage for dairy farms and dairy farmers' co-operatives. Encourage the expansion of alfalfa grass planting area. Support dairy processing enterprises to improve raw milk processing capacity. Therefore, the policy to help Inner Mongolia agriculture and animal husbandry high-quality development, we choose Inner Mongolia's sheep products with policy support, in line with the current political trends.

3.2 SWOT Analysis

3.2.1 Strength

1) Location advantage

Inner Mongolia is located in the northern hinterland of China, with a dry climate, mild summers and cold winters, which is very suitable for the growth of sheep. Inner Mongolia has a vast grassland area, which is the largest natural grassland in China, providing rich feed resources for sheep. Inner Mongolia has convenient traffic, adjacent to Beijing, Tianjin, Northeast and other economically developed areas, there are many highways and railways through, conducive to product transport.

2) Resource advantages

Inner Mongolia is the largest grassland pastoral area in China, with vast natural grassland resources and the largest sheep population in the country. According to statistics, the grassland area of Inner Mongolia accounts for about 12 per cent of the country, and the number of sheep reaches 150 million, accounting for 30 per cent of the national total. The main breeds of sheep in Inner Mongolia are Mongolian

sheep, Xilingol sheep, etc., which are cold-resistant, barrenness-resistant, etc., and have excellent meat quality. At the same time, high-quality pasture resources provide sheep with abundant natural feed.

3) Industrial base

Inner Mongolia is an important national production base of sheep products. 2022, the number of sheep in Inner Mongolia reached 27.66 million, accounting for 23% of the country, ranking first in the country, has formed a more complete sheep processing industry chain. Baotou, Hohhot and other places have a number of well-known sheep meat processing enterprises, production scale, high technical level.

4) Diversified products

Inner Mongolia has a rich variety of sheep products, not only high-quality mutton, but also cashmere, sheep's milk and other high value-added products. For example, Inner Mongolia is the largest wool production base in China, with more than 80 per cent of the country's cashmere production. In addition, Inner Mongolia also produces famous dairy products, such as yoghurt, cheese and so on. In recent years, Inner Mongolia sheep products continue to launch new products, such as dried mutton, mutton soup, mutton stuffing and other deep-processed products, to meet the diversified needs of consumers. Inner Mongolia sheep products can be differentiated according to different consumer groups to launch products, such as children's lamb, sheep milk for the elderly and other special products.

3.2.2 Weakness

1) Non-dairy products crowd out the market

Although Inner Mongolia has a wide range of sheep products, it faces fierce competition from other regions in meat and wool products. For example, Xinjiang, Ningxia and other places of lamb products in the national market share, to Inner Mongolia meat sheep products to bring some impact. In recent years, the dairy industry has developed rapidly, with dairy products such as milk and yoghurt gradually taking up a major share of consumers' expenditure, compared with sheep products such as mutton, goat's milk and other non-dairy products, which have declined in proportion to consumption and are facing greater competitive pressure in the market.

2) The interests of small and medium-sized farms are not closely connected, and market risks are still mainly borne by the breeding link.

The interests of small and medium-sized farms are not closely linked, and market risks are mainly borne by the farming sector. Most of the farms in Inner Mongolia are small and medium-sized farms, which have little connection with each other's interests and weak risk-resistant ability. Once the market fluctuates, most of the risks will be borne by the farming sector, which brings great uncertainty to the livelihood of farmers.

3) Small business scale

Inner Mongolia sheep products processing enterprises are generally small, the lack of large-scale leading enterprises to drive the role. Small enterprises in the capital, technology, management and other aspects of the short board, it is difficult to give full play to the scale effect, cost control and product quality control ability is limited.

4) Advertising is not strong enough

Due to the limited scale of enterprises, Inner Mongolia sheep products in brand promotion and advertising and publicity investment is limited, awareness is not high. Consumers' awareness and recognition of Inner Mongolia sheep products have to be further improved. In addition, the lack of effective brand marketing strategy, which also affects the competitiveness of sheep products, to a certain extent, restricting the ability to expand the product market.

