

er

ER: Requirements Specification Component

Tech4You allows all its users to purchase technological products, and to be updated on all the latest news.

A1: Tech4You

Nowadays we witness an era of technology and a constant development on this branch. Technologies are used on our daily lives, for example in medicine, communication, industry, science, transportation... and the motive is obvious, they allow us to reach practical goals with less effort and that's why they keep growing! So, a space with easy access that can provide with various types of tech products and brands to the users is an optimal idea. That space is called the Tech4You web information system and is being developed by a small group of young students (stakeholders) who will be responsible for maintaining the integrity, managing and ensuring that this online shop is running smoothly and always with the information updated.

Users are separated into three groups with different permissions and one subgroup: administrators, authenticated users, unauthenticated users and buyers.

We have the unauthenticated users as the lowest existence o this platform... When they enter the website they can see the homepage. At the top right corner they have the option to sign in or sign up and, on the left, a search bar where they can type the products they want by name (seeing after a products list), see its details and view its reviews. Also, under the above mentioned they can see the different existent categories on a line and can select one of them and search its products. At the footer they will see information about the shop, contacts and FAQ. In the middle will appear new products and top sells.

Authenticated users will have the option to sign out, at the top right corner they will also have the cart option, where they can add and remove products that they potentially want to buy and, when done, have the option to do it. Next to that they will have a wishlist where they can manage it, like the shopping cart. They, as well, have the right to manage their own reviews (add,remove and edit) and edit their profile so that their personal intel is always updated (they can delete the account also).

Buyers, as authenticated users that made already a purchase at the shop can track or cancel their orders, review the products bought and view the purchase history.

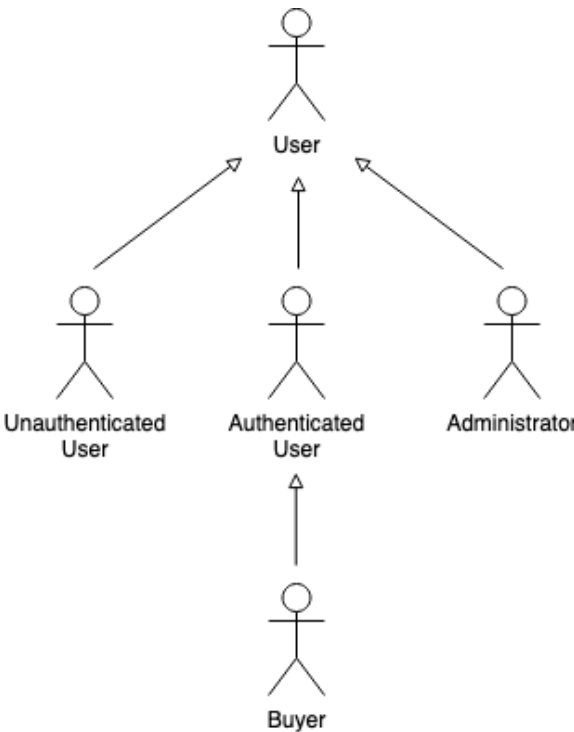
Administrators are the higher existence on this platform, with complete access and modification privileges, such as editing, adding and removing products, managing the FAQ section. However, some features won't be allowed by these group, because they aren't the target of usage, like buying products. Also, they can manage product categories, product stock, order status, response to reviews, view users' purchase history and sign out.

The platform will have an adaptive design, allowing users to have a pleasent browsing experience, regardless of the device (desktop, tablet or smartphone).

A2: Actors and User stories

This artifact contains the specification of the actors and their user stories. This allows to have documentation for the project requirements.

1. Actors



Identifier	Description	Examples
User	This user has access to all the products available and can search items	n/a
Authenticated User	Can buy items, add to wishlist and edit his profile.	[...]
Unauthenticated User	Can sign in or sign up	n/a

Identifier	Description	Examples
Buyer	When an authenticated user makes his first purchase, he becomes a Buyer, and then he can make reviews of his purchases	[...]
Administrator	Responsible for managing all products and users	[...]

2. User Stories

2.1. User

Identifier	Name	Priority	Description
US01	products list	high	As a user, I want to view the products list ordered by the most liked to the least one, so that I see the products available
US02	products details	high	As a user, I want to view product details, so that I can read products specs
US03	search products	high	As a user, I want to search products by name, so that I can find it quickly
US04	browse product categories	medium	As a user, I want to browse product categories, so that I list every product with the same category
US05	product reviews	medium	As a user, I want to view product reviews, so that I can read the opinions from other users

