

Typology Redesign

Thecnical Document

Maya Camilleri

Introduction

This document discusses the redesign of the Typology website. Typology is a skincare brand that appeals to people who like their skincare to be straightforward and environmentally friendly. The company was started by Ning Li and is known for its simple, natural products and its commitment to not testing on animals. The products are made in France and come in eco-friendly packaging.

The redesign of the Typology website aims to make shopping for skincare products online a better experience. The site will be easy to use and will help customers find out more details about the products. The idea is to create a place where people can buy skincare items and learn about how to take care of their skin using products that are simple and honest.

People of all ages who care about using clean and clear skincare items will enjoy the website. The brand is all about giving people what they need without any extra fuss, especially for those who want to understand what's in their skincare products.

Overall, the goal is to make the Typology website inviting and easy to use, keeping in mind the company's values of being clear about what goes into their products and caring for the environment. This document will cover the technical steps taken to build the website, such as setting up the database, getting the server ready, adding dynamic features, and testing everything to make sure it all works well for the user.

Database setup

The Typology website uses MySQL for organizing its data because it works well with PHP, the language used to create the website. MySQL is good for websites because it's easy to use, safe, can handle a lot of data, and is fast.

To set up the database, I used MAMP. MAMP is a program that makes it easy to install and manage a database on a computer. It has a simple control panel and comes with phpMyAdmin, which is a tool for looking after the database. They set up MAMP to meet the website's needs, like how much computer memory it can use and how many people can connect to it at the same time. This helps the website run smoothly.

The screenshot shows the phpMyAdmin interface for the 'Maya' database. The left sidebar lists various databases and their tables. The main area displays a table of 12 tables with their respective details. The table includes columns for Table, Action, Rows, Type, Collation, Size, and Overhead. The 'Maya' database contains tables such as admin, Byedit, contact_messages, FaceCare, products, reviews, Shipping, SupportRequestReplies, SupportRequests, user1, UserFavourites, and users. The 'users' table is highlighted with a yellow background.

Table	Action	Rows	Type	Collation	Size	Overhead
admin	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8_general_ci	16.0 KiB	-
Byedit	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8_general_ci	16.0 KiB	-
contact_messages	Browse Structure Search Insert Empty Drop	9	InnoDB	utf8_general_ci	16.0 KiB	-
FaceCare	Browse Structure Search Insert Empty Drop	7	InnoDB	utf8_general_ci	16.0 KiB	-
products	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8_general_ci	16.0 KiB	-
reviews	Browse Structure Search Insert Empty Drop	6	InnoDB	utf8_general_ci	16.0 KiB	-
Shipping	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_general_ci	16.0 KiB	-
SupportRequestReplies	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_general_ci	32.0 KiB	-
SupportRequests	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_general_ci	16.0 KiB	-
user1	Browse Structure Search Insert Empty Drop	38	InnoDB	utf8_general_ci	32.0 KiB	-
UserFavourites	Browse Structure Search Insert Empty Drop	47	InnoDB	utf8_general_ci	48.0 KiB	-
users	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8_general_ci	32.0 KiB	0 B

Schema Design:

The database schema was designed with a focus on the various aspects of the e-commerce operations.

The tables include:

admin: to store administrator credentials and manage access control,
contact_messages: for storing messages from the website's contact form,
products: which contains information about the skincare products,
reviews: to hold customer feedback and product ratings,
users: for managing customer accounts and their data,
SupportRequests and SupportRequestReplies: to handle customer service inquiries and responses.

These tables are related to each other through primary and foreign keys, ensuring data integrity and supporting efficient data retrieval. For example, reviews are linked to products to associate customer feedback with the correct item, and SupportRequestReplies are related to SupportRequests to track conversations in customer support.

Initial Setup:

At the beginning, I made the database using phpMyAdmin. I set up different user roles so that the website bosses and the website itself could use the database in different ways. I also put in starting information for things like products, so the website would have details like what the products are, how much they cost, and how many are available.

Data Manipulation Techniques:

In the Typology website, CRUD operations let you work with the data in the database. CRUD stands for Create, Read, Update, Delete, and it's how the website manages all the information.

Create:

When you add something new to the website, like signing up as a new user, adding a new product, or sending a message through the contact form, the website saves this new information in the database.

Read:

When you want to see information from the website, like looking at products to buy or reading reviews, the website finds and shows you this information from the database.

Update:

If you need to change something that's already on the website, like when you update your profile or when an admin changes the price of a product, the website makes those changes in the database.

