



# Yarnder project

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## Overview

Yarnder is a database of different yarn types which gives information on their technical properties (warmth, definition, elasticity, durability). The project's goal is to add a project matching tool as well as a community comment feature for logged in users.

## Problem

While there are community based crafting social media allowing makers to view examples of projects, there is currently no simple tool or resource that allows makers to know broadly what certain yarn types are good for.

## Solution

Yarnder will now allow makers to select their yarn type and view appropriate project matches to ensure a good result. It will also provide a new community area where logged in users can view and add comments showcasing their projects as examples.

## Estimation

Backend development:

- Complexity: S/M/L/XL
- Impact: N/A

Frontend development:

- Complexity: S/M/L/XL
- Impact: N/A

## User story 1: As a user, I want to be able to register on the Yarnder website

**AC#1** – The registration page must include the following elements:

- Email input field
- Username input field
- Password input field
- Confirm password input field
- A "Register" button to submit the form
- A "Login here" link for users who already have an account

**AC#2** – The email input element must validate format correctness and must be unique.

- If the format is invalid (e.g., missing "@" or domain), an error message must be displayed: "Please enter a valid email address."
- If the email is already registered, display the message with a link to the login page: "This email is already registered. Login here."

**AC#3** – The username input element must not be empty and must be unique.

- If the username is already taken, display the message: "This username is already in use."

**AC#4** – The password input element must enforce the following rules:

- Minimum of 8 characters
- At least one lowercase letter
- At least one uppercase letter
- At least one special character (e.g., !@#\$%^&\*)
- Display specific error messages for each unmet requirement:
  - "Password must be at least 8 characters."
  - "Password must include a lowercase letter."
  - "Password must include an uppercase letter."
  - "Password must include a special character."

**AC#5** – The confirm password input element must match the password input element.

- If the values do not match, display the message: "Passwords do not match."

**AC#6** – Invalid elements must be highlighted dynamically with appropriate error messages as the user inputs them.

**AC#7** – When clicking the register button with empty fields, display the message: "Please fill in the form to register."

**AC#8** – Upon successful registration, a green toast message must appear: "Email confirmation has been sent to your email address."

The image shows a registration form titled "Create Your Yarnder Account" with the subtitle "Join Yarnder today". The form contains four input fields: "Email" (with placeholder "you@example.com"), "Username" (with placeholder "Choose a unique username"), "Password" (with placeholder "Min. 8 characters, incl. special char"), and "Confirm Password" (with placeholder "Re-enter your password"). Below the fields is a blue "Register" button. At the bottom, there is a link: "Already have an account? [Login here](#)".

