Sheffield Hallam University

School of Computing and Digital Technologies

Applied Software Engineering (55-508876-AF-20256)

Assessment Portfolio

Task 1

Project: SutatinWear
Group #: 11
Group Members:

Name	ID	Scrum Role
Obada Bitar	c4013337	Developer
Tammam Al Bahri	C4045340	Developer
Harrun Handuleh	C4025844	Scrum master
Tyrese Fairweather	c4009423	Project owner
Mohammad Raheel Ali	c4025029	Developer

Github Repo link: Tammam-Al-Bahri/sustain-wear
Video Link:
Date: 14/10/25

Product goal:

To simplify and enhance the donation of wearable and sustainable clothing to charities through an accessible, user-friendly website designed for individuals and organisations.

User Roles:

ROLE	DESCRIPTION
Donor	Brief description: A donor is an individual who donates clothing through the website to support people in need. Responsibilities: ● They can browse donation campaigns or needs ● send clothes through post or drop off at a certain organisation ● View donation History ● Be able to see the sustainability impacts their clothes have been
Charity Staff	Brief description: An organisation that collects clothes listed on the website and distributes them to those in need. Responsibilities: ● Take packages of clothes sent through the website to be distributed. ● List on the website about the clothes that they have ready for collection. ● Accept or decline donations
System administrator	Brief description: Oversee the workings and maintenance of the website, be able to see if any problems are reported. Responsibilities: ● User management ● Fixing bug issues ● Maintenance of the website ● Responding to reports

Personas

Person 1 :

Amina Patel
● Age: 34 ● Occupation: Community Outreach Coordinator at a Local Charity ● Location: Birmingham, UK

	● Role: Charity staff ● Hobbies: Charity Work
Background	Amina works for a non-profit organization that supports low-income families and refugees by providing them with essential clothing. She uses the charity clothes website to manage clothing donations, organize logistics, and keep track of available clothing stock.
Goals	● Make the donation and distribution process efficient and organized. ● Ensure people in need receive appropriate clothing quickly. ● Reduce waste by only accepting what can be used or distributed.
Frustrations	● Receiving inappropriate or unusable donations (e.g., damaged or irrelevant clothes). ● Lack of real-time updates or alerts when donations are made or items are ready. ● Time lost manually updating the website with available clothing.
Technology	Desktop Computer: for managing the inventory updates, accepting or declining orders because of the condition and donor communication.
Scenario	Amina logs into the charity clothes website on Monday morning and sees that five new clothing donation offers have come in over the weekend. She quickly reviews the descriptions and photos attached by donors. Two of the donations include winter jackets and children's clothes, which her team urgently needs — she accepts them immediately. One donation includes worn-out items, so she politely declines and sends the donor a message explaining their quality guidelines. She then updates the listings to show that two boxes of winter clothing are now ready for pickup from the local donation center. Later that day, she receives a notification on her phone that a volunteer has scheduled a pickup for those boxes. This system allows her to serve her community efficiently without being overwhelmed by admin work.

Person 2 :

	Maya Thompson
	● Age: 34 ● Occupation: IT technician for SustainWear ● Location: Bristol, UK ● Role: System Administrator ● Hobby: sustainability activist
Background	Maya Thompson is a passionate sustainability advocate who merges her technical expertise with her environmental values. As the System Administrator for SustainWear she ensures the website runs smoothly for users and charity staff, allowing for clothes to be donated and not wasted when thrown away helping those in need of them. While she is off of work she spends time spreading awareness for sustainability initiatives and the impact that someone can have by reducing their waste. Outside of work, she is leading community workshops on sustainability, helping local

	businesses reduce their carbon footprint through better practices for managing their waste. Her view on sustainability is rooted in a belief that technology can be a powerful ally in the fight against climate change if used properly and that the actions that a single person takes can help even if it is by a little. Maya's weekends are often spent volunteering at urban gardening projects or organizing local clean-up events. Her mission is to make sustainability not just a goal, but a way of life.
Goals	● Wants to help the environment through sustainable practises ● By keeping the site running she can help reduce the amount of clothes thrown into land fills ● Encourage people to donate more clothes
Frustrations	● Due to a lack of, easy to use, donation sites people don't donate that often besides in person ● Most donation sites require you to go through tedious verifications that could take a significant amount of time
Technology	Laptop and desktop: for maintaining the website and allowing it to run smoothly for users
Scenario	When Maya logs into her account as a system administrator she is able to see reports about any bugs or errors that users have reported. This allows her to see what issues are needed to fix and can decide on to do by severity of said issue ranging from, if it is a niche issue or something that could stop users from using the website like usual. She is also able to check if any users have been reported for falsifying clothes for donation and causing issues on the site. These reports allow her to be able to see what users are making issues for charity staff by falsely donating items that can not be worn on purpose.

Person 3 :

Sarah Kim	
● Age: 22 ● Occupation**:** IT specialist for SustainWear ● Location**:** Seattle, USA ● Role: System administrator ● Hobby**:** Fashion design enthusiast	
Background	Growing up in a creative family, Sarah developed an early appreciation for design and innovation. Her role at SustainWear allows her to merge her technical expertise with her creative side - she often collaborates with the design team to streamline digital tools for product development and sustainability tracking. Outside of work, Sarah participates in local fashion events and workshops, where she connects with similar thinking designers who share her commitment to environmentally conscious fashion. She dreams of one day launching her own sustainable fashion line that leverages technology to reduce waste and improve ethical production practices.
Goals	● Allowing clothes to be distributed through an easily to use website ● Many clothes are able to be viewed and distributed to others ● Wants a website that looks inviting and nice to look at that is practical
Frustrations	● Lots of clothes that can still be worn are thrown away when others could use them instead

	• Some donation websites aren't streamlined and are very inefficient for others when donating clothes • Many websites won't show the impact each piece of clothing has on the environment by not throwing it away
Technology	Desktop and a laptop: allows for her to keep the website running smoothly when she's at work, home or on the move.
Scenario	Sarah logs into her account and she sees that some users are having trouble uploading photos with their donations. She checks the system and finds that it is an issue from a recent update that was pushed to the website so she and some others find the issue and fixes it as well as doing more thorough testing to make sure it works. Later, she reviews reports of users submitting false information about donated clothes so she suspends accounts that have done it multiple times, telling them that they can appeal the decision by sending proof it was an accident while issuing warnings to first time offenders in case it was truly an accident. Sarah then checks for accessibility issues and notices that a new menu isn't working well with screen readers. Once noticed she adds it to the list of items to do in the next sprint marking its urgency and complexity appropriately.

Person 4 :

Aisha Khan	
• Age:28 • Occupation: Primary school teacher • Location: Birmingham, UK • Role: donor	
Background	Aisha, as a parent and passionate teacher, teaches her kids and students to care about sustainability as much as she can. She donates her children's clothes that have been outgrown through SustainWear, a platform she was told about by someone she knows. Because of her bad vision, Aisha uses tools like screen readers on her iPhone and on her laptop. She also relies on browser extensions for larger text and high-contrast colors helping her notice buttons or text boxes that aren't easy to see. She prefers websites that work well with screen readers and don't rely only on visuals which allows for many people with visual impairments to use the websites. Since she teaches full time, she utilizes her mobile phone during brief breaks or in the evenings to upload images of the items she is donating. Aisha has utilized various donation websites but frequently encountered frustration due to forms that were difficult to access, ambiguous status updates, or images lacking text alternatives. She opted for SustainWear because it is very user friendly for users that have issues with their vision, which gives her confidence that she can complete the donation process on her own.
Goals	• Donate quickly and independently using her smartphone without needing assistance. • Track donation status (Pending → Approved → Received) through simple and accessible updates.

	● View her personal sustainability impact in both text and audio-friendly formats. ● Receive accessible notifications through emails and app alerts readable by her screen reader. ● Wishes to use SustainWear long-term as part of her sustainable lifestyle, encouraging friends and colleagues to join.
Frustrations	● Donation forms that rely heavily on images or icons without alt-text. ● Small fonts and low-contrast designs that make text hard to read. ● Unclear error messages that are not able to read aloud by her screen reader. ● Pop-ups that trap keyboard focus, preventing her from navigating back. ● Lack of feedback after submission: she needs clear confirmation that her donation was received. ● Websites that time out or reset mid-entry when using assistive tech. ● Inaccessible charts or impact visuals that use only colour to show progress.
Technology	Devices**:** mobile phone and laptop Assistive Technology**:** ● Screenreader technology ● ZoomText for screen magnification. ● Browser extension for high-contrast themes.
Scenario	During her lunch breaks at school, she decides what clothes her children have outgrown and need donating. Once decided she notes them down so she remembers later. When she gets home she does her preparatory work for tomorrow's classes and then gets the clothes she decided to donate when at work and others she didn't think of that either she doesnt wear or also doesnt fit her. Once she has gathered the clothes she then takes pictures of them all one by one and then opens the website and navigates to the donate button which is easily visible normally and by screenreaders. Once the form is open she then starts listing the clothing with its colours, design size and how worn it has been over time. She then completes the listings for the clothes and is told the closest place to deliver them and their operating times.

Person 5 :

Priya Desai	
● Age: 33 ● Occupation: Charity Donations Coordinator ● Location: Leicester, UK ● Role: Charity Staff ● Disability: Dyslexia	
Background	Priya works at a busy charity shop where she manages daily donations and inventory updates. Her role involves approving or declining items, adding them to stock, and ensuring quality standards are met. Because of her dyslexia, she prefers interfaces that use short

	sentences, clear spacing, and predictable layouts. Priya finds long paragraphs, small fonts, or cluttered screens mentally tiring. She appreciates systems like SustainWear, which use straightforward menus, colour-coded labels with text, and clear confirmation messages that help her focus on her task.
Goals	● Review and approve donations quickly with minimal reading effort. ● Use clear filters to sort donations by category or condition. ● Leave short notes for donors when declining items. ● Update inventory automatically after approval. ● Avoid confusion or errors when processing large queues.
Frustrations	● Cluttered dashboards filled with long text or inconsistent button placement. ● Error messages that are too technical or vague. ● No visual or text confirmation after actions. ● Colours used without text descriptions.
Technology	Devices**:** Office desktop, iPad for warehouse checks. Assistive Technology**:** browser text-to-speech plug-in, OpenDyslexic font enabled.
Scenario	Priya logs into the SustainWear dashboard at her charity shop. The homepage shows three large buttons: Incoming Donations, Inventory, and Reports. She clicks Incoming Donations and sees a simple list with item photos and short labels like “Men’s Jackets – Good Condition.” Using the filter, she selects “Winter Clothes” and begins reviewing. Each entry has clear Approve and Decline buttons in the same position, with a short field for notes. She approves several items, types “Perfect for winter stock”, and gets an on-screen message saying “Donation approved and added to inventory.” When she declines one worn-out jacket, she chooses “Too worn for resale” from a dropdown and confirms. The system reads her action aloud using text-to-speech. Priya smiles, knowing everything was processed correctly. The clean, consistent design helps her finish the queue efficiently without feeling overwhelmed.

Person 6 :

Thomas Jones	
● Age: 27 ● Occupation: freelance graphic designer ● Location: Brighton, UK ● Role: Donor ● Hobby: Restoring vintage clothes	
Background	Thomas is a creative freelancer who loves giving old clothes new life. He often shops secondhand and customizes pieces with patches, embroidery, or dye or restoring them if able. Sustainability is important to him—not just as a lifestyle, but as part of his design philosophy. He discovered SustainWear while researching eco-friendly platforms to donate

	clothes he no longer wears, has fixed or restored. Thomas prefers digital platforms that are visually clean and simple as he thinks simple is best. He values transparency and simplicity, especially when it comes to understanding where his donations go and how they help. He knows how website design works and is developed but has little patience for clunky forms or vague status updates.
Goals	● Donate clothes easily through a mobile-friendly platform ● Track the environmental impact of his donations ● Support charities that align with his values ● Feel confident that his items are being used meaningfully
Frustrations	● Forms that are cluttered or hard to navigate on mobile ● Sustainability metrics that feel generic or disconnected from his actual impact ● Limited mobile features that interrupt his workflow when donating on the go
Technology	Mobile and laptop: prefers to use his mobile phone whenever possible
Scenario	Thomas is sorting through his wardrobe on a free afternoon and decides to donate a few vintage jackets and graphic tees he no longer wears. He opens the SustainWear app on his phone and starts a new donation. The form is simple and clean. He then uploads photos, adds item details, and selects the category. After submitting, he receives a confirmation message and sees the donation listed in his history as "Pending Review." After a while, he gets a notification that his items were accepted and to be delivered to a charity store to then be distributed. The dashboard shows how much CO_2 and textile waste he helped reduce. Thomas feels good knowing his clothes that he has added to or restored are making a difference and that the process was quick, simple and easy.

User Stories

Title: Create and Submit a New Donation	**Priority: High**	**Estimate: 8**
I wish to submit information and photographs of my clothing items via a user-friendly online form, so that I can conveniently donate items and monitor their approval status and sustainability effects.		
Acceptance Criteria **Given** I am logged in as a registered Donor, **When** I open the *"New Donation"* form, **Then** I should be able to: ● Upload item photos and add essential details such as category, size, and condition. ● View validation messages if required fields are incomplete or incorrect. ● Submit my donation successfully and receive a confirmation message: *"Donation submitted – pending staff review."*		

- See the new donation appear in my *Donation History* with the status *Pending*.
- Access an accessible confirmation email or notification summarising the donation.

Stage of Implementation-
✅ *Prototype Stage – Functional UI and backend logic completed.*
Form validation, photo upload, and database storage are implemented. AI categorisation is in development for the next sprint. Accessibility testing (screen reader and mobile layout) scheduled for the upcoming release to ensure WCAG compliance and alignment with the project's inclusivity goals.

Title: Review and Manage Incoming Clothing Donations	Priority:	Estimate: .. points

As a Charity Staff Member, I want to review, approve, or reject incoming clothing donations via a management dashboard, so that I can ensure only appropriate and usable items are accepted and made available for redistribution.

Acceptance Criteria
Given I am logged in as a registered Charity Staff Member,
When I access the Donations Management Dashboard,
Then I should be able to:

View a list of all pending donations submitted by donors, including:

Item photos
Item details (category, size, condition, seasonality)
Donor information (name, region)

Date of submission

- Approve or reject individual items or entire donations using clear actions (e.g., Approve, Reject buttons).
- Add optional comments or reasons when rejecting an item (e.g., "Heavily worn," "Missing size info").
- Upon approval or rejection:

  The donor receives a notification/email about the decision, including comments if provided.

  The item status updates to "Approved" or "Rejected" in both the staff and donor views.

Stage of Implementation

Title: C02 impact	Priority: Must	Estimate: .. points 5

As a donor I want to see how much CO_2 I save by donating my old clothes instead of throwing them away, so that I can understand the positive environmental impact of my donations and feel encouraged to keep supporting the charity.