2.2. Authenticated User

Identifier	Name	Priority	Description
US06	add product to shopping cart	high	As an Authenticated User, I want to add a product to shopping cart, so that I can buy the product latter
US07	manage shopping cart	high	As an Authenticated User, I want to manage shopping cart, so that I can manage the cart items
US08	sign out	high	As an Authenticated User, I want to checkout, so that my account is protected
US09	buy cart products	high	As an Authenticated User, I want to buy the added products, so that I can conclude my purchase
US10	add product to wishlist	medium	As an Authenticated User, I want to add a product to my wishlist, so that I can save it for later
US11	manage wishlist	medium	As an Authenticated User, I want to manage wishlist, so that I can manage the items
US12	manage reviews	medium	As an Authenticated user, I want to manage my reviews, so that I can add/remove/edit them
US13	delete account	medium	As an Authenticated user, I want to delete my account, so that I don't have an account in the site
US14	edit profile	low	As an Authenticated User, I want to edit my profile, so that the system can have my updated personal information

2.3. Unauthenticated User

Identifier	Name	Priority	Description
US15	sign in	high	As a Unauthenticated User, I want to sign in, so that I can access my profile
US16	sign up	high	As a Unauthenticated User, I want to sign up, so that I can create my profile

2.4. Buyer

Identifier	Name	Priority	Description
US17	view purchase history	high	As an Authenticated User, I want to view purchase history, so that I can review all my bought items
US18	review purchased product	medium	As a Buyer, I want to review a purchased product, so that I can write my opinion about the product that I bought
US19	track order	medium	As a Buyer, I want to track my order, so that I will know when the order arrives

2.4. Administrator

Identifier	Name	Priority	Description
US20	manage order status	high	As a Administrator, I want to manage order status, so that I can control the order's flow

Identifier	Name	Priority	Description
US21	sign out	high	As a Administrator, I want to checkout, so that I can close my account
US22	add new product	medium	As a Administrator, I want to add a product, so that the user can buy it
US23	manage product information	medium	As a Administrator, I want to manage product information, so that the users can get an updated version of it
US24	manage product stock	medium	As a Administrator, I want to manage the product stock, so that I can control the quantity of a certain product
US25	manage product categories	medium	As a Administrator, I want to manage product product categories, so that I can change the categories list
US26	view users' purchase history	medium	As a Administrator, I want to view users' purchase history, so that I can add to users' main page related content
US27	response to reviews	medium	As a Administrator, I want to response to reviews, so that I can clarify the users
US28	manage FAQ	low	As a Administrator, I want to manage (add, edit or delete) FAQ, so that the users can have updated information

3. Supplementary Requirements

3.1. Business rules

Identifier	Name	Description
BR01	Stock	An authenticated user can only purchase a product if it's available in stock
BR02	One review	A buyer can only review each product bought once
BR03	Managing product specs	Only administrators may change the product specifications
BR04	User deleted	His data (bought items and favourite products) continues stored in the database, but the personal info is deleted from the database
BR05	Admin account restriction	Administrators accounts are indepedent of the other types of user accounts (i.e. they cannot buy products)
BR06	Cancel order	The Buyer can only cancel an order until it has been paid
BR07	Order status emails	The user should receive an email every time the status products changed (in proccess, preparing, dispatched, delievered, cancelled)
BR08	payment type	The user should receive the IBAN, right after the checkout, in order to pay for his order

3.2. Technical requirements

The main technical requirements that we will be focused on are:

- **Availability:** The users must have access at any time to the website
- **Usability:** The website design must be simple, in order not to cause troubles when using it
- **Performance:** The website must be fast, so the users can have a smooth experience

Identifier	Name	Description
TR01	Availability	The system must be available 99% of the time in each 24-hour period
TR02	Usability	The system must be simple and easy to use. The system is going to be used by costumers from all ages, with or without experience, so it's fundamental to have a good usability
TR03	Accessibility	The system must ensure that everyone can access the pages, regardless on the device or web browser they use, and whether they have any handicap or not
TR04	Performance	The system should have quick response times (shorter than 2 s) to ensure the user's attention. It should load and render content fast, and have a good response to user interation
TR05	Web application	The system should be implemented as a Web application with dynamic pages (HTML5, JavaScript, CSS3 and PHP). It is critical that the Tech4You system is easily accessible from anywhere without the need to install specific applications or software, adopting standard web technologies
TR06	Portability	The server-side system should work across multiple platforms (Linux, Mac OS, etc.)
TR07	Database	The PostgreSQL database management system must be used, with a version of 11 or higher
TR08	Security	The system shall protect information from unauthorized access through the use of an authentication and verification system

Identifier	Name	Description
TR09	Robustness	The system must be prepared to handle and continue operating when runtime errors occur
TR10	Scalability	The system must be prepared to deal with the growth in the number of users and their actions, whether in terms of a gradual or abrupt surge, without disrupting end-users' activities
TR11	Ethics	The system must respect the ethical principles in software development (for example, personal user details, or usage data, should not be collected nor shared without full acknowledgement and authorization from its owner)