## User story 2: As a user, I want to be able to log in on the Yarnder website

**AC#1** – The login page must include the following elements:

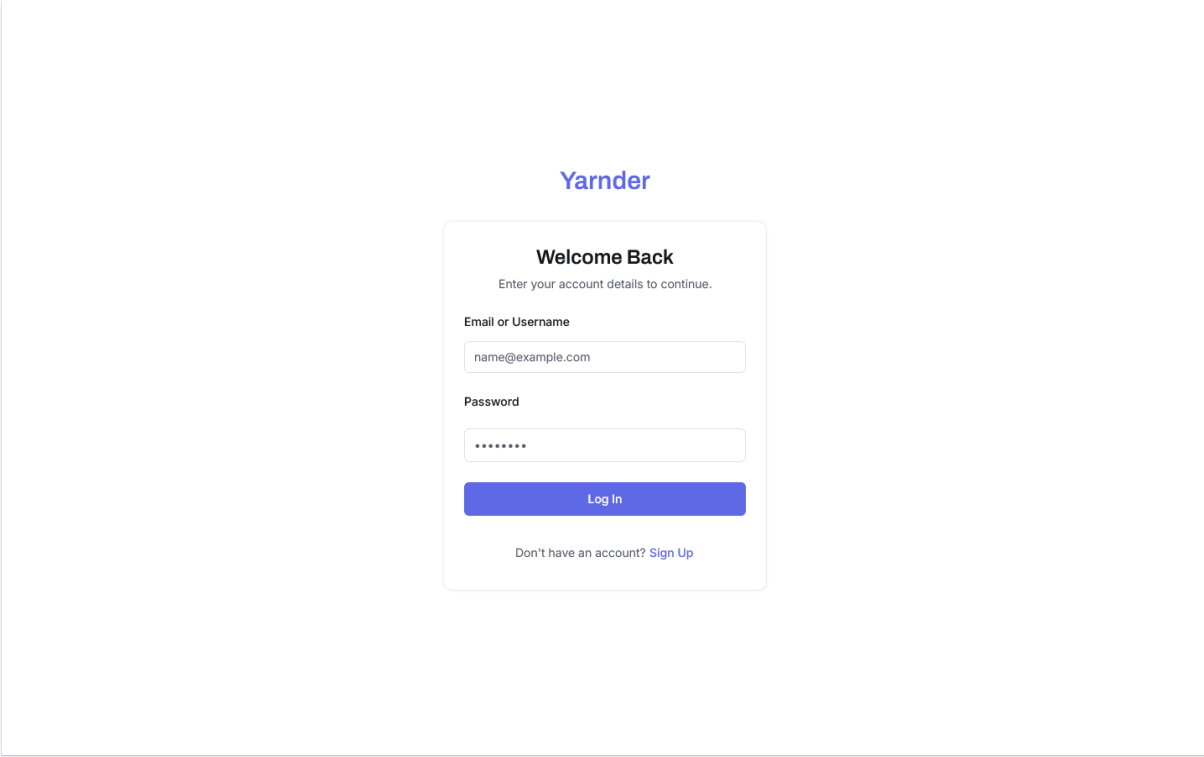
- An input element labeled **"Email or Username"** with placeholder text `name@example.com`
- A **Password** input element with obscured input
- A **"Log In"** button to submit the form
- A prompt for users without an account: `"Don't have an account? Sign Up"` with "Sign Up" as a clickable link

**AC#2** – When clicking the log in button with an empty Email or username field, display the following error message: `"Please fill in the form to register."`

**AC#3** – When clicking the log in button with an empty "Password" field, display the following error message: `"Please enter your password."`

**AC#4** – If the entered credentials are incorrect, the form must display a general error message: `"Invalid email/username or password."`

**AC#5** – Upon successful login, the user must be redirected to the "Matching" page.



The image shows a login form for 'Yarnder'. The form is centered on a light gray background. It has a title 'Welcome Back' and a subtitle 'Enter your account details to continue.' Below this are two input fields: 'Email or Username' with the placeholder text 'name@example.com' and 'Password' with masked characters '.....'. A blue 'Log In' button is positioned below the password field. At the bottom of the form, there is a link that says 'Don't have an account? Sign Up'. The entire form is enclosed in a thin gray border. At the bottom left of the image, there is a small text 'Made with Visily' with a logo.

Yarnder


**Welcome Back**  
Enter your account details to continue.

Email or Username  
name@example.com

Password  
.....

Log In

Don't have an account? [Sign Up](#)

Made with  Visily


### User story 3: As a user, I want to use the matching system to easily find projects based on yarn types

Matching will be available for the following projects: winter garment, summer garment, hat, scarf, socks, blanket, toy. Projects that share at least 70% of their properties with selected yarn types will result in a match.

**AC#1** – The default empty state for matching page must include the following elements:

- Yarn type selection elements grouped by category (e.g., Fiber, Spinning Structure, Ply Structure, Treatment)
- A "Show Match" button

**AC#2** – The "Show Match" button must remain in a disabled state until the user selects at least one yarn type from any category.



Matching

Database

Fiber

Sheep WoolCottonLinenAcrylic

Spinning Structure

WorstedWoolen

Ply Structure

Single2ply3ply

Treatment

SuperwashNon Superwash

Find Your Project

Select at least one yarn type to find a match

Show Match

For full documentation on these criteria please visit the [Database](#) page.