3.2.3 Opportunity

1) Internet marketing develops rapidly

With the rapid development of the Internet and mobile Internet, network marketing has become an increasingly popular marketing method. More and more consumers are accustomed to buying goods through the network, Inner Mongolia sheep products can use the e-commerce platform for precision marketing. Inner Mongolia sheep products can take advantage of the platform of network marketing, expand sales channels, improve visibility. For example, some Inner Mongolia cashmere, cheese and other products have been in the e-commerce platform to carry out sales, get a good market response.

2) Transportation network is increasingly developed

In recent years, Inner Mongolia's transport network continues to improve, highways, high-speed rail and other infrastructure construction to speed up, which provides strong support for the transport and sale of sheep products in Inner Mongolia. According to statistics, as of the end of 2022, Inner Mongolia highway mileage reached more than 7800 kilometres, ranked first in the country.

3) Increased national consumption awareness

Along with the continuous improvement of the national economic level, people's consumption concept and consumption ability is also changing. Inner Mongolia sheep products as a healthy, green agricultural and animal husbandry products, more favoured by consumers. More and more consumers are concerned about food safety, nutrition and health factors, favouring green, organic sheep products. High-end consumer groups of cashmere, sheep's milk and other high value-added products demand is growing. According to estimates, in 2022 China's meat consumption reached 89 million tonnes, an increase of 3.5%, creating a broad market space for Inner Mongolia meat and sheep products.

4) Strong environmental atmosphere

In recent years, the State has strongly supported the development of animal husbandry and introduced a series of favourable policies. At the same time, the Inner Mongolia Autonomous Region also attaches great importance to the development of sheep industry, formulated a series of development plans and support measures. These favourable policy environment and the development of the atmosphere for the development of sheep industry in Inner Mongolia to create good conditions.

3.2.4 Threat

1) Impacted by the influx of capital, industry competition is fierce

In recent years, the sheep industry is regarded as a new industry with great potential, attracting a large amount of capital influx, large enterprises have entered the Inner Mongolia sheep products market. Some large food enterprises and capital groups have laid out the sheep industry, leading to increased competition within the industry. For example, Yili, Mengniu and other dairy giants have set up large-scale sheep milk farms in Inner Mongolia, which has had a certain impact on local small and medium-sized enterprises.

2) Homogenization of dairy products leads to vicious competition at low prices

In recent years, the dairy products industry presents overcapacity, product homogeneity is serious characteristics, easily lead to disorderly vicious price competition. Some dairy enterprises to take low-priced strategy to seize the market, resulting in goat milk and other goat dairy products difficult to compete with. Malignant price competition exacerbated the sheep dairy products profit margin compression, affecting the profitability of sheep products enterprises.

3) Resource and environmental constraints are becoming increasingly tight.

Although Inner Mongolia has vast grassland resources, due to overgrazing and changes in the natural environment, the pasture resources in some areas have been degraded to varying degrees. In addition, climate drought, water shortage and other problems have also brought pressure to the sustainable development of the sheep industry in Inner Mongolia. 2022, Inner Mongolia suffered a sustained drought, which had a certain impact on the stock of sheep in that year.

4 Service Introduction

4.1 Services provided of our platform

The services we provide include: customers can register an account to become our

member, or users who already have an account can log in directly. Users can learn about our brand story, our founder profile and contact us on the About us page. Users can browse wool coats, sweaters, wool blankets, goat milk, goat milk powder and other rich products on the clothing and food pages. Customers can add the products they are interested in to the shopping cart and pay. The payment methods include binding bank card payment, or you can choose to jump to Alipay, WeChat and other third-party payment platforms to pay. During the shopping process, we provide convenient and fast payment methods to meet the different needs of customers.

4.1.1 Registration process:

- 1) The user opens the registration page and fills in the required registration information, such as username, password and email address.
- 2) After the user submits the registration form, the system verifies the validity of the information provided, such as checking whether the username already exists, whether the password meets the requirements, whether the email address is valid, etc.
- 3) If the verification is successful, our system will send a confirmation link to the email address provided by the user.
- 4) The user opens the registration confirmation email and clicks the confirmation link to verify his email address.
- 5) Once the email address is successfully confirmed, the user's registration process is complete.