Acceptance Criteria
Given i am logged in to my SustainWear donor account
When I view my profile or donation history
I check my profile,
Then the website should:

- Estimate the amount of co2 produced per clothing
- Calculate how much co2 i have saved based on the estimate
- Include a short, easy-to-read explanation of how the CO_2 impact is calculated.

Stage of Implementation-In development — The database can already record donated items and their categories. The next step is to link each category to an estimated **CO_2 value** (based on textile recycling data) and show the total savings on the user dashboard. The feature will be tested for accuracy, accessibility, and mobile compatibility before release.

Title: Monitor System Health and Manage User Reports	Priority:	Estimate: .. points

As a System Administrator, I want to oversee the platform's operations and respond to reported issues via a central dashboard, so that I can ensure the website remains functional, secure, and user problems are addressed promptly.

Acceptance Criteria
Given I am logged in as a System Administrator,
When I access the Admin Dashboard,
Then I should be able to:

- Receive and view user-submitted reports, including:
  Report type (Bug, UI issue, Content error, Abuse, etc.)

  Affected user details and timestamp

  Description of the issue and any attached screenshots or logs

- Filter reports by status (New, In Progress, Resolved), severity level, or submission date.
- Push maintenance updates or alerts (e.g., upcoming downtime) to users via a site-wide banner or notification system.

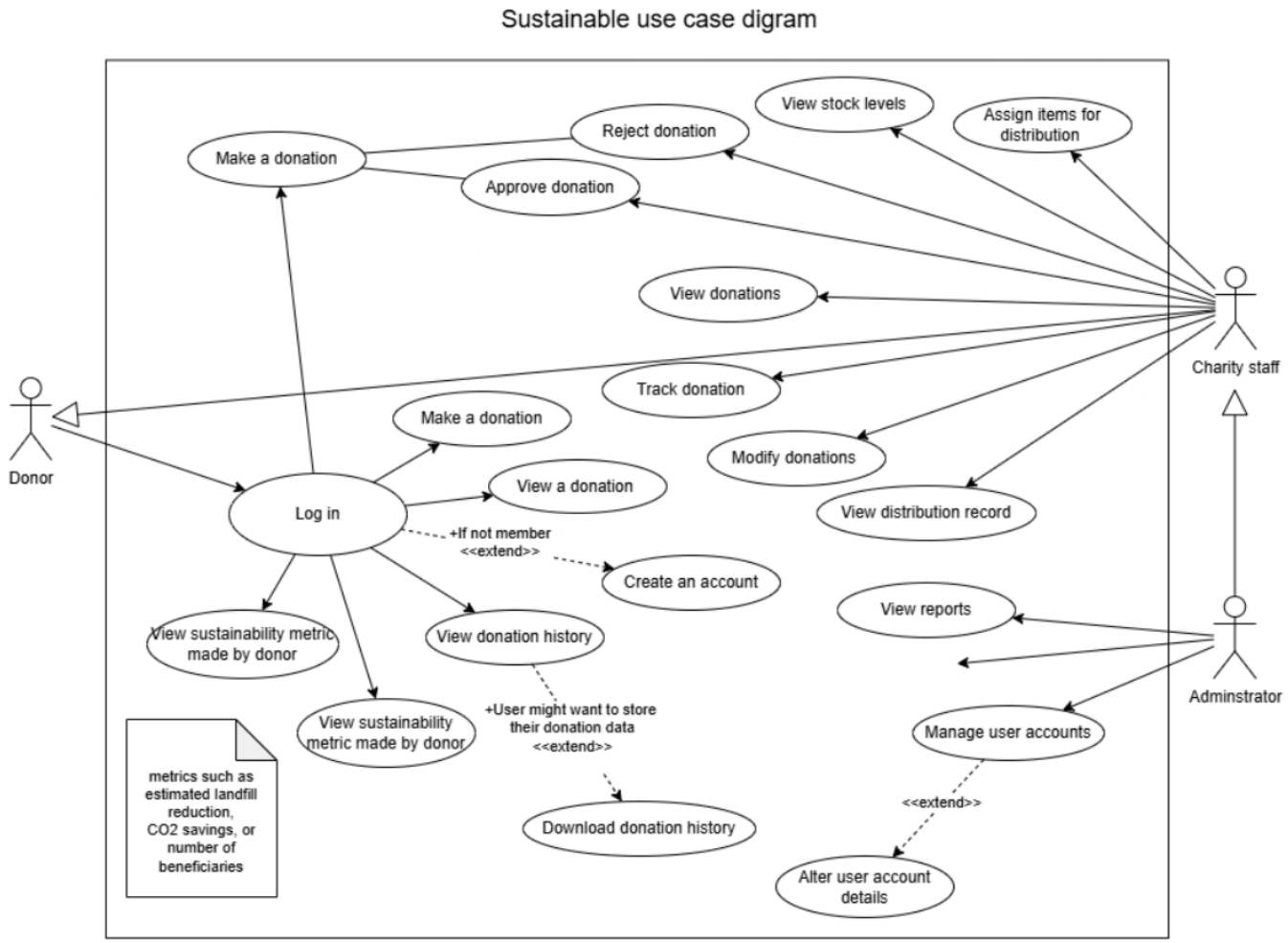
Stage of Implementation

Non-Functional requirements

ID	Theme	Description	Priority
NFR01	**Accessibility & Usability**	The SustainWear web app must meet WCAG 2.2 Level AA standards, be fully usable with keyboard-only navigation, and ensure all form labels and messages are readable by screen readers during accessibility testing.	Must
NRF02	Performance	All interactive transitions — including logging in, opening donation forms, submitting items, and updating inventory — must complete within 3 seconds of user action on standard desktop and mobile browsers. Frame rate during UI animations must remain above 60 FPS when tested on mid-range devices	Must
NFR03	Security and data protection (GDRR)	All user data, including submitted images and login credentials, must be protected throughout transmission and storage. TLS 1.3, or Transport Layer Security, is a security protocol that jumbles data so that it cannot be read or stolen during transmission between the user and the	Must

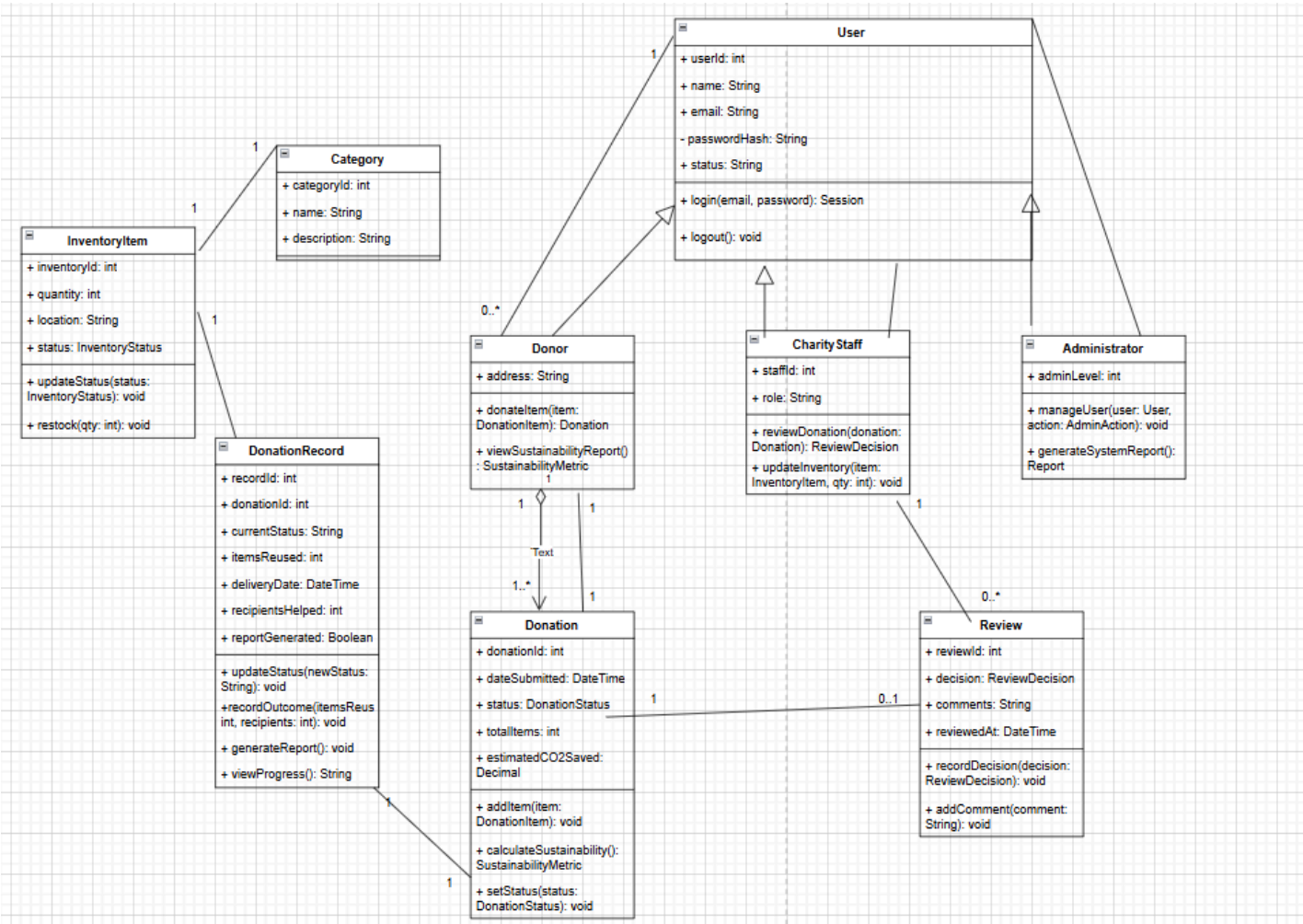
		SustainWear system.	
NFR04	System Performance and Speed	All users must be able to access and use the SustainWear system with ease and speed. On a typical 4G mobile connection or regular Wi-Fi, the homepage and main dashboard should load in three seconds.	Must

Use case digram



UML diagram

UML diagram

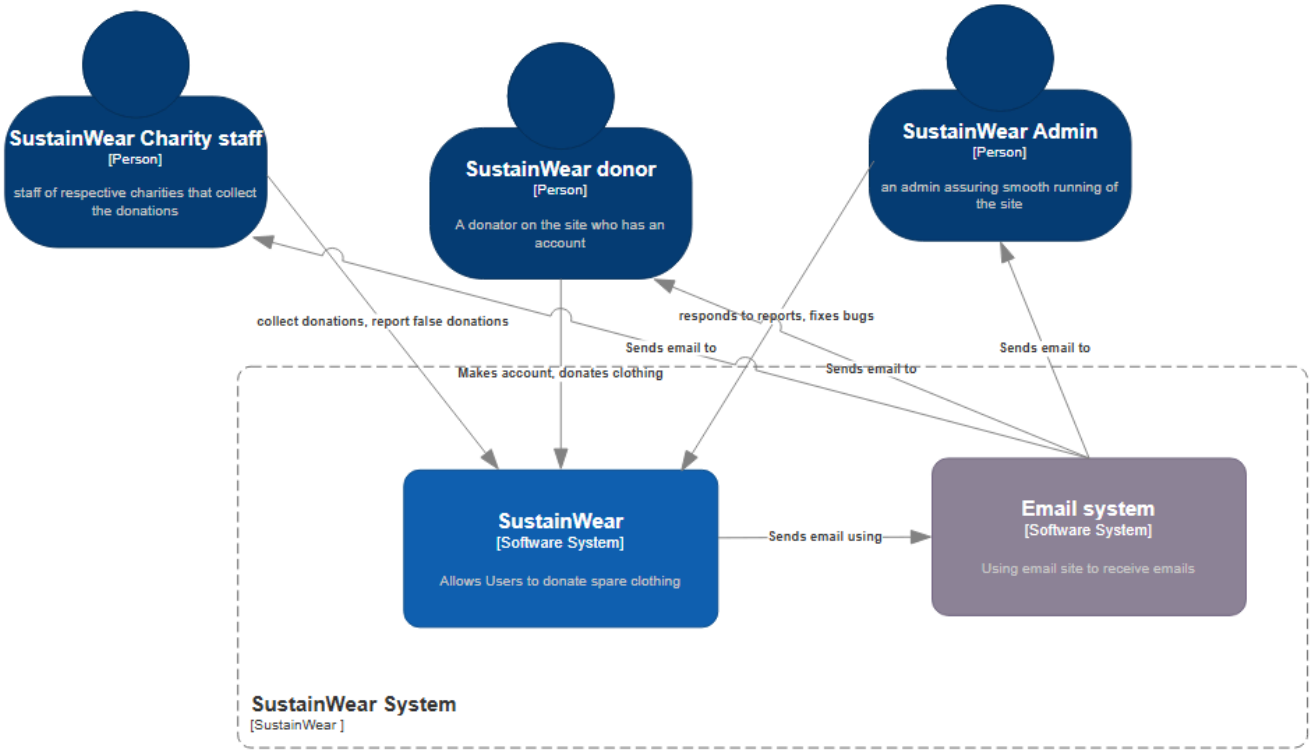

User
+ userId: int
+ name: String
+ email: String
- passwordHash: String
+ status: String
+ login(email, password): Session
+ logout(): void
Category
+ categoryId: int
+ name: String
+ description: String
InventoryItem
+ inventoryId: int
+ quantity: int
+ location: String
+ status: InventoryStatus
+ updateStatus(status: InventoryStatus): void
+ restock(qty: int): void
Donor
+ address: String
+ donateItem(item: DonationItem): Donation
+ viewSustainabilityReport() : SustainabilityMetric
Charity Staff
+ staffId: int
+ role: String
+ reviewDonation(donation: Donation): ReviewDecision
+ updateInventory(item: InventoryItem, qty: int): void
Administrator
+ adminLevel: int
+ manageUser(user: User, action: AdminAction): void
+ generateSystemReport(): Report
DonationRecord
+ recordId: int
+ donationId: int
+ currentStatus: String
+ itemsReused: int
+ deliveryDate: DateTime
+ recipientsHelped: int
+ reportGenerated: Boolean
+ updateStatus(newStatus: String): void
+recordOutcome(itemsReus int, recipients: int): void
+ generateReport(): void
+ viewProgress(): String
Donation
+ donationId: int
+ dateSubmitted: DateTime
+ status: DonationStatus
+ totalItems: int
+ estimatedCO2Saved: Decimal
+ addItem(item: DonationItem): void
+ calculateSustainability(): SustainabilityMetric
+ setStatus(status: DonationStatus): void
Review
+ reviewId: int
+ decision: ReviewDecision
+ comments: String
+ reviewedAt: DateTime
+ recordDecision(decision: ReviewDecision): void
+ addComment(comment: String): void
Text
1
0..*
1..*
0..1

Definition of Done (DoD)