3.3. Restrictions

Identifier	Name	Description
R01	Deadline	The system should be ready to be used at the end of the semester

A3: Information Architecture

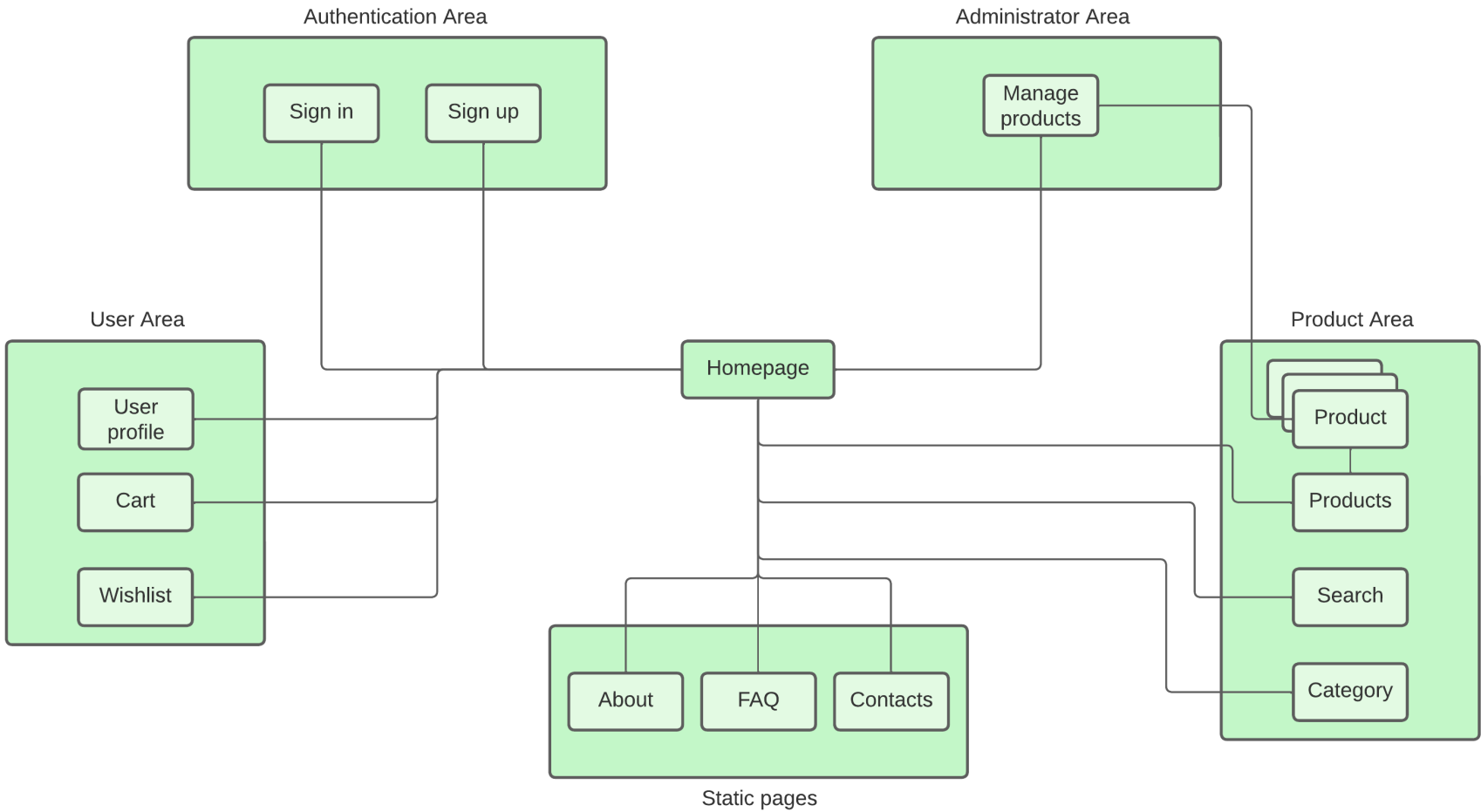
This artifact shows the organization of the system to be developed. The goals are the following:

1. Help to identify the user requirements.
2. Quick interaction on the design oth the user interface.

This artifact includes two elements:

1. A sitemap, defining how the information is organized in pages and the interaction between them.
2. A set of wireframes, defining the functionality and the content for each page.