4.1.2 Login process:

- 1) The user opens the login page and enters the username and password used when registering.
- 2) After the user submits the login form, our system verifies whether the username and password provided match.
- 3) If the verification is successful, the user will be successfully logged into our system and gain access rights.

4.1.3 Forgot password process:

- 1) The user clicks the "Forgot password" link on the login page.
- 2) Our system requires the user to enter the email address used when registering.
- 3) After the user submits the email address, our system verifies whether the address matches the address provided during registration.
- 4) If the verification is successful, our system will send a password reset link to the email address provided by the user.
- 5) The user opens the password reset email and clicks the reset link to enter the password reset page.

4.1.4 Password change process:

- 1) Users open the password reset page and enter the new password.

- 2) After the user submits the new password, our system verifies the validity of the password, such as password length, complexity, etc.
- 3) If the password verification is successful, our system will update the user's password and display a message that the password change is successful.

4.1.5 Email verification process:

- 1) During the registration, password forgetting or password modification process, our system sends a verification link to the email address provided by the user.
- 2) The user opens the verification email and clicks the verification link to confirm the validity of the email address.
- 3) Once the email address verification is successful, the user will be allowed to continue to complete the corresponding operation, such as registration, password reset, etc.

4.2 How are the services are to be provided

4.2.1 User login

The Platform allows users to register for an account and log into the system by providing the necessary information to create an account and logging in with the username and password provided. After logging in, users can access their personal information, shopping cart, order history and other information.

4.2.2 Product Browsing and Purchase:

Users can browse various products on the platform's homepage or related category pages. Users can click on a product to learn more about it, such as price, description, specifications, reviews, etc. If users are interested in a certain product, they can click on it to find out more about it. If users are interested in a certain product, they can add it to the shopping cart for subsequent purchases.

4.2.3 Pre-sale Consultation:

We usually provide pre-sale customer service support, users can communicate and consult with customer service personnel through online chat, e-mail or telephone. Users can ask questions about product features, prices, promotions, delivery methods, etc., in order to make purchasing decisions.

4.2.4 Payment service:

When a user selects a payment method, the platform interfaces with a payment service provider to realize the payment function. These payment service providers may be banks, third-party payment platforms and so on. After submitting the payment information, the user is usually required to authorize and confirm the payment and wait for the payment result. Once the payment is successful, an order confirmation notification is provided to the user.

4.2.5 After-sales customer service:

Once the user completes the purchase, the platform will provide after-sales customer service support. After-sales customer service can answer users' questions about order status, logistics tracking, return and exchange policies, quality issues, etc. and provide corresponding solutions.

4.3 In what ways of users are using the service

Access to the Web:

Users have unparalleled flexibility in accessing the our website. They can do so from a wide range of devices, including computers, laptops, and tablets. Irrespective of the device, our website ensures a seamless experience by supporting all major standard web browsers, such as Chrome, Firefox, Safari, and Edge. This ensures that users can explore the website's features and functionalities with ease, regardless of their preferred browser.

Our website is designed to provide an intuitive and user-friendly interface, making it easy for users to navigate through different sections. Whether they are looking for specific products, checking out the latest deals, or simply browsing, the Platform's website offers a robust and engaging experience.

Use of Mobile Applications:

To cater to the ever-growing mobile user base, the Platform also offers mobile applications. These applications are designed to provide a native and optimized experience for smartphones and tablets. Users can simply download and install the mobile app from their respective app stores, such as Google Play or the App Store, and start exploring the Platform's offerings right away.