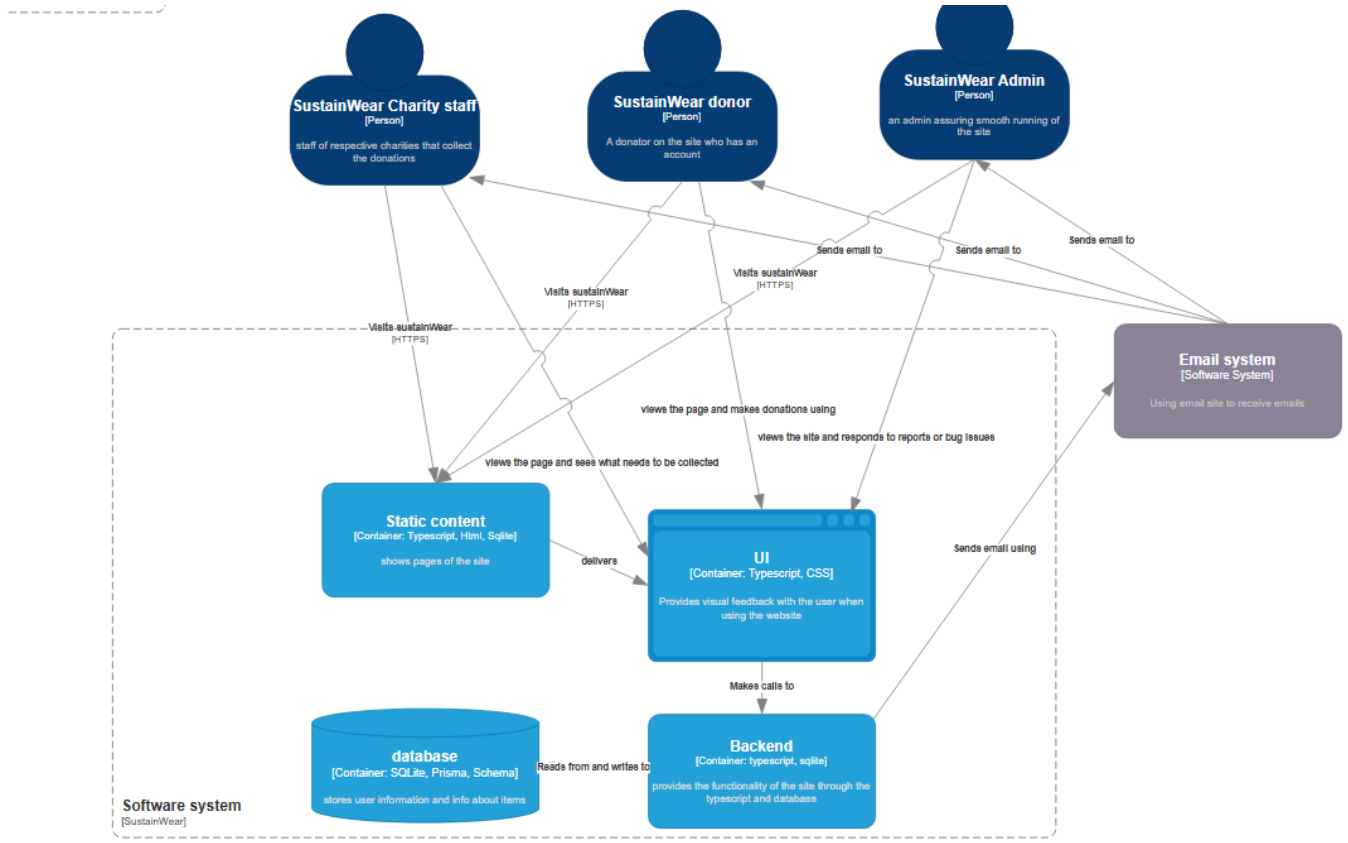
- Has to have nin-functional and functional requirements tested
- Has to be peer reviewed in the before being pushed to the main branch
- Has to fulfil the requirements as best as possible
- Have working implementations over many barely working implementations