Delete:

When something needs to be taken off the website, like a product that's not being sold anymore or a user account that should be closed, the website can remove that information from the database. Usually, only someone like an admin can do this to keep things safe.

SQL/Query Statements:

SQL statements are used to interact with the database. Each CRUD operation is associated with a specific SQL command:

INSERT INTO table_name (...) VALUES (...) for creating new records,
SELECT * FROM table_name WHERE condition for reading data,
UPDATE table_name SET column_name = value WHERE condition for updating records, and
DELETE FROM table_name WHERE condition for deleting records. Prepared statements are used for executing these SQL commands to prevent SQL injection attacks and improve performance.

Before the Typology website puts or changes any information in the database, it checks and cleans the data:

Validation:

The website looks at the data to make sure it's the right kind. For example, it checks if an email address looks like a real email, or if a password is strong enough. This is to make sure all the information is in the format the website expects.

Sanitization:

The website also cleans the data. This is to stop bad things like SQL injection, which are ways hackers can try to break into the website. It uses special PHP functions to clean up the data from forms, like removing any harmful code or characters, to make sure only safe data is put into the database.

Virtual Server Setup

I chose MAMP to help me build the Typology website because it's easy to use and set up. MAMP comes with Apache, MySQL, and PHP, which are the tools I need for my website. It also works on all computers, which makes things simple.

I set up MAMP to act like the real server where the website will go live. This means I made sure the settings on MAMP, like how much memory PHP can use and how long scripts can run, are the same as they will be on the real server. I also used the same version of PHP to avoid any surprises when moving from development to the live website.

For testing, I ran all the features of the web application to make sure they work well and fast. This includes checking how data is added, read, changed, and deleted, making sure user logins work right, and that the website responds quickly. With MAMP's PHPMyAdmin, I could see the database and make sure everything was correct.

Building a Dynamic Web Application

The Typology website was made using a few different languages. HTML5 helps put together the website's content in a clear way. CSS3 makes the website look nice and ensures it works well on all devices like phones or computers. JavaScript, with a tool called jQuery, makes the website fun to use by adding things like checking forms, bringing in data without re-loading the page, and making things move on the screen.

On the technical side, PHP is used because lots of people know how to use it, it's simple, and there's a big community to help if needed. PHP takes care of the behind-the-scenes work, like sending forms, talking to the database, and keeping track of users' sessions.

The website keeps content fresh and interesting by automatically updating information based on what users do and what data they ask for. PHP scripts run on the server, take what the user's browser asks for, get or change data in the database, and then create the web page's content to send back to the browser. This means users always get the newest information without having to hit the refresh button.

The Typology website becomes lively because of what users do. When users do things like signing in, looking for products, writing reviews, or putting things in their shopping cart, the website reacts.

Behind the scenes, PHP scripts handle these actions. They talk to the database and make things happen. For example, when someone writes a review, a PHP script takes the review, saves it in the database, and then shows it on the product page right away. No need to refresh the page—it's all instant!

Test Cases

Testing Strategy:

The testing approach was structured around the IPO model. Each user action, defined as an input, triggers a specific process on the server, leading to an expected output. The test cases were designed to validate each step of this model to confirm that every user interaction produced the correct outcome.

Test Scenarios:

1. User Login

- Input: User enters their login credentials.
- Process: The system checks if the login and password match the database records.
- Expected Output: User is either logged in and redirected to their account page or asked to re-enter details if there's a mismatch.
- Actual Outcome: As expected.

2. Product Selection

- Input: User selects a product.
- Process: The system retrieves product details from the database.
- Expected Output: The product information page is displayed.
- Actual Outcome: As expected.