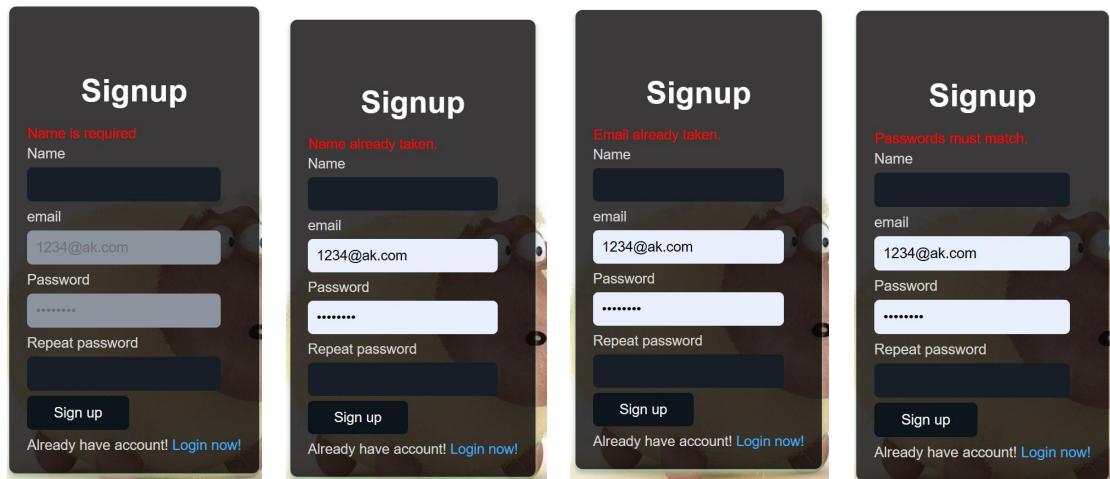
With the mobile app, users can enjoy the same features and functionalities as the website, but with a more personalized and convenient interface. They can quickly register for an account, browse through products, add items to their shopping cart, make secure payments, manage their orders, and even communicate with the customer service team for any assistance.

The mobile app also offers additional features like push notifications, which keep users updated about the latest deals, discounts, and product launches. This ensures that users never miss out on any exciting offers and can stay connected with the Platform at all times.

Overall, whether users choose to access the Platform through the website or the mobile app, they can enjoy a seamless and enriching experience, with all the necessary tools and features to make their shopping journey a breeze.

5 Project Accomplishments

5.1 User register



The image displays three mobile device screens side-by-side, each showing a "Signup" form. The background of the screens features a cartoon goat's face.

- Left Screen:** Shows a "Name" field with an empty input field. Below it is an "email" field containing "1234@ak.com". The "Password" and "Repeat password" fields both contain "*****". A red validation message at the top states "Password must be at least 8 characters.". A "Sign up" button is at the bottom.
- Middle Screen:** Shows a "Name" field with an empty input field. Below it is an "email" field containing "1234@ak.com". The "Password" and "Repeat password" fields both contain "*****". A red validation message at the top states "Password must contain at least one letter.". A "Sign up" button is at the bottom.
- Right Screen:** Shows a "Name" field with an empty input field. Below it is an "email" field containing "1234@ak.com". The "Password" and "Repeat password" fields both contain "*****". A red validation message at the top states "Password must contain at least one number.". A "Sign up" button is at the bottom.

Each screen also includes a "Already have account! [Login now!](#)" link at the bottom.

5.2 Login



The image shows two mobile device screens displaying a "Login" form. The background of the screens features a cartoon goat's face.

- Left Screen:** Shows an "Email" field with the input "1234@ak.com". The "Password" field is empty. A red validation message at the top states "Incorrect password.". A "Log in" button is at the bottom.
- Right Screen:** Shows an "Email" field with the input "12345@email.com". The "Password" field is empty. A red validation message at the top states "Email does not exist.". A "Log in" button is at the bottom.

Both screens include a "Forgot your password? [click here!](#)" link and a "Don't have a account ? [Register now!](#)" link at the bottom.

5.3 Reset Password

Reset Password

Email

New password

Confirm new password

[Create a new account!](#)
[Back to homepage!](#)

Welcome to Happy Goat!
Join us and explore now!



[Home](#)

Reset Password
Email does not exist.