Profile

Quick LinksLegalContact

**AC#3** – The user must be able to select one or more yarn types across any combination of categories.

The screenshot shows the 'Find Your Project' interface on the Yarnrder website. The header includes the Yarnrder logo and a navigation menu with 'Matching' (selected) and 'Database'. The main content area is titled 'Find Your Project' with a subtext 'Select at least one yarn type to find a match'. It features four categories of filters: 'Fiber' (Sheep Wool, Cotton, Linen, Acrylic), 'Spinning Structure' (Worsted, Woolen), 'Ply Structure' (Single, 2ply, 3ply), and 'Treatment' (Superwash, Non Superwash). A 'Show Match' button is located on the right. A footer section includes a 'Profile' link, 'Quick Links', 'Legal', 'Contact', and social media icons. A small note at the bottom states 'For full documentation on these criteria please visit the Database page.'

**AC#4** – When the "Show Match" button is enabled and clicked, the system must display a list of matching project results based on the selected yarn types.



**AC#5** – Once project results are displayed, the "Show Match" button must transform into a "Reset" button.

The screenshot shows the Yarnrder website's 'Find Your Project' interface. On the left is a sidebar with a 'Matching' tab and a 'Database' link. The main area is titled 'Find Your Project' with the instruction 'Select at least one yarn type to find a match'. Below this are four filter sections: 'Fiber' (with 'Sheep Wool' selected), 'Spinning Structure' (with 'Woolen' selected), 'Ply Structure' (with '3ply' selected), and 'Treatment' (with 'Non Superwash' selected). A blue 'Reset' button is positioned to the right of the filters. Below the filters, a match result is displayed: '☆ Here's your match ☆' followed by 'Winter Garment Hat'. At the bottom of the main area, a link to the 'Database' page is provided. The footer contains 'Quick Links', 'Legal', 'Contact', and social media icons.

**AC#6** – Clicking the "Reset" button must:

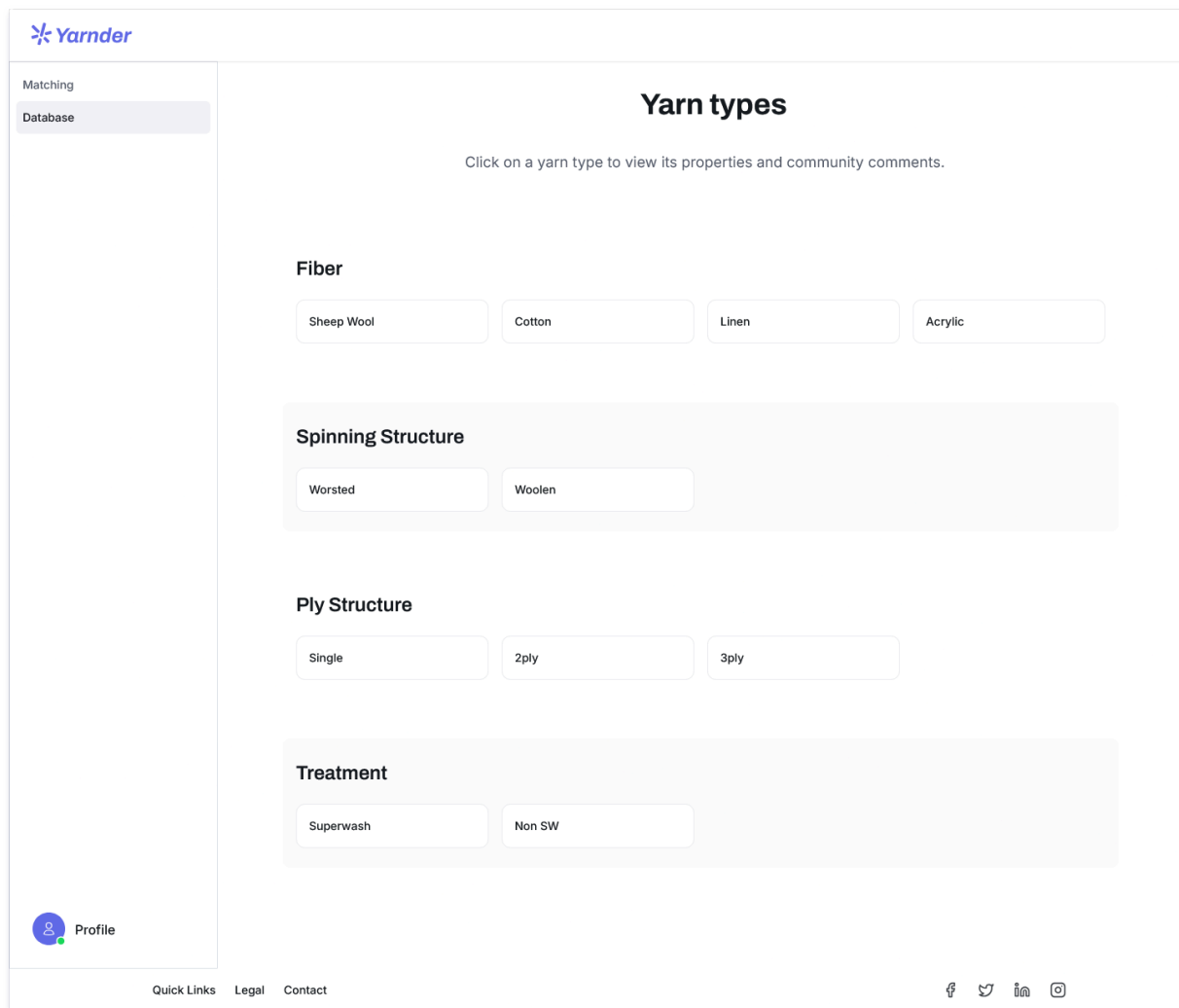
- Unselect all previously selected yarn types
- Remove any displayed project results
- Return the page to its default empty state