System Design

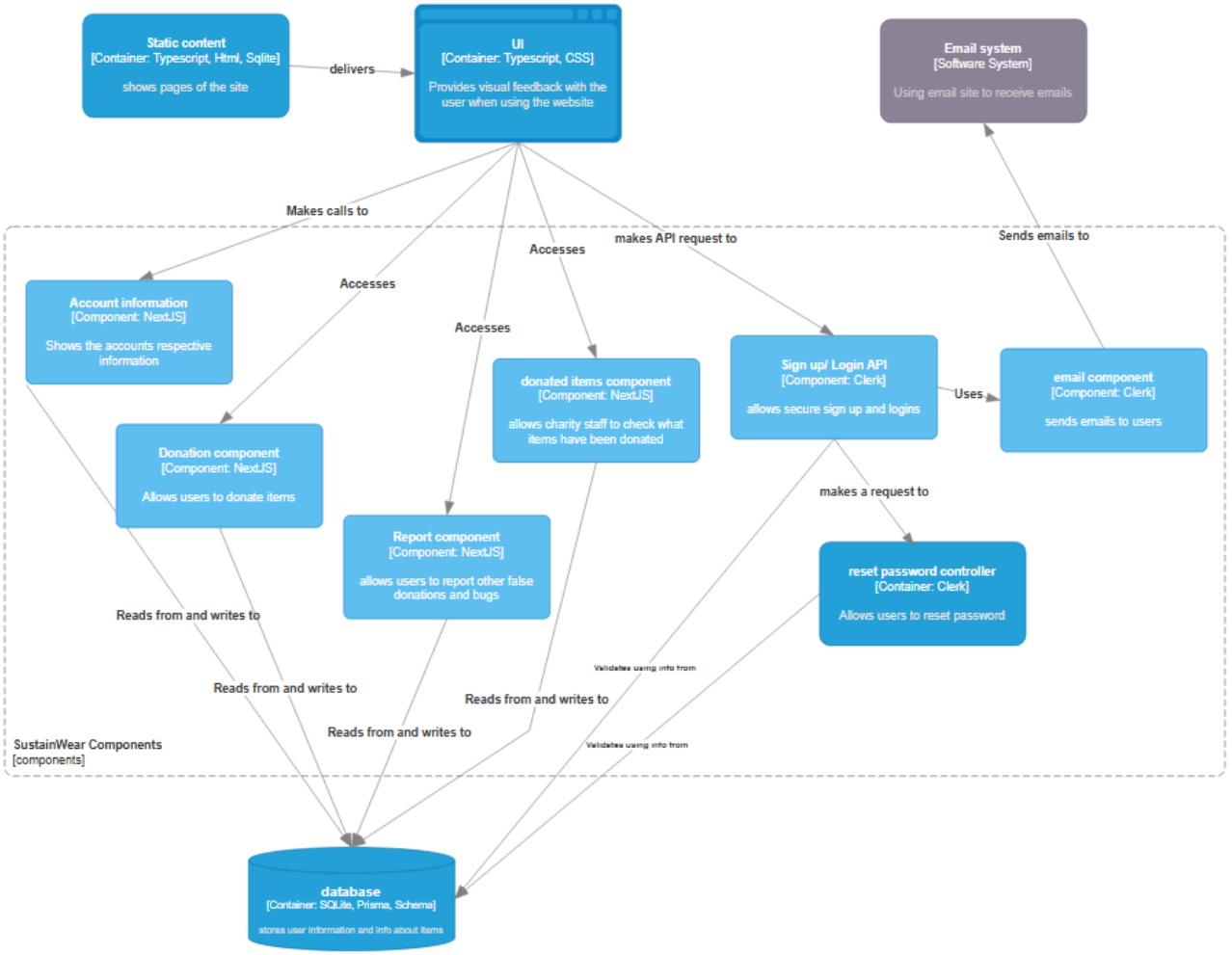
Context Diagram



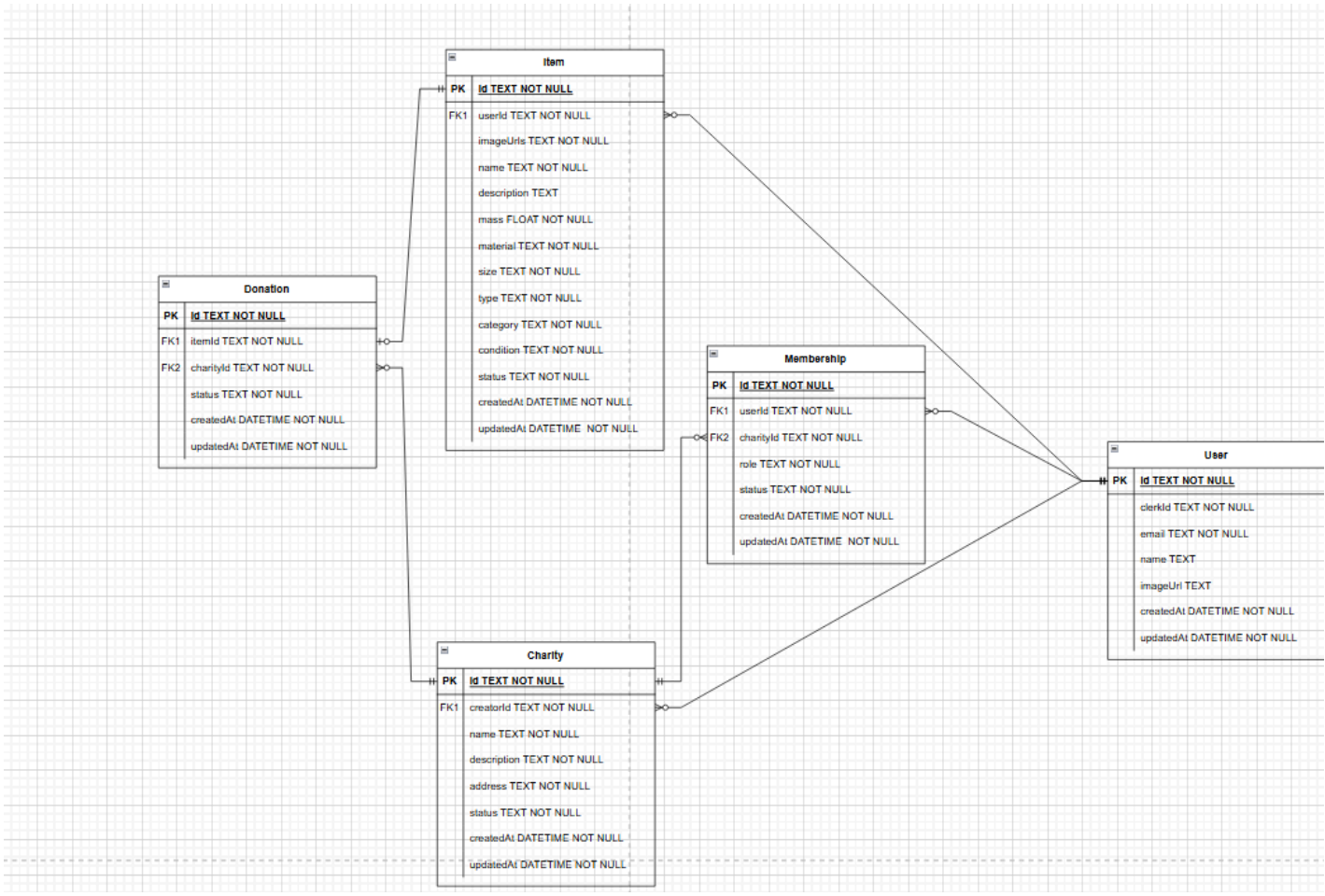
Container Diagram



Component Diagram

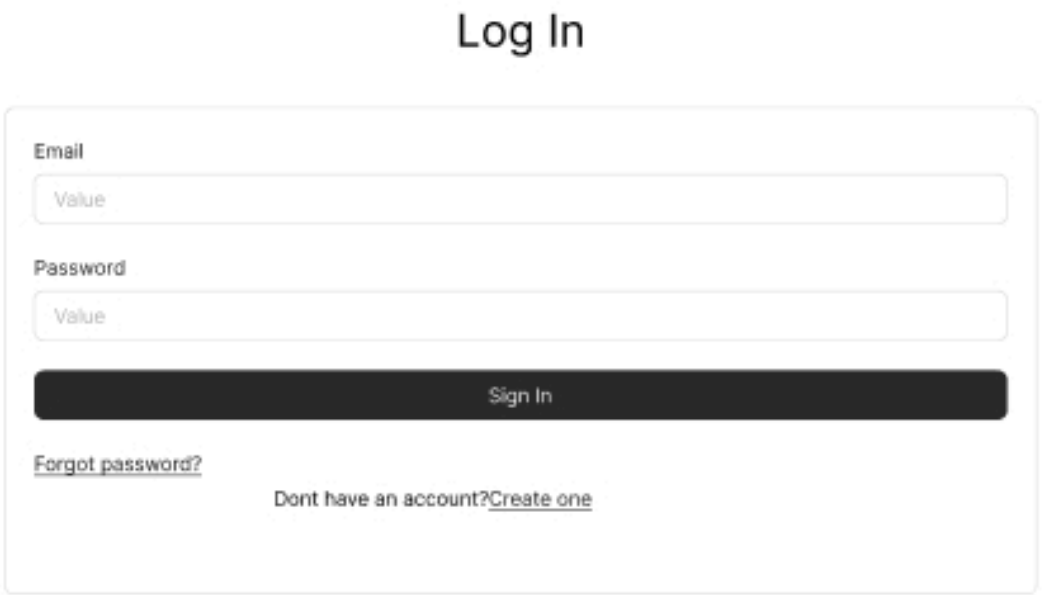


Data Design

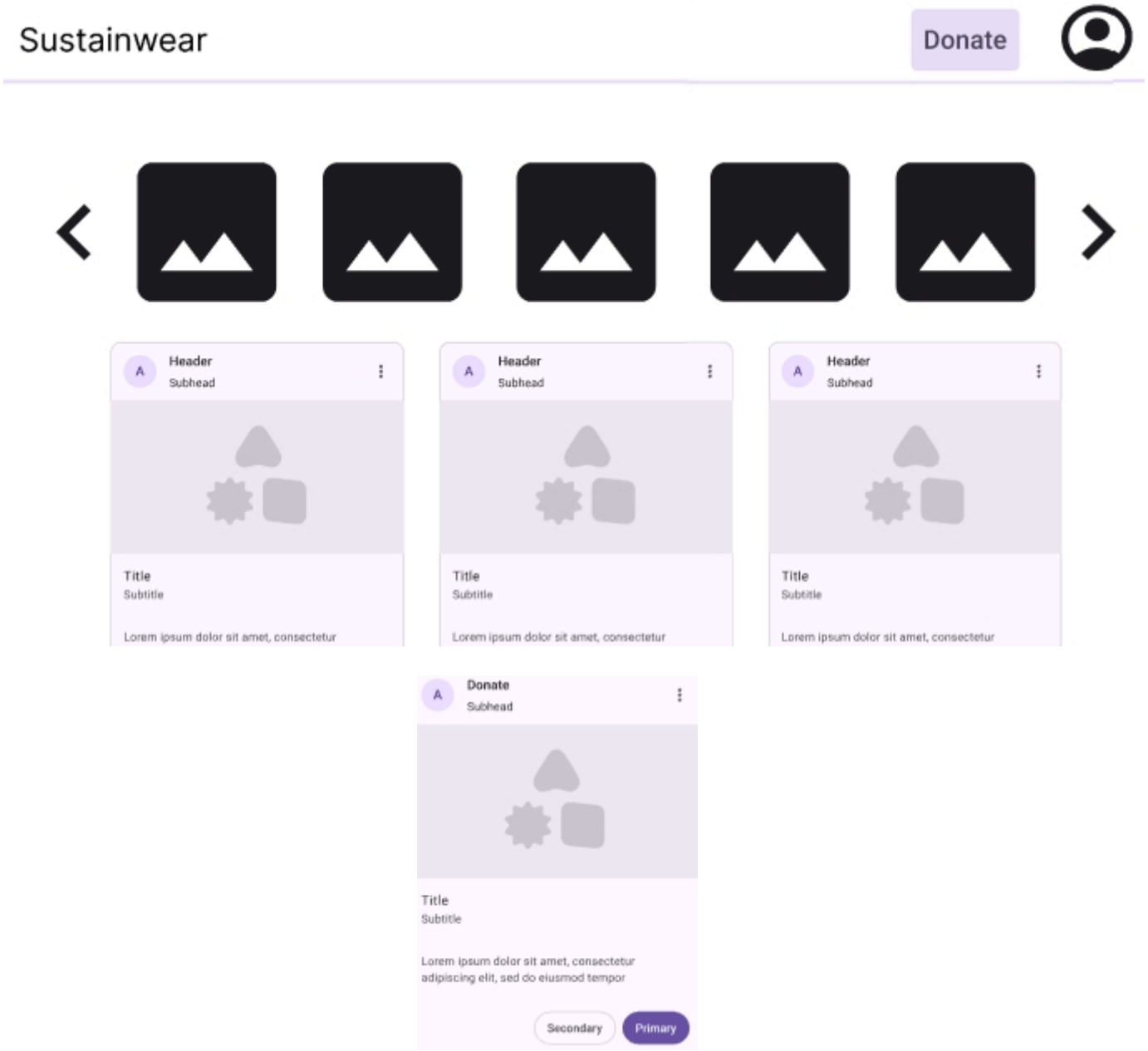


Explain key entities (User, Donation, Item, Category, etc.) - TAMMAN

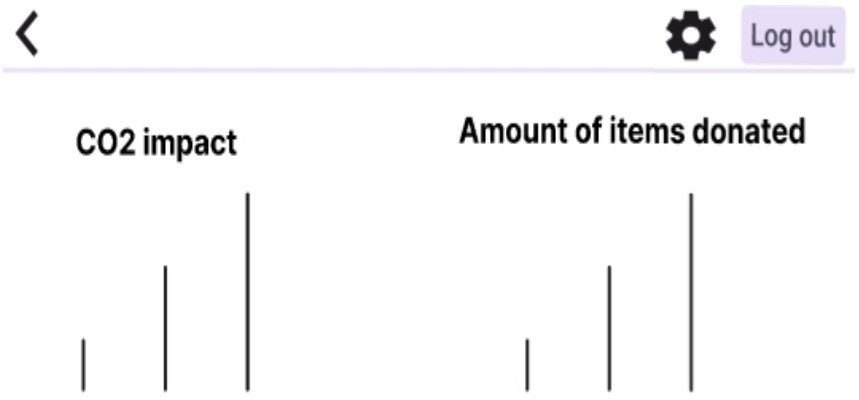
Interface Design (UI/UX)



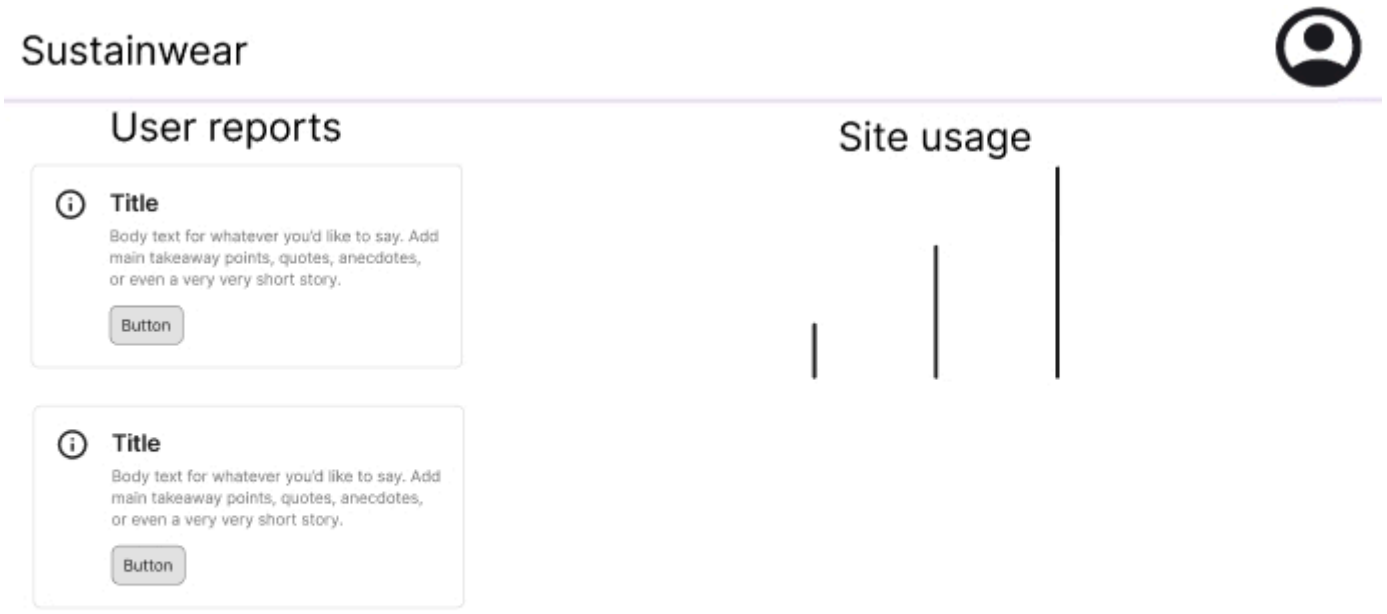
User:



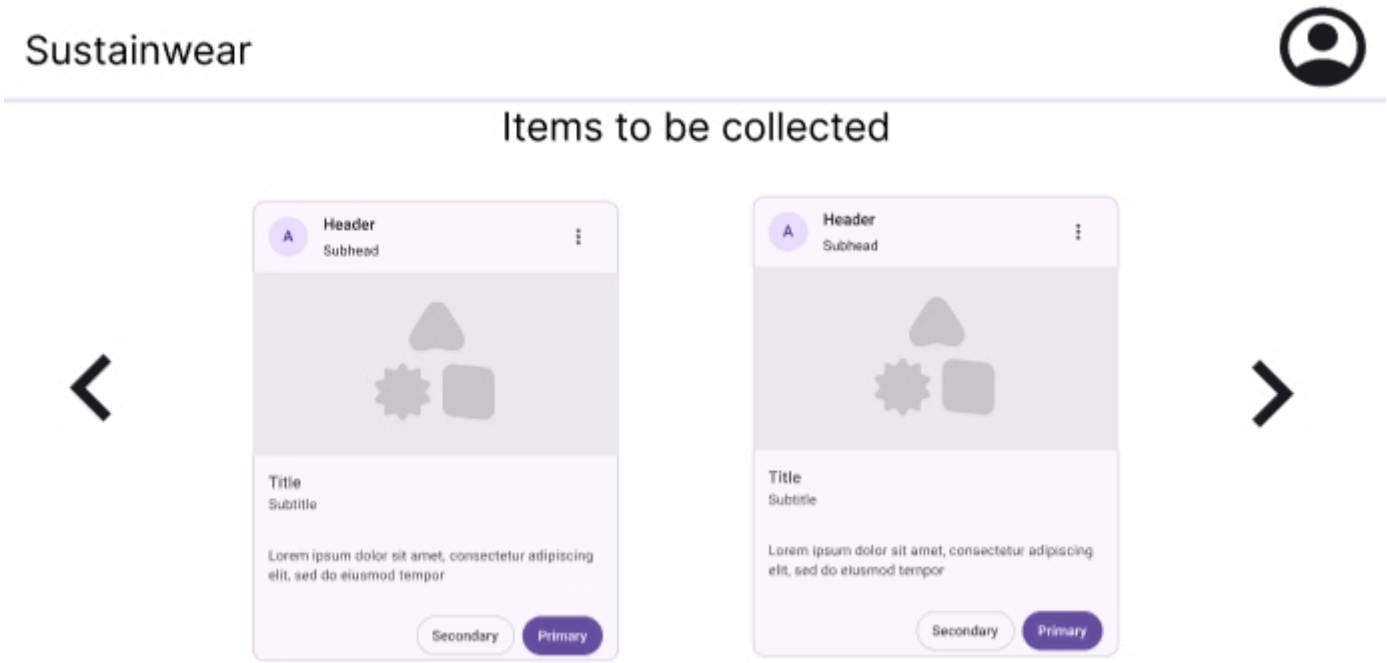
Settings:



Admin Homepage:

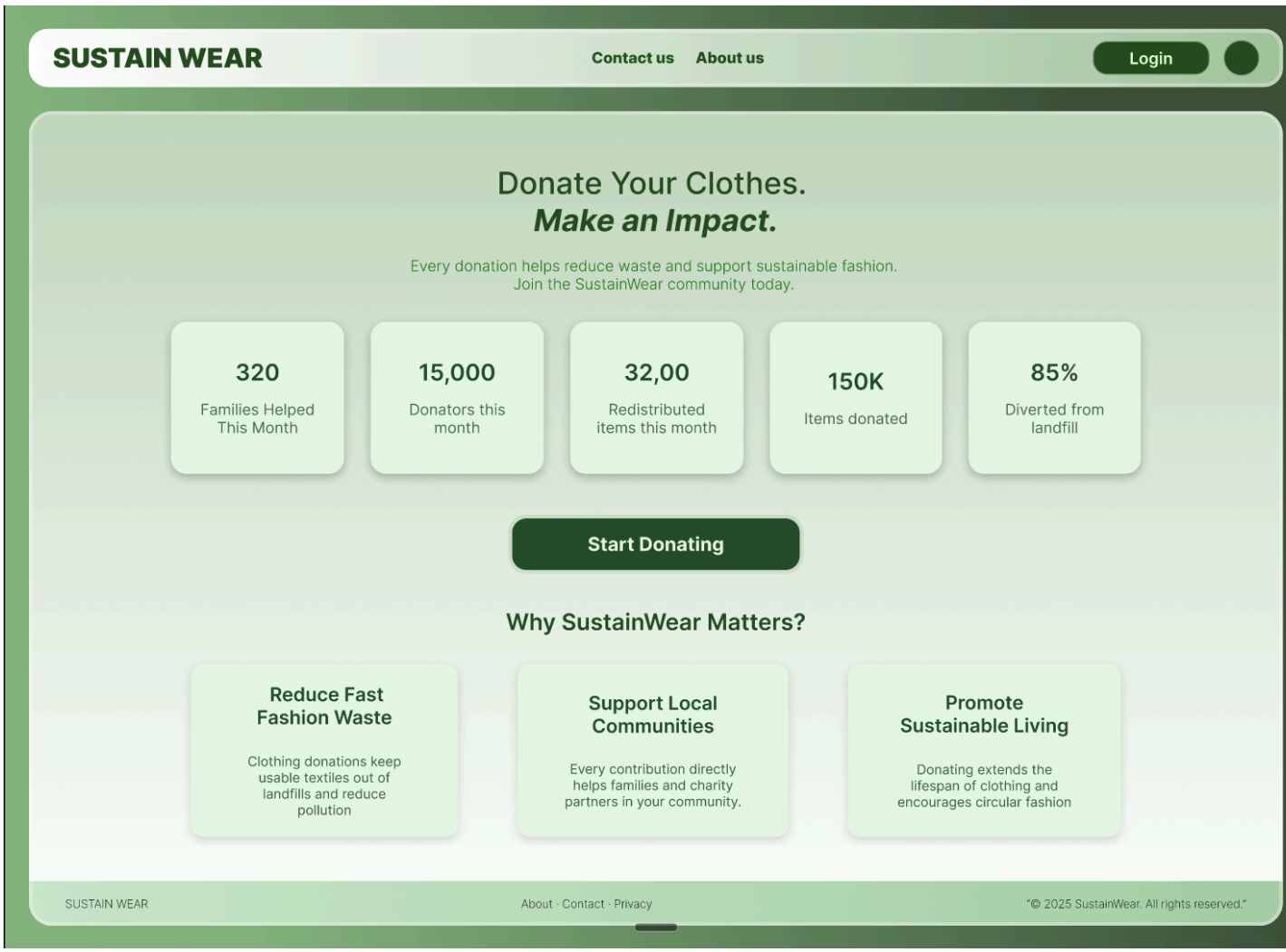


Charity staff homepage:

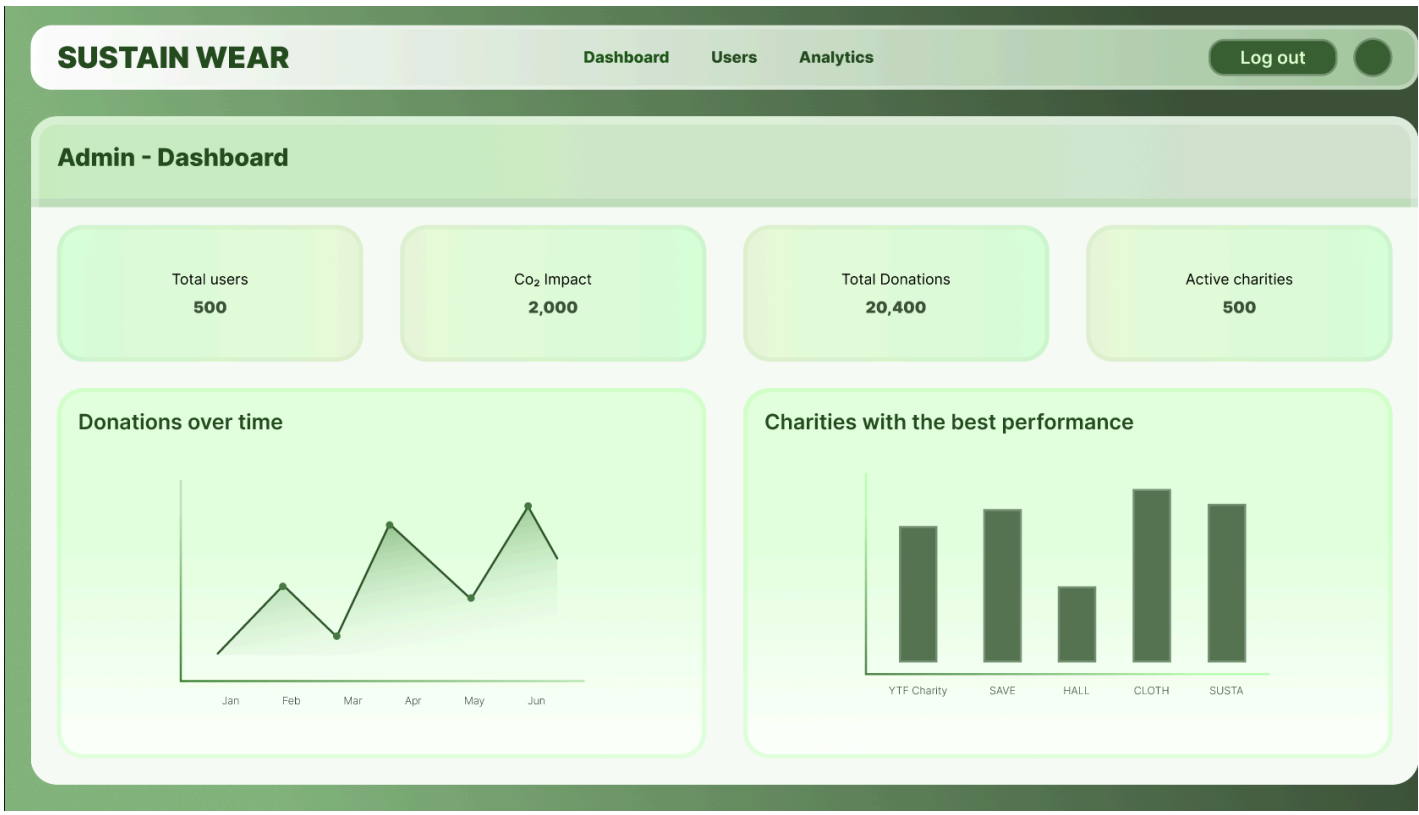


Refined Wireframe

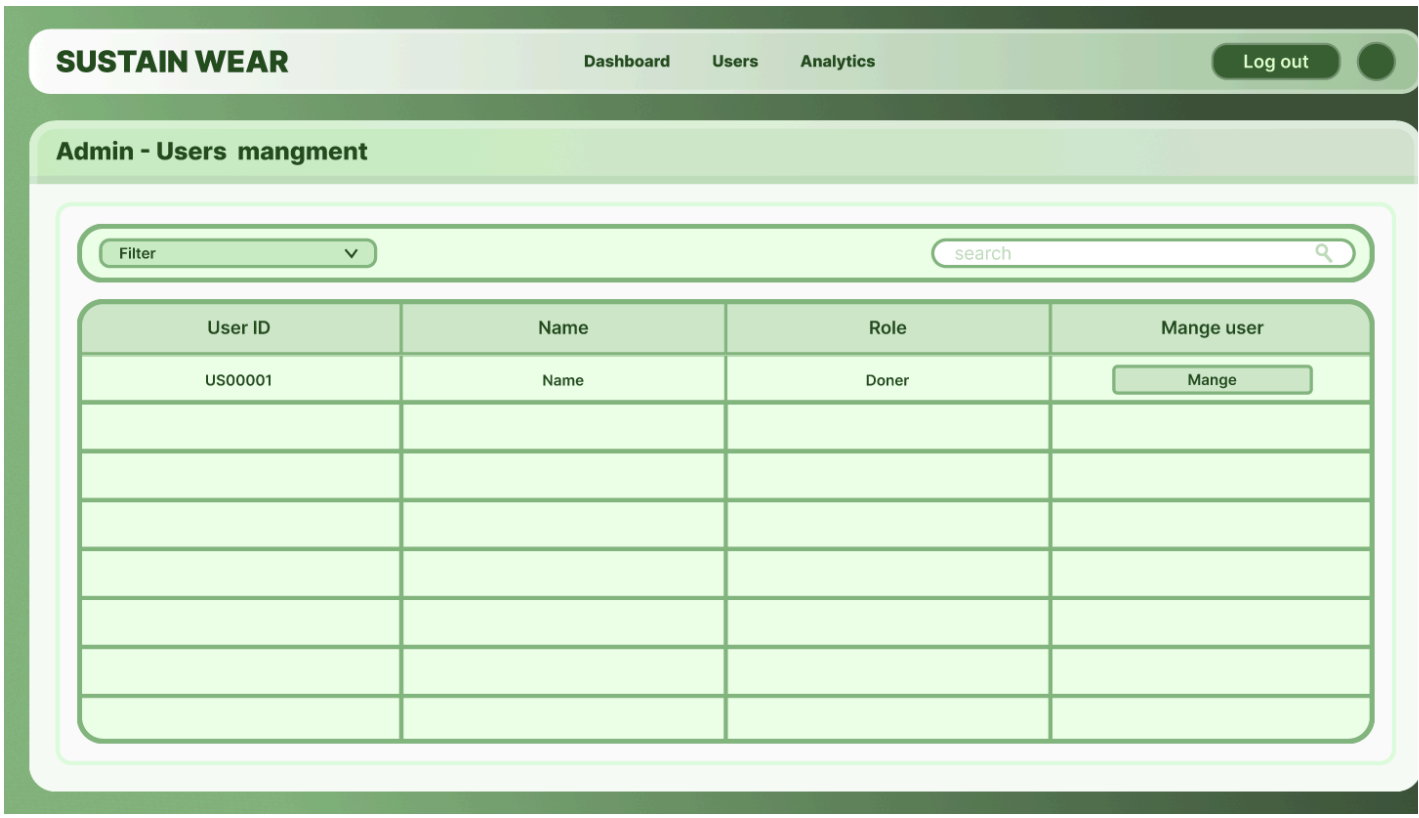
Landing page



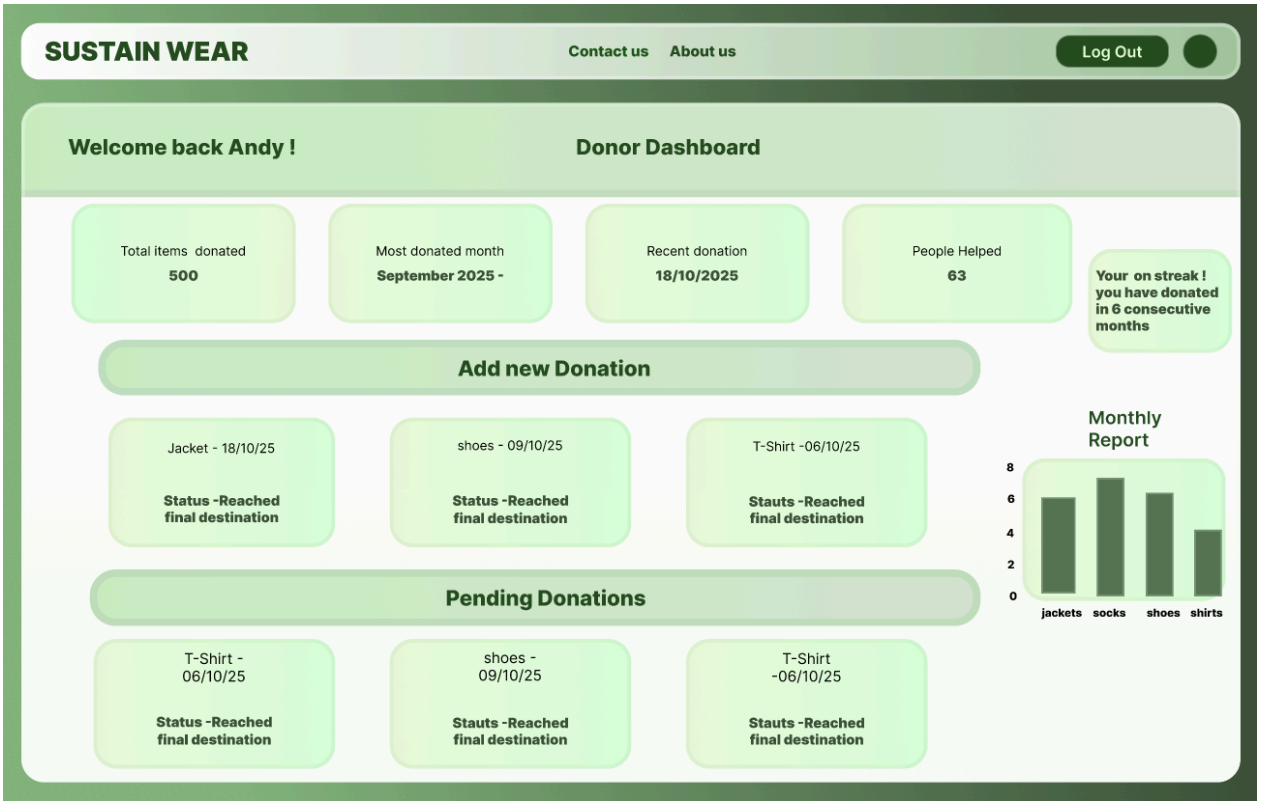
Landing page



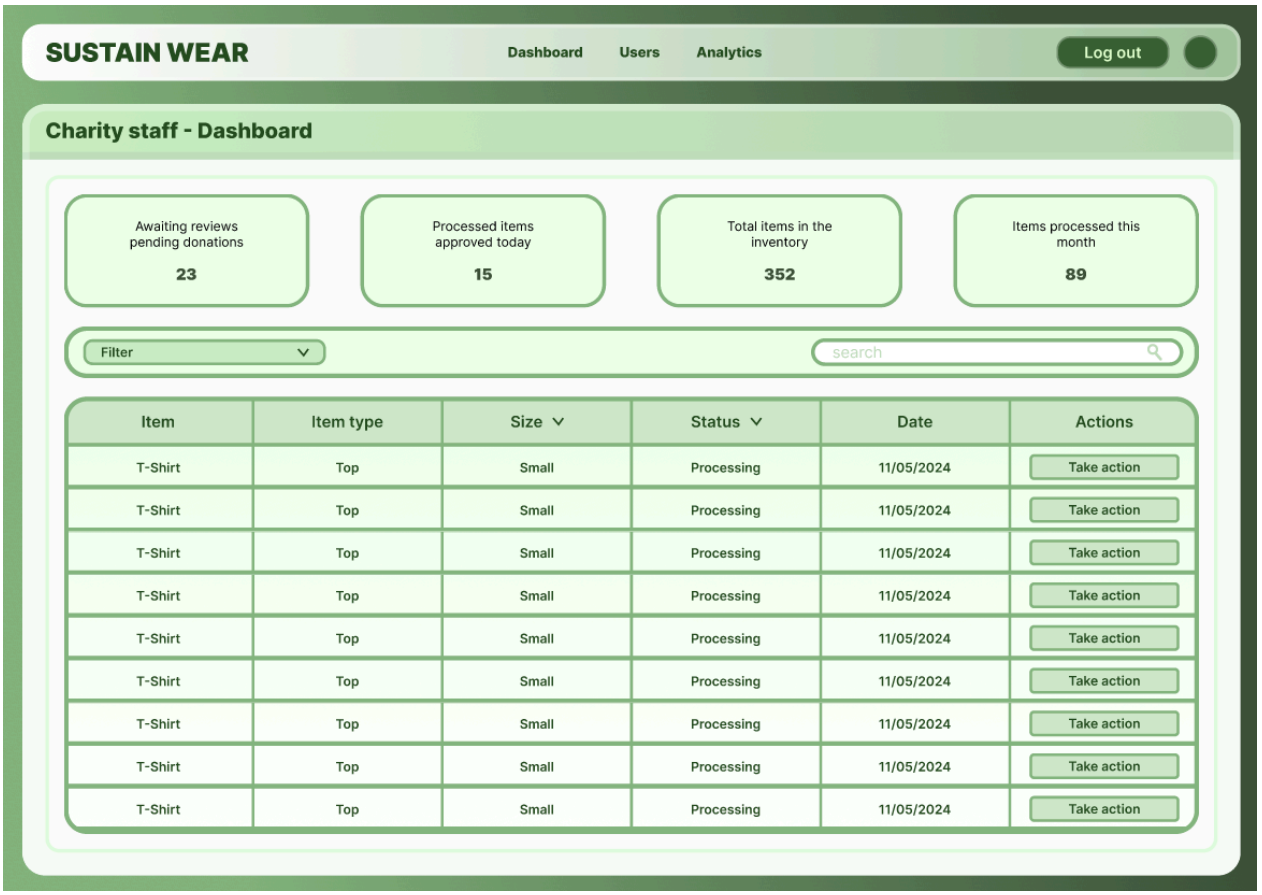
Admin - User management page



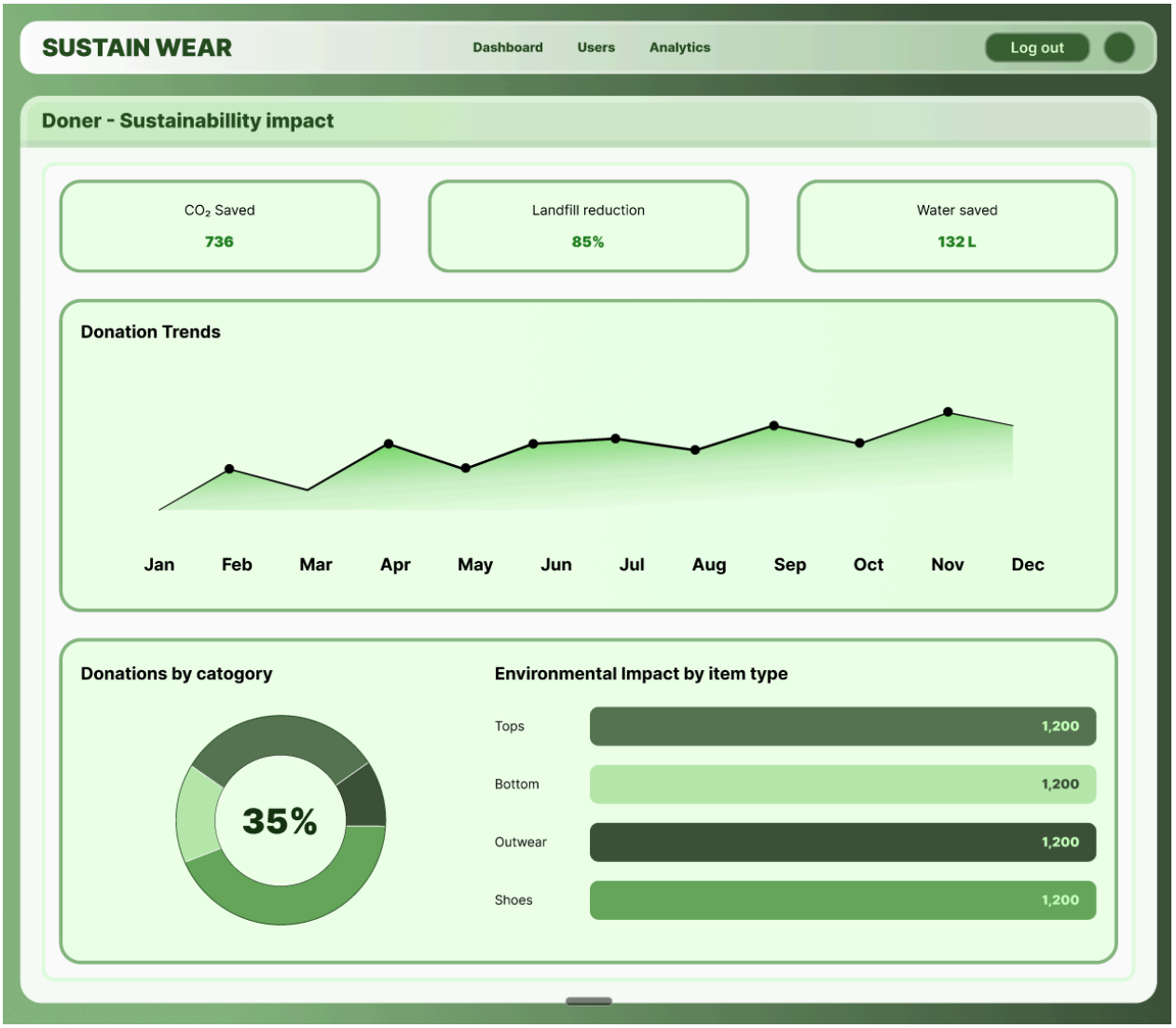
Donor Dashboard page



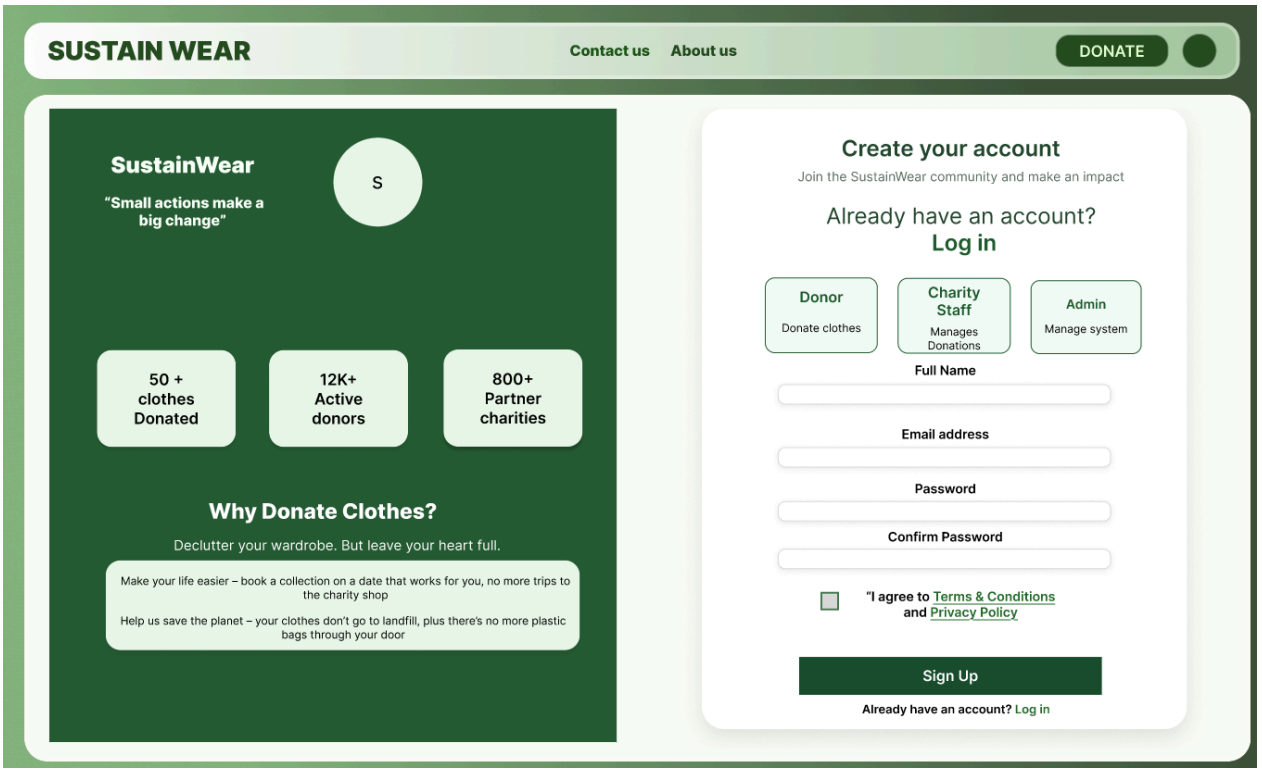
Charity staff dashboard page



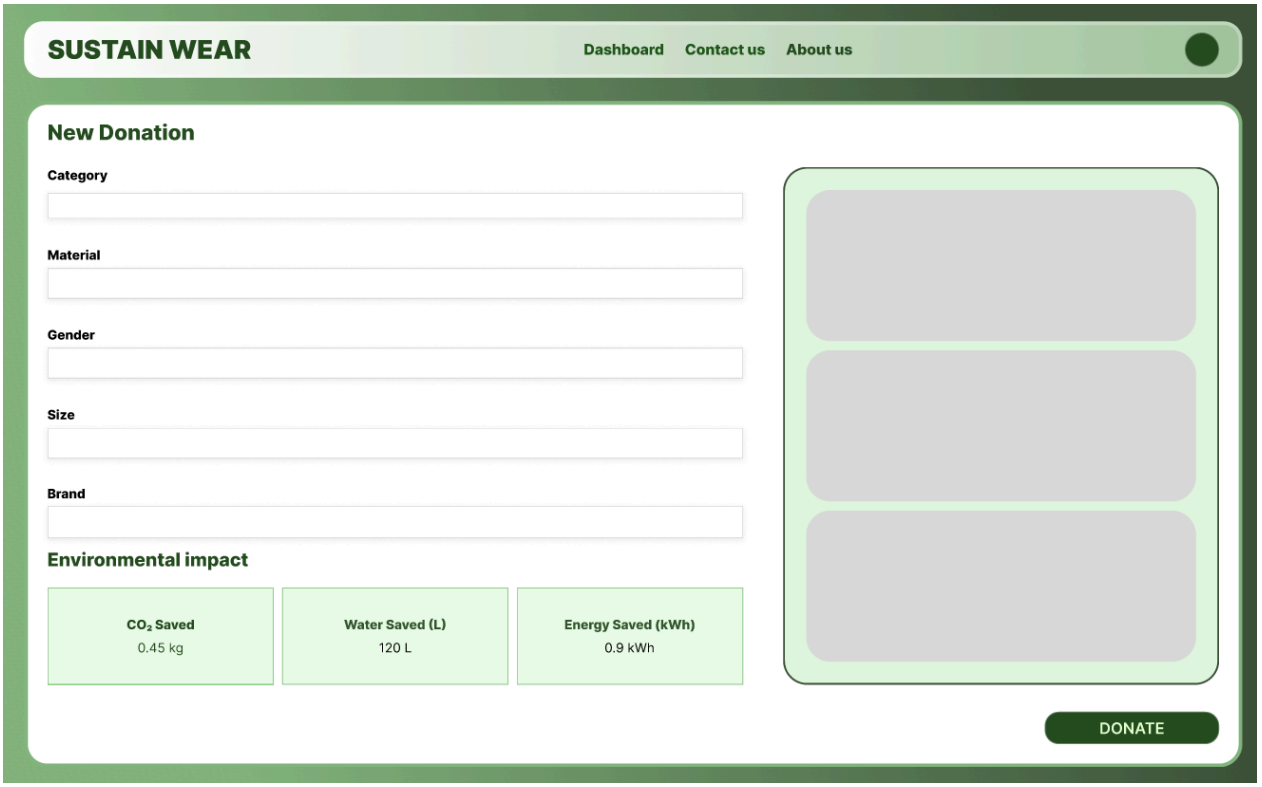
Dono - sustainability Impact page



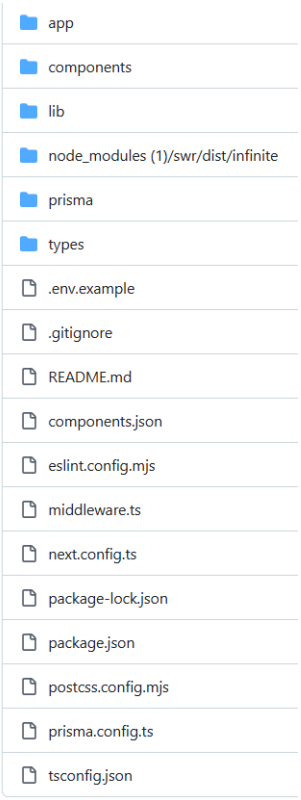
New user - Sign up / Login



Donor - Donation page



Implementation Notes



https://github.com/Tammam-Al-Bahri/sustain-wear

sustain-wear/README.md at master · Tammam-Al-Bahri/sustain-wear

Merge branch 'development' of https://github.com/Tammam-Al-Bahri/sustain-wear into OB-Dev
ObadaBitar committed 2 days ago

feat: add donation history page for tracking contributions
ObadaBitar committed 2 days ago

Refactor code structure and remove redundant sections for improved readability and maintainability