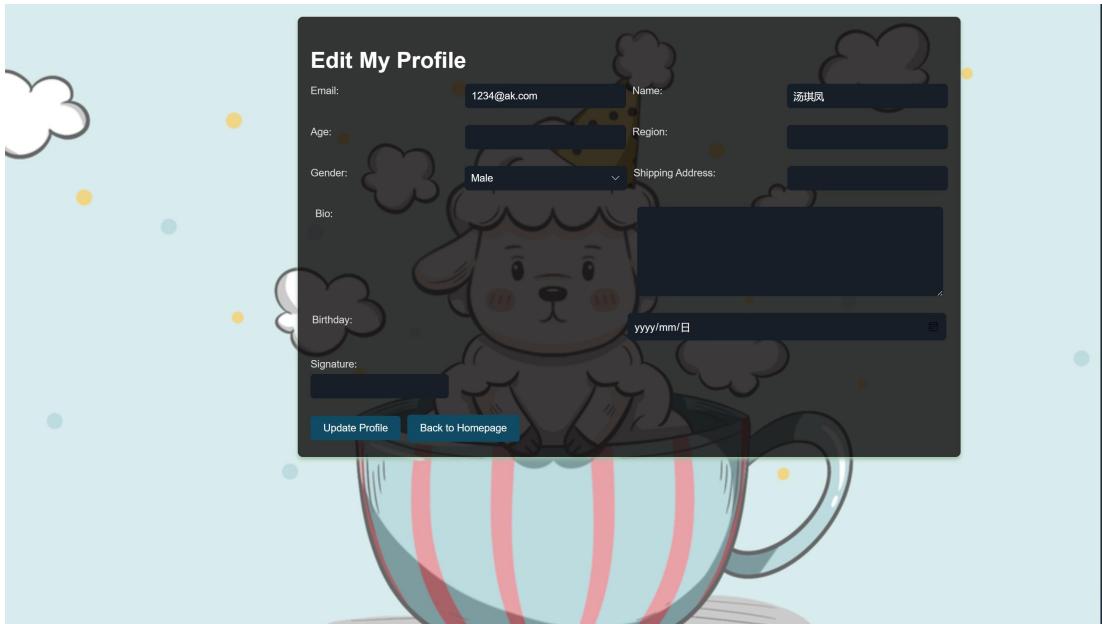
Reset Password
Password must contain at least one letter.

Reset Password
Password must be at least 8 characters.

Reset Password
Passwords must match.
Email
 1234@ek.com
New password

Confirm new password

5.4 Profile



5.5 Clothes Page

The Clothes Page header includes the logo "Happy Goat.", navigation links for Home, Clothes, Food, and About Us, and user authentication links for Log In or Sign Up. Below the header is a promotional banner featuring a white lamb in a field with the text: "--Summer Offer--", "Up To 40% Off All Product.", "Promotional Offer Is Valid On 4.16.5, Welcome To Shop!", and a "Shop Now" button. At the bottom are category filters: All, Coat, Scarf, Cardigan, and Blanket.

[All](#) [Coat](#) [Scarf](#) [Cardigan](#) [Blanket](#)

-10%
Short 101801 Icon Coat
\$52.99 from \$45.99

-15%
Short 101801 Icon Coat
\$52.99 from \$45.99

-5%
Wool Robe Coat
\$42.99 from \$35.99

-20%

Short Cashmere Coat
\$62.99 from \$55.99

-17%
Ludmilla Icon Coat
\$30.99 from \$25.99

-3%
Cshmere Wrap Coat
\$12.99 from \$15.99

**Short 101801 Icon Coat****52.99 USD**

Iconic Coat 101801 In Wool And Cashmere Beaver, Available In A New Short Version Above The Knee. The Oversize Fit And Details, Including The Lapel Collar, Fold-Up Kimono Sleeves, Welt Pockets And Sartorial Pick Stitch Finish, Are Taken From The Classic Style. Double-Breasted Lined Garment, Fastened With Horn Buttons.