**AC#7** – If no project has enough shared properties to match the user selection, the system must display a "No match found" message below the Reset button.

**AC#8** – The "Database" hyperlink must be persistently visible at the bottom of the page and must navigate to the documentation page when clicked.

## User story 4: As a public user, I want to be able to view community comments for yarn types in the database

The database section currently allows users to click on any yarn type to open a properties sidepanel.



**AC#1** – The properties sidepanel must display the following new elements below the properties table:

- A prompt stating: "Please Sign up or Login to leave comments." (public users cannot submit comments)
- A community comments section showing existing user comments

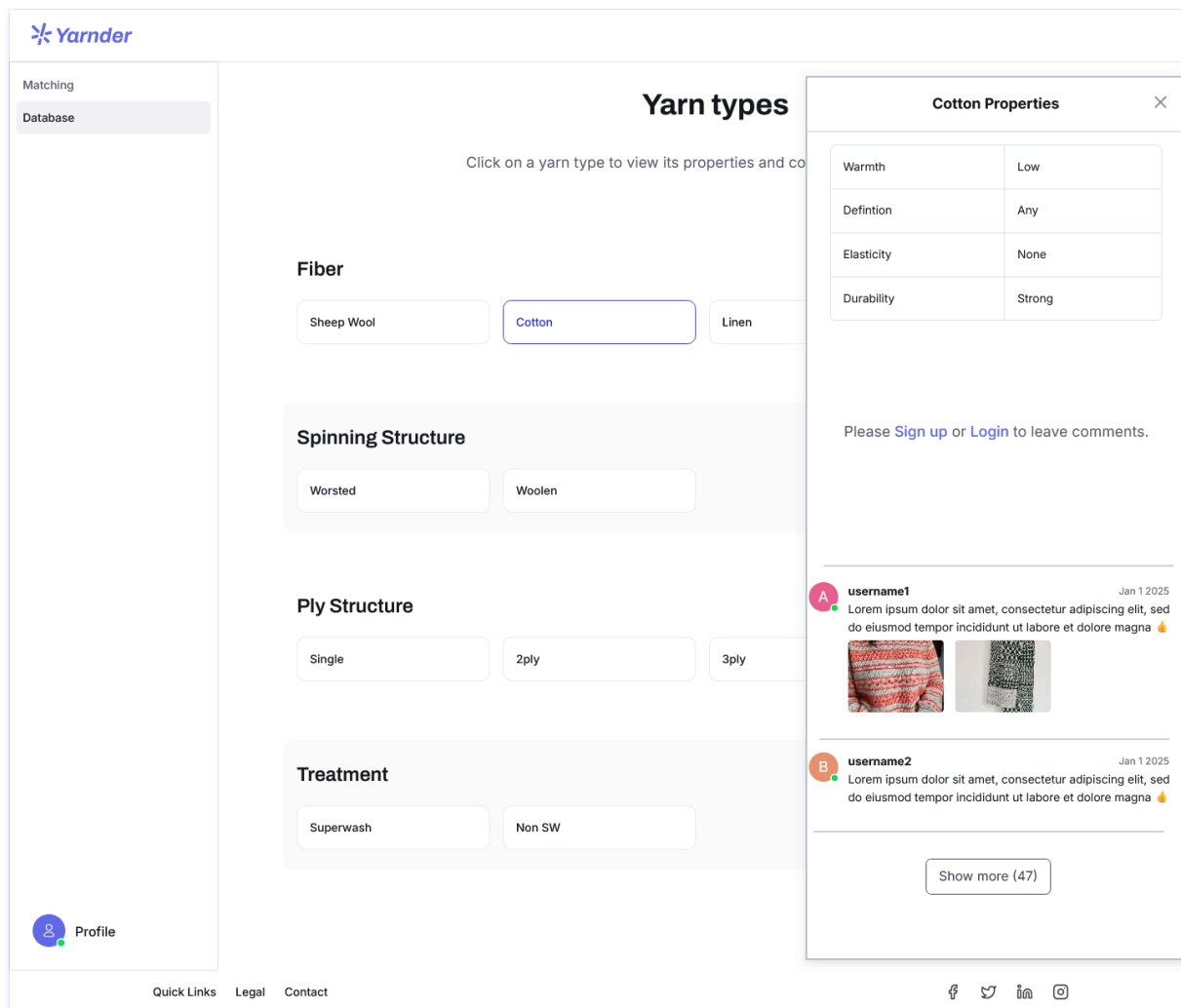
**AC#2** – Public users must be able to view all existing comments for the selected yarn type, regardless of login status.