ObadaBitar committed 2 days ago

Merge pull request #20 from Tammam-Al-Bahri/TA-donation-page
Tammam-Al-Bahri authored 3 days ago

Merge branch 'development' into TA-donation-page
Tammam-Al-Bahri authored 3 days ago

Commits on Dec 12, 2025

feat: implement donations API endpoint and update UI components for better user experience
ObadaBitar committed 3 days ago

Merge pull request #19 from Tammam-Al-Bahri/Tyrese-UserPages
TyreseF06 authored 3 days ago

Merge branch 'development' into Tyrese-UserPages
TyreseF06 authored 3 days ago

added barchart chart.js and a barchart component
TyreseF06 committed 3 days ago

feat: add CO2 emissions calculation API endpoint and integrate it into donor page
Tammam-Al-Bahri committed 3 days ago

Commits on Dec 10, 2025

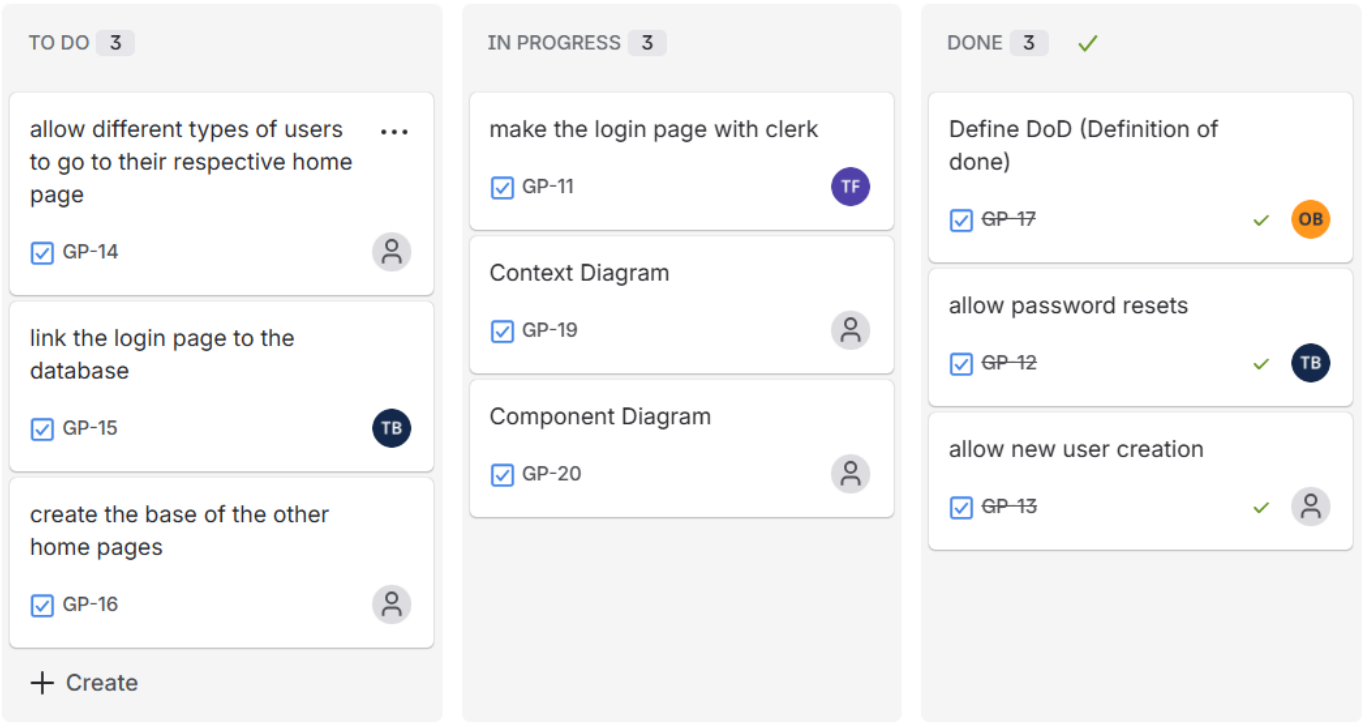
Merge branch 'development' of https://github.com/Tammam-Al-Bahri/sustain-wear into OB-Dev
ObadaBitar committed 5 days ago