Colour : [WHITE](#) [BLACK](#) [CAMEL](#) [MORE](#) **Add To Cart**

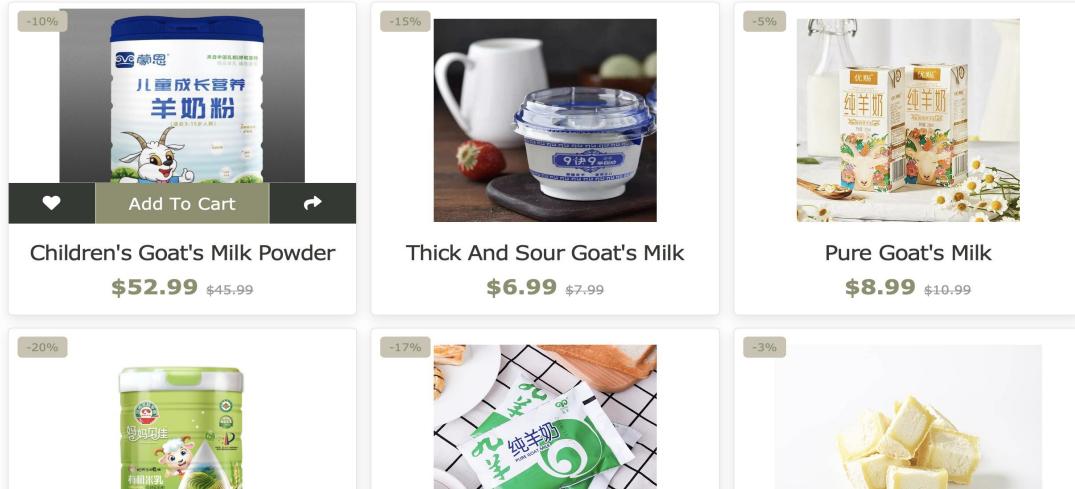
5.6 Food Page

Happy Goat.

Home Clothes Food About Us

Log In or Sign Up

All Goat's Milk Goat's Cheese Milk Powder Milk Flakes



Happy Goat.

Home Clothes Food About Us

Log In or Sign Up



Thick And Sour Goat's Milk

7.60 USD

Thick Yoghurt Is A Rich And Nutritious Yoghurt Product. We Are Committed To Providing High Quality Dairy Products That Bring Consumers Delicious And Healthy Choices. We Use Fresh And High Quality Milk As The Raw Material For Making Thick Yoghurt. The Milk Is Sterilised At High Temperatures To Retain The Natural Nutrients Of The Milk And Is Made Into A Thick Thick Yoghurt Through A Special Process.

Weight : 100PCS 500PCS 1000PCS MORE

1 Add To Cart



5.7 About Us Page

Happy Goat.

Home Clothes Food About Us

Heart Cart User
Log In or Sign Up



About Us

<p>“ Lorem Ipsum Is Simply Dummy Text Of The Printing And Typesetting Industry. Lorem Ipsum Has Been The Industry's Standard Dummy Text Ever ★★★  HuangJiaQi</p>	<p>“ Lorem Ipsum Is Simply Dummy Text Of The Printing And Typesetting Industry. Lorem Ipsum Has Been The Industry's Standard Dummy Text Ever ★★★  LuChang</p>	<p>“ Lorem Ipsum Is Simply Dummy Text Of The Printing And Typesetting Industry. Lorem Ipsum Has Been The Industry's Standard Dummy Text Ever ★★★  LiangZiXin</p>	<p>“ Lorem Ipsum Is Simply Dummy Text Of The Printing And Typesetting Industry. Lorem Ipsum Has Been The Industry's Standard Dummy Text Ever ★★★  TangQiFeng</p>
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Contact Us



name

email

number

message

Send Message

Happy Goat.

[Home](#) [Clothes](#) [Food](#) [About Us](#)

[Log In](#) or [Sign Up](#)



Market Covered
30+ Regions

Product Patents
100+

International Industrial Design Awards
21 Award Winners



The Beginning Of PETKIT

In 2013, People's Pursuit Of Wearable Technologies Became A Phenomenon, Aroused From Which, The Guo Brothers (Co-Founders Of PETKIT Who Were Hardware Engineers At The Time) Started To Ask Themselves: We Already Created Better Life Experience With Technologies For Humans, So Why Don't We Use Our Professions To Bring Welfare To The Animals? As Animal Lovers And Pets' Owners, They Raised The Question At The Time When Pets Were Not Paid Enough Attention To. They Left Their Job Soon After And Started The Meaningful Journey To Redefine Pets' Lifestyle And The Raising Experience For The Parents.