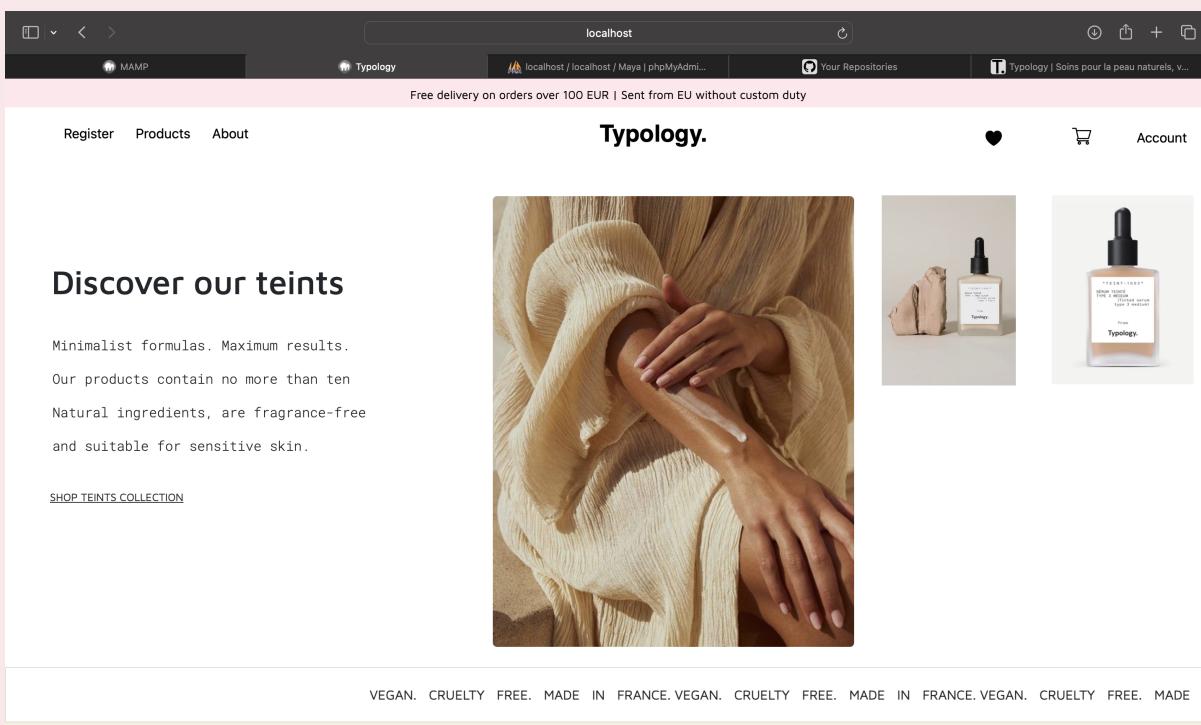
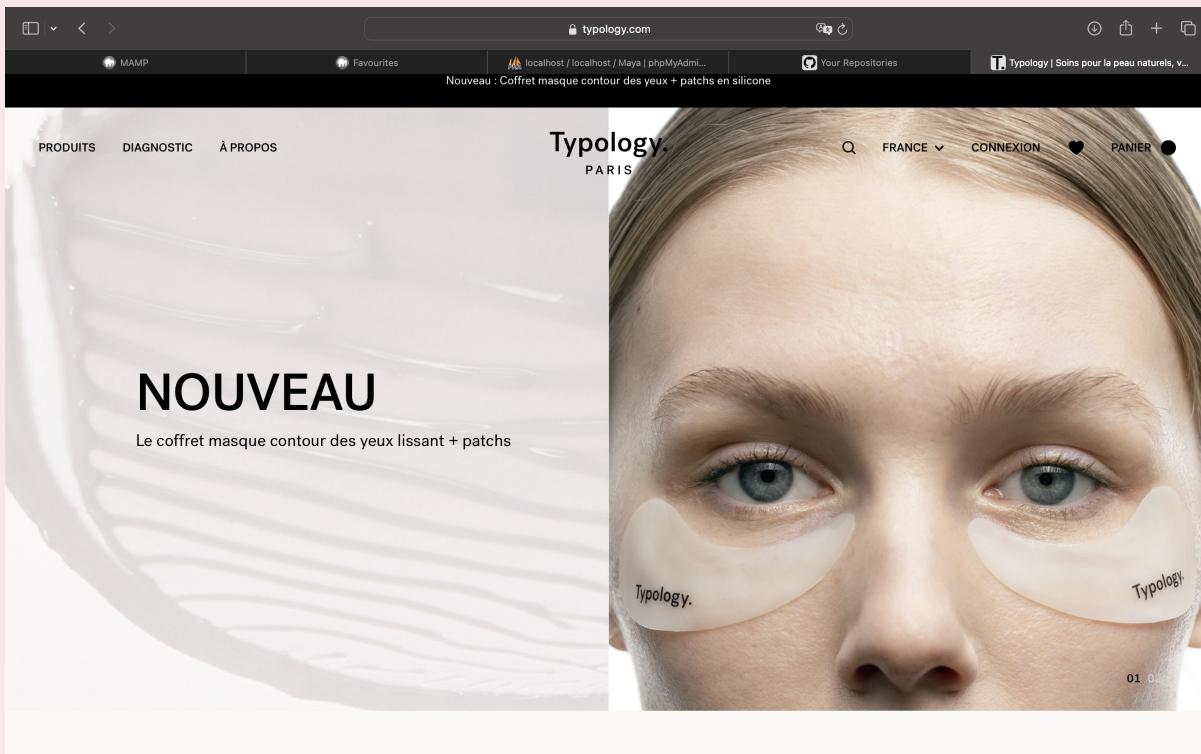
3. Add to Cart

- Input: User adds a product to their shopping cart.
- Process: The product is added to the user's shopping cart and the total price is recalculated.
- Expected Output: The shopping cart page is updated with the new item and total cost.
- Actual Outcome: As expected.