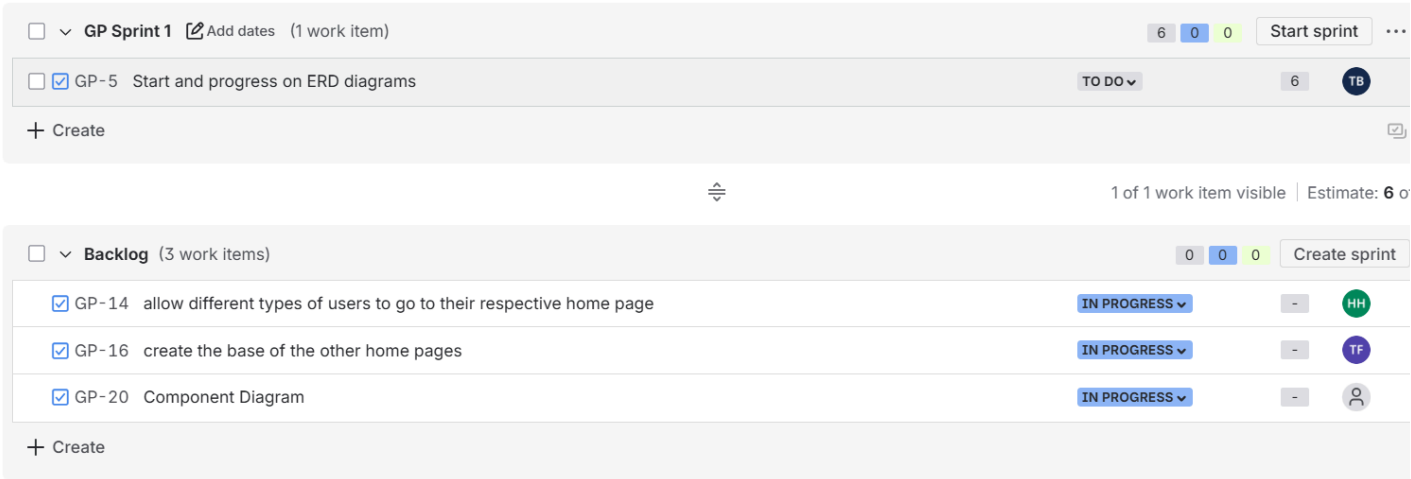
Commits on Dec 9, 2025

refactor: clean up package.json by removing unnecessary dependencies and scripts
Tammam-Al-Bahri committed last week

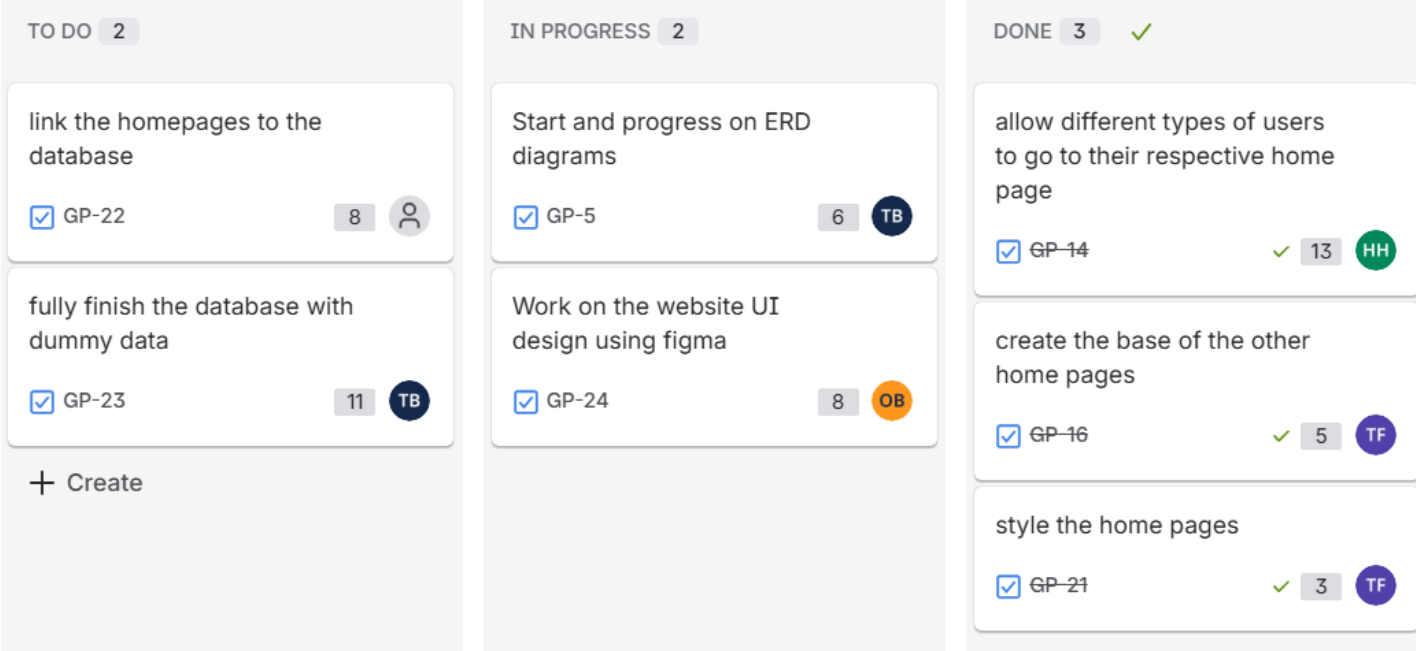
Sprints and backlog

WEEK 4





Week 6



Testing Documentation

Tools Used

- Lighthouse

Test Coverage Overview

User Story / Requirement	Test Case IDs	Test Type	Status
US01 Donation Submission	TC01	Integration	Pass
US02 Inventory Update	TC02	Integration	Pass
NFR01 Accessibility & Usability, >95% accessibility	TC03	System	Pass
NFR02 Max Page load time	TC04	System	Pass
NFR03 System Performance and Speed	TC05	System	Pass

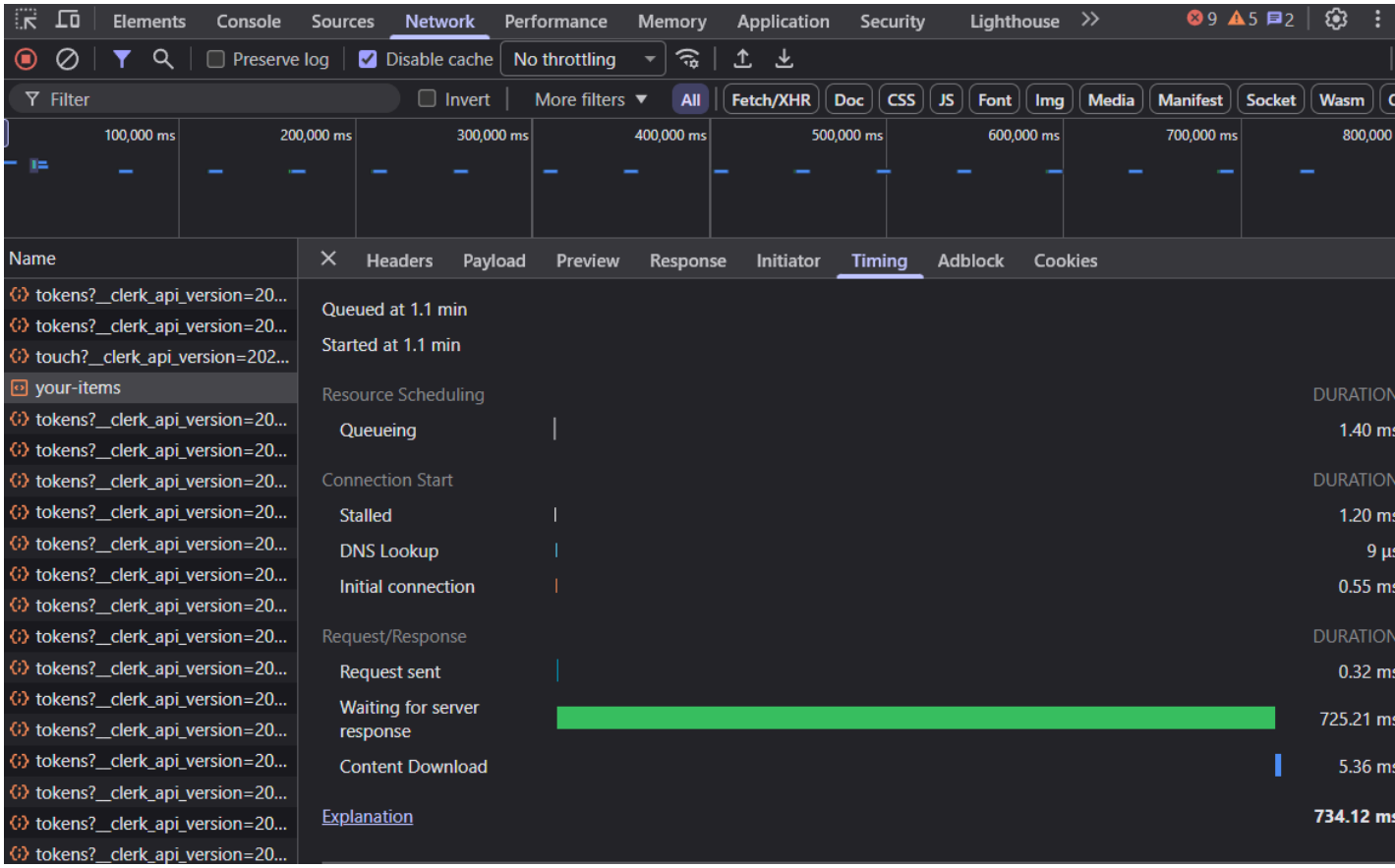
Test Cases Summary

Test Case ID	Preconditions	Steps to Execute & Input data	Expected Output	Actual Output
TC01	Account created, Donor role	1. Access donor page 2. Press donate button 3. Enter details for required fields 4. Press the “donate” button	Donation is sent and a toaster is displayed	Donation is sent and a toaster is displayed

TC02	Account created, Charity-staff role	1. Access charity staff page 2. Find the desired record to alter 3. Press ‘Action’ button 4. Select ‘Received’	Donation status should be updated	Donation status is updated
TC03	n/a	1. In the landing page navigate to dev tools through the browser settings. 2. Navigate your way to the Lighthouse. 3. Select 'Accessibility' as one of the settings and hit run	Accessibility should be higher than 95%	Accessibility is higher than 95%
TC04	Account created, Donor role	1. open the browser 2. Navigate to the donor dashboard 3. Record the page load time using the devtools in the browser 4. Compare against maximum acceptable load time eg (3 seconds)	The dashboard should fully load within 3 seconds.	The donor dashboard finished loading in 2.03 seconds, which is below the maximum allowed load time of 3 seconds.
TC05	Valid donor, charity staff, and admin accounts exist The user is logged in with the correct roll	1. Login as Donor 2. Submit a donation with valid details 3. Measure response time until confirmation message appears	user actions should complete within 2 seconds, and the system should remain responsive with no freezing or noticeable delay	All user actions (e.g., submitting donations, s) should complete within 2 seconds. It was 0.72 seconds.

Non-Functional Requirements testing

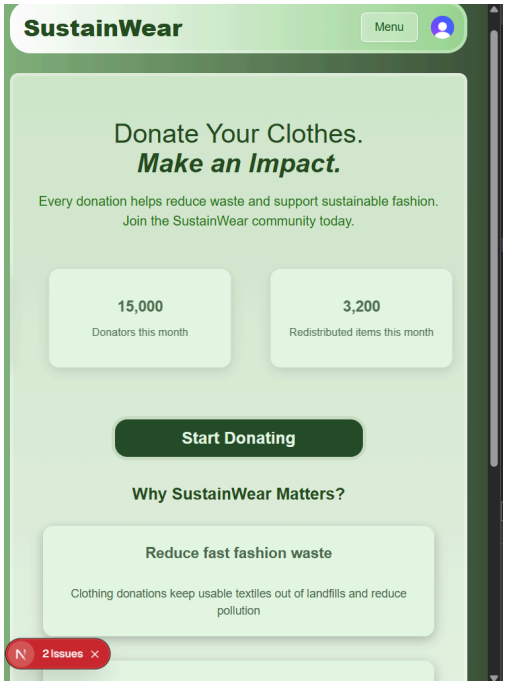
Performance testing Summary

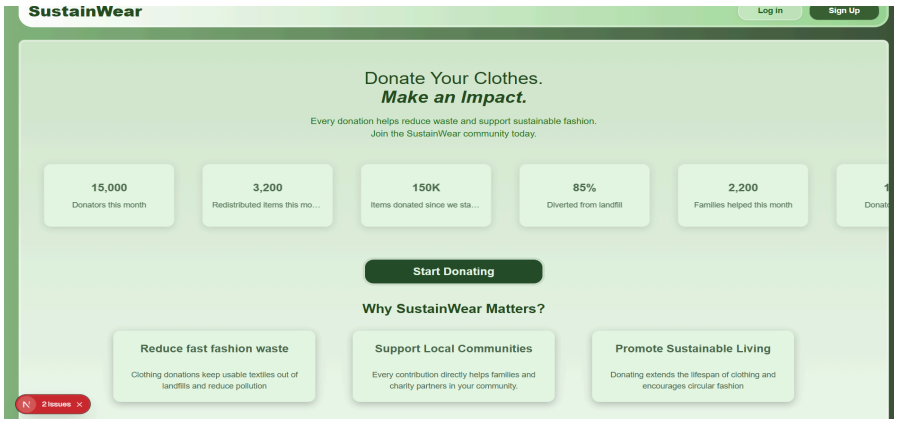


The name (your item) and what it's doing right now for performance testing is when I create a donation as a donor to evaluate page load times and system responsiveness during key user actions. The time was shown within the dev tools within the timing section as you can see The system remained responsive throughout testing, meeting the non-functional performance requirements.

Usability Evaluation Summary

The SustainWear system was designed using a mobile-first approach, ensuring that all key features are easily accessible and usable on small screens such as smartphones such as the homepage above for our usability.





Accessibility testing Summary

As seen above the pages are easily accessible for users that require a screen reader. They will encounter little to no difficulty to navigate through the project.

Landing page

Accessibility

These checks highlight opportunities to improve the accessibility of your web app. Automatic detection can only detect a subset of issues and does not guarantee the accessibility of your web app, so manual testing is also encouraged.

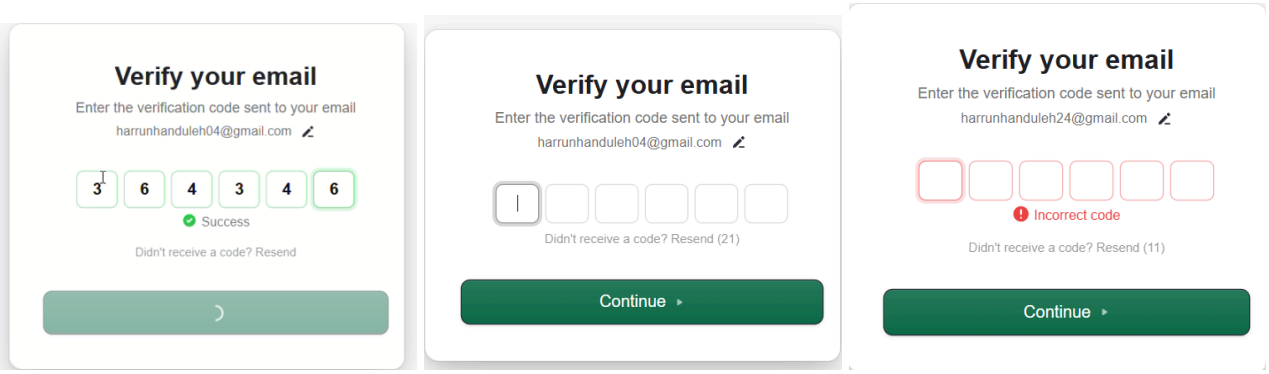
Admin page

Accessibility

These checks highlight opportunities to improve the accessibility of your web app. Automatic detection can only detect a subset of issues and does not guarantee the accessibility of your web app, so manual testing is also encouraged.