Specializing In Goat



Quantity Products
Milk Protein
20%
48 Hours
Freshness After Milking
Rich In Calcium
200 Mg Per 100 MI



The Beginning Of PETKIT

In 2013, People's Pursuit Of Wearable Technologies Became A Phenomenon, Aroused From Which, The Guo Brothers (Co-Founders Of PETKIT Who Were Hardware Engineers At The Time) Started To Ask Themselves: We Already Created Better Life Experience With Technologies For Humans, So Why Don't We Use Our Professions To Bring Welfare To The Animals? As Animal Lovers And Pets' Owners, They Raised The Question At The Time When Pets Were Not Paid Enough Attention To. They Left Their Job

6 Database

This system aims to provide a comprehensive user information management platform, including user registration, login, profile editing and password reset functions. The backend of the system is developed based on PHP and uses MySQL database to store user data.

6.1 Database structure

The user information management system uses a database named 'user' which is designed to contain multiple key fields to store user details. The 'id' field is an integer that serves as a unique identifier for the user and is set to auto-increment. The 'name' field is a string that stores the user's name for display and query purposes. The 'email' field is also a string and is used for user login authentication and as contact information. The 'password_hash' field stores a hash of

the user's password to ensure secure storage of the password. In addition, the database records the `age` (the user's age), `region` (the user's region), `gender` (the sex), `shipping_address` (the mailing address), `bio` (the biography), `birthday` (the date of birth), and `signature` (the personality), which together form the user's basic profile. Together, these fields form the basic user profile and support the core functions of the system, such as authentication, displaying and updating personal information.

		id	name	email	password_hash	age	region	gender	shipping_address	bio	birthday	signature
<input type="checkbox"/>		56	汤姐	tang@3.com	\$2y\$10\$kuXHbddD8UnJ6nOYVmppuTkIrOVmacSOmpH0Lfgn8...	6	Hunan province	male	Room 501	hello! every one!	2024-04-18	hi!
<input type="checkbox"/>		55	tang	tang@63.com	\$2y\$10\$scd7pyHSZxvAsVMDlrXgOeXlvUarj55DFuObGo3Wy1...	NULL	NULL	NULL	NULL	NULL	NULL	NULL
<input type="checkbox"/>		58	1	12@12.com	\$2y\$10\$TFHlpNIR/Z0v5bnKKhVtyXu0d/qVRchXsqV9zd43D8c...	NULL	NULL	NULL	NULL	NULL	NULL	NULL
<input type="checkbox"/>		61	123	1234@ak.com	\$2y\$10\$eBb1o/tfHQbNsBrDE92Dx.eiuJsc/e69L0x/GcNvHZP...	NULL	NULL	NULL	NULL	NULL	NULL	NULL

6.2 Functional realization

In the user information management system, the functions of user registration, login, password reset and profile editing are realized through specific PHP scripts. User registration is done through process-signup.php where the user has to enter his name, email and password for data validation and confirmation. The system also provides email and username checking to avoid data conflict. User login is realized by login.php, user must use email and password for authentication, once authentication is successful, the system will automatically jump to the main page. If you need to reset your password, you can do it via reset.php using the email address you registered with. Additionally, users can update their personal information such as name, age and location via profile.php to ensure that the profile is accurate and up-to-date. These features are implemented to ensure the user-friendliness and data security of the platform. The following is the code for connecting to a mySQL database via php.

```
<?php

$host = "localhost";
$dbname = "login_db";
$username = "root";
$password = "tqf0000|.";

$mysqli = new mysqli( $host,$username, $password, $dbname);

if ($mysqli->connect_errno) {
    die("Connection error: " . $mysqli->connect_error);
}

return $mysqli;
```

6.3 Account Security

In order to enhance the security of the system, two key technical measures have been taken. First, all user passwords are hashed by PHP's password_hash function before they are stored in the database. This step ensures that the password data is secure, and that the password information cannot be easily cracked even if the database is accessed without authorization. Second, to prevent SQL injection attacks, we use prepared statements in all database queries. This method effectively isolates the SQL code from the data input and ensures that the executed SQL commands will not be maliciously tampered with due to external input data, thus greatly enhancing the security of database operations. Together, these measures provide users with a more secure and reliable network environment.