I made sure that things like forms, buttons, and links on the website work right. For example, I checked if the login form lets people log in correctly and also if it shows the right messages when something goes wrong, like if you type the wrong password or forget to fill in a field.

I kept an eye on errors that happened and looked at them. If something went wrong, the website showed messages to help users fix the problem. They used special tools, like the browser's developer tools and log files, to find and fix any issues.

Home page



Byedit page

The screenshot shows a web browser window with the URL typology.com. The page title is "SÉRUMS VISAGE". The main content area features three dark brown glass bottles with black dropper caps, arranged vertically. To the left of the bottles, there is descriptive text about face serums and their benefits. To the right, there are two smaller images: one showing a row of seven different serum bottles and another showing a single bottle labeled "VITAMINE C 1% (Vitamin C 1%)". The overall design is clean and minimalist.

Réalisez votre diagnostic de peau et découvrez votre typologie de peau, ainsi que votre prescription sur-mesure

PRODUITS DIAGNOSTIC À PROPOS

Typology.
PARIS

Accueil / Sérum visage

SÉRUMS VISAGE

Sérum pour visage adaptés à toutes les typologies de peau.

Hautement concentrés en actifs comme l'acide salicylique, l'acide glycolique ou réthinoïl, nos sérum permettent de traiter les préoccupations de peau ciblées, comme les imperfections, rougeurs ou les signes de l'âge.

Formes galéniques cosmétiques à la texture

BEST-SELLER

BEST-SELLER

The screenshot shows a web browser window with the URL localhost. The page title is "Typology.". The main content area displays four product cards: "Sensitive skin Serum - £20.00", "Lip oil - £12.00", "Vitamin C - £12.00", and "Serum Caffeine - £12.00". Each card includes a small image of the product bottle and its name. Below the products, there is a section with the Typology logo and a quote: "We seek the essential. Our formulations are pared back to functional, safe ingredients. Made in France, shipped worldwide." There is also a "Select Region" dropdown and a "Subscribe to Our Newsletter" form.

Free delivery on orders over 100 EUR | Sent from EU without custom duty

Register Products About

Typology.

BY EDIT

Sensitive skin Serum - £20.00

Lip oil - £12.00

Vitamin C - £12.00

Serum Caffeine - £12.00

We seek the essential. Our formulations are pared back to functional, safe ingredients. Made in France, shipped worldwide.

Select Region ▾

Subscribe to Our Newsletter

Sign up to our newsletter & exclusive updates.

Enter your email

I have read and understood the Privacy Policy.

Product page

typology.com

MAMP Favourites localhost / localhost / Maya | phpMyAdm... Your Repositories sérum teinté - teint - typology

Un produit offert dès 75€ d'achat

PRODUITS DIAGNOSTIC À PROPOS

Typology.
PARIS

Accueil / Soins teintés / Sérum Teinté

• FAIRE LE DIAGNOSTIC

“Le coup de cœur beauté de la rédaction.”

marie claire



01 02 03 04 05 06 07

BEST-SELLER

Sérum Teinté

★★★★★ 3776 avis

Couvrance légère - Fini naturel

Enrichi en Vitamine C pour l'éclat du teint et en aloe vera pour hydrater la peau.

Sans nanoparticules, sans silicone, non occlusif, n'obstrue pas les pores.

99% d'origine naturelle - 30ml

Vérifiez votre teinte ici.

Entre deux teintes, votre peau balance ? Choisissez deux séums teintés. Bénéficiez de 30% de réduction sur la seconde teinte.

Sélectionnez une teinte



localhost

MAMP Favourites localhost / localhost / Maya | phpMyAdm... Your Repositories sérum teinté - teint - typology

Free delivery on orders over 100 EUR | Sent from EU without custom duty

Register Products About

Typology.

Lip oil

★★★★★

Read our customer reviews

Description

Enriched with squalane, jojoba oil, and vitamin E, this tinted oil subtly colours the lips, delivering nutrition and suppleness with a glossy, non-sticky finish. Formulated without mineral oils and silicones. 98% naturally derived. Vegan. Made in France.

Price: € 12.00

Quantity: 1 Add to Cart



Customer Reviews

Jessica Farrugia