**AC#3** – By default the sidepanel loads the 2 most recent user comments and must include a "Show more" button if there are more comments:

- Clicking "Show more" must load the next 10 comments in chronological descending order.
- Comments must be loaded with scroll behavior inside the sidepanel.

**AC#4** – The sidepanel must be closable by either:

- Clicking the "X" button in the top corner
- Clicking outside the sidepanel area



## User story 5: As a logged in user, I want to be able to add comments for yarn types in the database

Logged-in users must be able to add comments for any yarn type and view a comment composer element on top of the existing comments.

**AC#1** – The comment composer element requires a minimum of **25 characters** and must support up to **1000 characters**.

- The composer must dynamically expand in height as the user types.
- The composer must include a manual resize control (arrow in the bottom-right corner).

**AC#2** – Users must be able to attach up to **5 images** to a single comment.

- Once 5 images are uploaded, the upload tool is disabled.
- Allowed image formats: **PNG** and **JPG**
- Maximum resolution per image: **4500×4500 pixels**
- Maximum file size per image: **10MB**

**AC#3** – Invalid elements must be highlighted dynamically with appropriate error messages as the user inputs them.

- If the comment contains less than 25 characters, display: "Comment must contain at least 25 characters."
- If the comment exceeds 1000 characters, display: "Comment must not exceed 1000 characters."
- If more than 5 images are selected, display: "Comment must not contain more than 5 images."
- If an unsupported image format is uploaded, display: "Only PNG and JPG formats are supported."
- If an image exceeds resolution or size limits, display: "Image resolution must not exceed 4500×4500 pixels." "Image size must not exceed 10MB."

**AC#4** – When clicking the publish button with empty fields, display the minimum character input message: "Comment must contain at least 25 characters."

**AC#5** – Upon successful submission, the new comment must appear in the comment list for that yarn type.

- Comment must appear on top of existing comments since it is the most recent.
- Attached images must be displayed as previews within the comment block.
- Clicking an image in a user comment will open it in full size in a new browser tab.

**AC#6** – The comment composer and image upload elements must only be visible to logged-in users.

- Public users must continue to see the prompt: "Please Sign up or Login to leave comments." (see US-4 AC#1)