7 Division and Takeaways&Reflection

TANG QIFENG: Responsible for the development of database and user authentication features, including registration, login, password updates, and profile editing.

1) Database Connection and Management:

I learned how to use the object-oriented approach of 'mysqli' to initialize a connection with the MySQL database. This involved setting up connection parameters such as hostname, database name, username, and password. I implemented an error-handling mechanism to capture errors and stop script execution when the connection fails, while displaying an error message.

2) User Authentication and Session Management:

I created a login system that retrieves user information from the database using the email provided by the user and verifies the hashed password using 'password_verify()'. Upon successful login, I start and regenerate the session to securely store user information. I use HTTP redirects to navigate to the user's homepage after successful login, and I enhance security by regenerating the session ID to prevent session fixation attacks.

3) Form Processing and Data Validation:

I adopted various methods to validate user inputs, including using PHP's built-in function 'filter_var' to verify email addresses and using regular expressions to check the complexity of passwords. I used 'mysql' 's prepared statements to avoid SQL injection attacks and learned how to safely bind parameters to my SQL queries.

4) CRUD Operations:

I implemented operations to add and update user information in the database and

learned how to handle potential database errors, such as duplicate entries.

5) JavaScript and Client-side Validation: I introduced JavaScript for client-side validation to ensure appropriate checks are made before form submission, which not only improves user experience but also reduces the server's load.

LU CHANG: Responsible for the structural layout of the web, CSS web design rendering, layout control, responsive design, clothes page as well as clothing details pages.

1) Improve user experience and navigation efficiency:

I learned that using HTML to build a website framework can help users better understand and navigate the content of the website. Reasonable layout can improve the user experience and navigation efficiency, allowing them to quickly find the information they need.

2) Attract users' visual attention:

I unified the use of color blocks, which can attract users' visual attention and help highlight important content or functional areas. By choosing colors, sizes, and arrangements, created a web page appearance that matches our product features.

3) Layout Control

I used CSS's box and positioning properties, such as relative positioning, absolute positioning and fixed positioning. By setting these positioning attributes and related offset values (top, bottom, left, right), can position the element in our web page and create floating elements and stacking effects, and control their size, spacing. I also used alignment, creating multi-column layouts, grid systems, to realize various web page layout and arrangement effects.

4) Responsive design

I used media queries to adjust the style and layout of web pages according to the screen size and characteristics of the device. Use CSS techniques such as Flexbox or Grid Layout to create a grid system so that elements on the web page automatically adjust their size and position to adapt to different screen sizes.

HUANG JIAQI: Responsible for the design of product dynamic page effects and detailed product information display for food and clothing detail pages.

1) Designing the skeleton of the web content:

I use HTML to effectively organise and present information about wool clothing and sheep's milk food. Ensure that the content of the website is logical and easy to read through a sound structure using appropriate headings, paragraphs and lists. I use CSS to beautify the website interface and create a web interface that reflects the cultural characteristics of the Inner Mongolia region.

2) Enhancing the interactivity of the website:

By writing scripts to process user input and feedback, I increased the functionality of the site, for example, implementing a dynamic product filter that allows users to quickly find the right wool clothing or goat milk food according to their needs. With customised layouts, colour schemes and font choices to enhanced the user's visual experience.

LIANG ZIXIN: Responsible for the about me page and have agreed to the overall layout and design of the page.

With the help of HTML and CSS, I gained the ability to create and design user-friendly web interfaces. These technologies are the cornerstones of web development and allow me to translate web page layout and aesthetic ideas into reality.

Finally, the JavaScript course greatly enhanced my understanding of front-end programming. By learning JavaScript, I was able to add interactivity to web pages, from simple user input forms to complex dynamic elements.