1. Sitemap



2. Wireframes

UI01: Main Page



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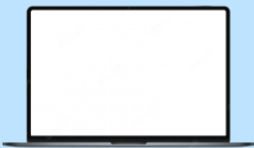
TVs

LAPTOPS

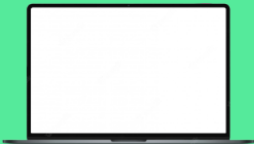
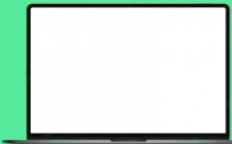
DESKTOPS

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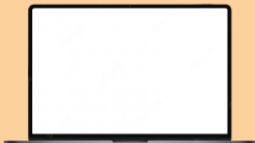
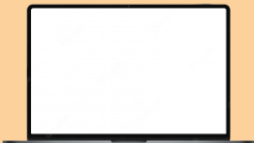
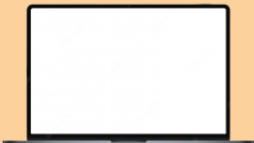
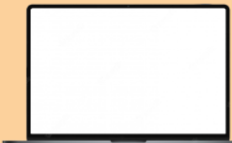
NEW PRODUCTS



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BEST LAPTOPS



BEST SMARTPHONES



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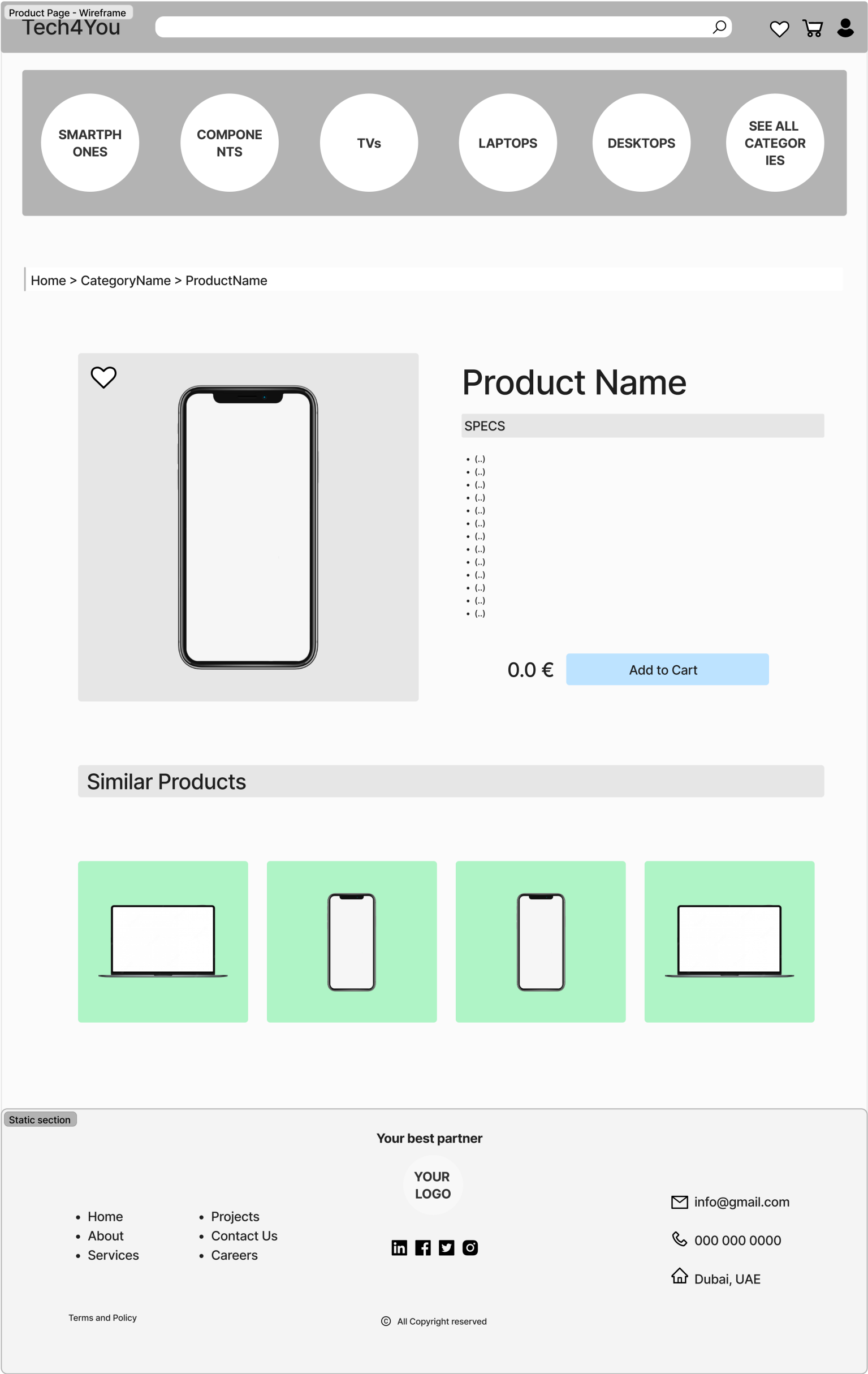
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Revision history

Changes made to the first submission:

- 1. Item 1
- 2. ...

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