Security Testing Summary

Two-Factor Authentication was implemented to enhance account security. The test showed that using this verification process would allow them to access their dashboards and messing up these codes prevented them access.



Reflection on Legal, Social, Ethical & Professional Issues (LSEPI)

As a reflection on the Legal, social, ethical and professional issues of the project there were many that we based our design around and tried including when we realised that those aspects could be improved upon for the user so that they could have a better experience on the website.

One legal issue would have been route security and log in security which we designed around when creating our project. To solve the log in security issue, we used a 3rd party API called clerk which handled the user information when someone logged into their existing account or was creating one. Using Clerk allowed us to also enforce route security. To do this we had to use the metadata on Clerk to assign roles which dictated the access you had to other pages. This meant that donors could not access the admin page that could affect user accounts but admins could access all pages to help check issues on the charity or donor pages.

A professional issue would be the initial designs of the pages. The designs for certain pages and on the layout made some items harder to see for normal users. When this was spotted it was changed to be more easily accessible for the users who would be using our site.
Some extra care was also taken into account to help make navigation easier. Hard to navigate pages would cause many issues with new users as they would not know how to get to certain places on the site, so the designs were simplified so buttons were clear in where they were taking you or what they were doing.
Another issue is that when signing up for an account you are asked for a first and last name. This was first envisioned to make the site more personal for the user but could cause issues if data gets leaked. To combat this problem, those fields asking for a first and last name were made optional so that you did not have to give that information away if you did not want to.

Group Reflection & Collaboration

As a group, we kept in communication throughout the duration of the project. This helped when problems arose as the person in charge of said part of the project where the issue occurred is notified and since they are alerted when a problem is located it can be looked at quickly and fixed. This led to early issues being spotted and fixed.

The division of work during the beginning was spread out through the diagrams and getting the github repository set up. Once the github was ready and the diagrams were made most of us started programming while the others improved upon the wireframe to give us a better direction in designing the project which helped so there were not any conflicting design ideas. When we started we divided the project into sections by the user roles and their pages. This meant everyone could get a page or more to do for everyone.

The effectiveness of making sprints and following them were prevalent during the beginning however, later on we left this method as it is much more effective for larger groups. As we had a small group in constant communication it was much easier to ask if someone was able to do what was needed than assign it on JIRA and hope they checked it.

There were definitely problems not using just sticking to sprints on JIRA as deadlines got pushed to later and were not followed too strictly which could have caused some issues if you or someone else needed what was being done by another person.

Feedback helped with development as in the beginning we were struggling with trying to figure out how to add AI into the project and then we were told to not think about it for now. This allowed us to focus on other features and not struggle with AI and run out of time for other requirements that are needed. Another piece of feedback was on the design of the website as some parts could be hard to see for some people but as the creators we were used to how it looked so we did not realise that for others it could be hard to see. That feedback helped change the look of the website slightly.

Incorporation of Formative Feedback

Table 1 - Weekly Feedback

Week #	Feedback	Response
1		
2	Simplify the use case diagram and don't be reliant on having AI features on the project	The use case diagram had unnecessary items removed and we thought of having AI features as less necessary
3		
4		
5		
6		
7		
8	• Text elements and clarity are questionable and need working on. Some of the text is unreadable • Improvement on background design and work on having consistent visuals • Team needs to communicate between eachother	• Improved text and contrast between foreground and background making text more readable • Worked on trying to get the team more collaborative and made so that we have some more online meetings where we quickly discussed what each person is working on
9		
10		
11		
12		

AI Transparency Declaration (AITS)

AITS - level 2

We are level 2 as AI was used to help the initial design stages of the project and give suggestions on how to help find necessary resources to help with the usage of items like prisma and clerk. This is because none of us had

gone into depth with them and looking through all the documentation could take a while, whereas AI could tell us what part of it we needed.

Appendix A: GitHub Repository

[Tammam-Al-Bahri/sustain-wear]

feat: add initial database schema and migration files for User, Charity, Membership, Item, and Donation tables
Harrun01 committed last month

Merge remote-tracking branch 'origin/TA-prisma' into HH-development
Harrun01 committed last month

refactor: update Header component layout and styling for improved user experience
Harrun01 committed last month

feat: add sign-in and sign-up pages with Clerk integration and updated styling
Harrun01 committed last month

feat: enhance styling for header and signup components with new layout and design
Harrun01 committed last month

fix: allow unauthenticated users to not access donor routes on homepage
Harrun01 committed last month

feat: add donor route redirection for logged-in users on homepage
Harrun01 authored and TyreseF06 committed last month

feat: enhance middleware to include donor route protection and improve role-based access control
Harrun01 authored and TyreseF06 committed last month

feat: enhance donation management by adding user-specific donation views and integrating DonationsContainer in CharityCard
Tammam-Al-Bahri committed 3 weeks ago — 7e50bd3

feat: implement donation management features, including listing and updating donation statuses, and enhance UI with donation components
Tammam-Al-Bahri committed 3 weeks ago — 380e7be

feat: select items and claim them to a charity you are a staff or creator of
Tammam-Al-Bahri committed 3 weeks ago — fd07555

feat: refactor item and charity components, implement SelectCharity and update ItemsContainer for better item selection
Tammam-Al-Bahri committed 3 weeks ago — 1e19031

Commits on Nov 20, 2025

feat: (I have created a mess and next commit I will have switched to api routes rather than whatever this is) implement item and charity management features, enhance UI with accordion components
Tammam-Al-Bahri committed last month — 2dc94dd

Commits on Nov 19, 2025

feat: enhance ItemCard and MembershipCard components, improve user data handling in checkUser function
Tammam-Al-Bahri committed last month — a43ca5c

feat: add item listing functionality
Tammam-Al-Bahri committed last month — 867ed69

added bar chart component with dynamic weekly date
TyreseF06 committed last week — 84c7c95

Commits on Dec 8, 2025

Merge branch 'development' into Tyrese-UserPages
TyreseF06 authored last week — Verified — c942a14

added some styling to the donate button
TyreseF06 committed last week — 99e41b2

added data to cards that show how many charities are collaborating with the active status on prisma
TyreseF06 committed last week — fafd535

centred the text on the cards
TyreseF06 committed last week — 15f3466

fixed the width issue with the cards on the donor screen
TyreseF06 committed last week — 7cf93c0

added a button to the header that only appears for donors allowing them to donate just needs a path to the donate page
TyreseF06 committed last week — c55c894

made a live dontation teacker that shows the total number of donations
TyreseF06 committed last week — a4b5df0

fix: enhance styling of CharityStaff component's dropdown for better visibility
ObadaBitar committed 2 days ago — b478092

feat: integrate Sonner for toast notifications and enhance UI components with improved styling
ObadaBitar and Tammam-Al-Bahri committed 2 days ago — 6be3a4f

feat: update donations data structure and enhance CharityStaff component with new statistics and DonationButton integration
ObadaBitar and Tammam-Al-Bahri committed 2 days ago — ddfb809

feat: enhance donations API to include charity details and improve data structure in CharityStaff component
ObadaBitar and Tammam-Al-Bahri committed 2 days ago — 609ddeb

Merge branch 'development' of https://github.com/Tammam-Al-Bahri/sustain-wear into OB-Dev
ObadaBitar committed 2 days ago — f39d061

feat: add donation history page for tracking contributions
ObadaBitar committed 2 days ago — ba6f35d

Refactor code structure and remove redundant sections for improved readability and maintainability
ObadaBitar committed 2 days ago — 542e21b

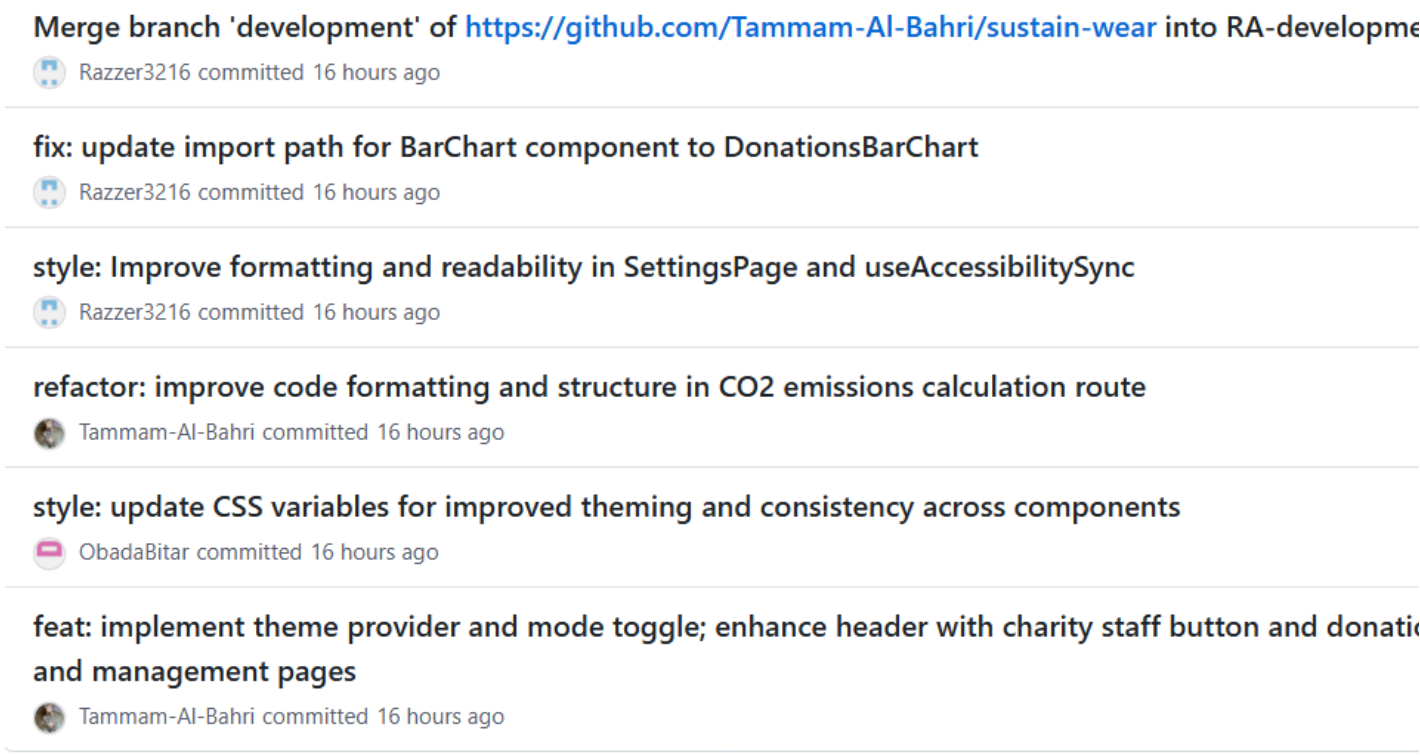
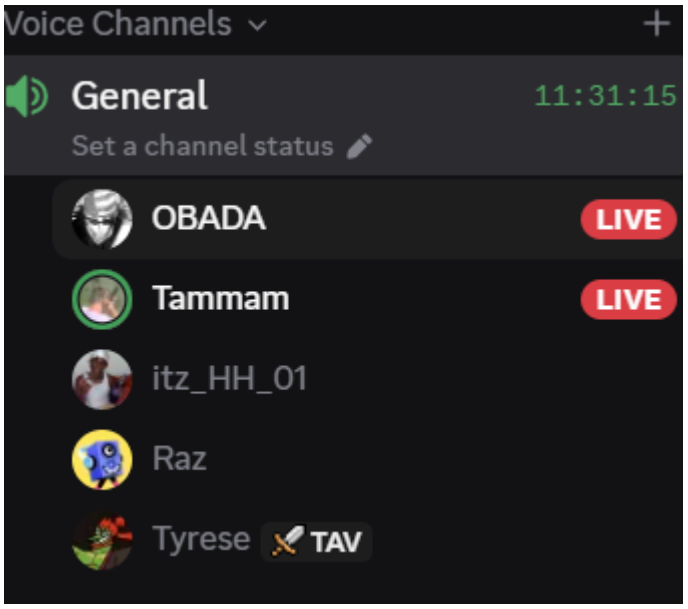


Table 2 - GitHub Usernames

Student name	GitHub name
Harrun handuleh	harrun01
Tyrese Fairweather	TyreseF06
Obada Bitar	ObadaBitar
Mohammad Raheel Ali	Razzer3216
Tammam Al Bahri	Tammam-Al-Bahri

Appendix B – Supporting Evidence

Team Members	21/10/2025	28/10/2025	4/11/2025	11/11/2025	18/11/2025	25/11/2025	2/12/2025	9/12/2025
Tyrese Fairweather								
Obada Bitar								
Harrun Handuleh								
Mohammad Raheel Ali								
Tammam Al Bahri								
Type:	Physical meeting	Physical meeting	Physical meeting	Physical meeting	Physical meeting	Physical meeting	Physical meeting	Physical meeting



ZAP Report

CWE ID: 1021
WASC ID: 15
Source: Passive (10020 - Anti-clickjacking Header)
Alert Reference: 10020-1
Input Vector:

Description:

The response does not protect against 'ClickJacking' attacks. It should include either Content-Security-Policy with 'frame-ancestors' directive or X-Frame-Options.

Other Info:

Solution:

Modern Web browsers support the Content-Security-Policy and X-Frame-Options HTTP headers. Ensure one of them is set on all web pages returned by your site/ap

CWE ID: 693
WASC ID: 15
Source: Passive (10038 - Content Security Policy (CSP) Header Not Set)
Alert Reference: 10038-1
Input Vector:

Description:

Content Security Policy (CSP) is an added layer of security that helps to detect and mitigate certain types of attacks, including Cross Site Scripting (XSS) and data injection attacks. These attacks are used for everything from data theft to site defacement or distribution of malware. CSP provides a set of standard HTTP headers that allow website owners to declare approved sources of content that browsers should be allowed to load on that page — covered types are JavaScript, CSS, HTML frames, fonts, images and embeddable objects such as Java applets, ActiveX, audio and video files.

Other Info:

Solution:

Ensure that your web server, application server, load balancer, etc. is configured to set the Content-Security-Policy header.

CWE ID: 497
WASC ID: 13
Source: Passive (10037 - Server Leaks Information via "X-Powered-By" HTTP Response Header Field(s))
Input Vector:

Description:

The web/application server is leaking information via one or more "X-Powered-By" HTTP response headers. Access to such information may facilitate attackers identifying other frameworks/components your we application is reliant upon and the vulnerabilities such components may be subject to.

Other Info:

Solution:

Ensure that your web server, application server, load balancer, etc. is configured to suppress "X-Powered-By" headers.

References

Clerk documentation - https://clerk.com/
Prisma documentation - https://www.prisma.io/