1. The Purpose of the Project

The first section of the template deals with the fundamental reason your client asked you to build a new product. That is, it describes the business problem the client faces and explains how the product is intended to solve the problem.

1a. The User Business or Background of the Project Effort

Content

The business being done is the creation of an ecommerce platform built specifically for small business clothing brand owners because this particular group of user's do not have an online marketplace specifically for their niche. This is a problem because not having an online marketplace for these business owners forces small businesses to rely mostly on social media engagement to attract customers to their product. The work the users will be able to do with the delivered product is to be able to sell their clothing merchandise in the ecommerce store and purchase merchandise in the ecommerce store.

Motivation

The motive is to provide an online marketplace for small business clothing brand owners so they no longer have to rely mostly on social media engagement to attract users to their products. Providing this online marketplace will solve this problem by improving discoverability, sales, trust, and the success rate of this group of users who typically lack the funds to access the other resources used to improve a businesses success rates.

Considerations

This is a serious problem because without the implementation of this solution we will continue to see individual clothing brands that can change the lives of the

founder(s) and clients fail simply because they do not have the discoverability to get noticed and they do not come from backgrounds that can afford to pay for ads and marketers.

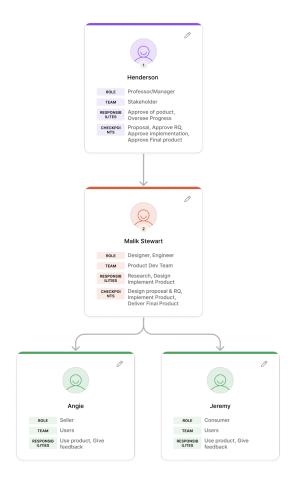
Form

This project will create an online marketplace that improves the success rates of small business clothing brand owners.

2. Clients and Users

Organizational chart showing where the clientele fits within the organization. This chart lists the role, team, responsibilities, and checkpoints of the clients and users.

Organizational Chart



3. User Persona

Content

A story about an invented person that includes:

A Person's name, age, job, family, hobbies, where they live, favorite food, favorite music, likes, dislikes, where they go on holiday, attitude to technology, attitude to money, or any other characteristic that could influence the way that the person thinks of the product. It helps if you include a photograph or drawing of the imagined person.

Persona 1



Jeremiah Smith

Age: 19
Education: Fashion Major PT
Hometown: Brooklyn, NY
Family: Lives with Dad
Occupation: Part-time Retail

"I just love designing clothes"

Goals

- Need a way sell his clothes online that is time friendly
- An online store that is easy to set up & understand
- Budget friendly option.
- Sell clothes to new demanding audience

Frustrations

- Hard to find time to fully commit to clothing brand
- Money is tight. Part time job
- Not being able to sell clothes to new customers

Jeremiah is a recently graduated high school student works a part time job and goes to to college part time. When Jeremiah was in High School he fell in love with clothes and graphic design. He would spend hours on his computer designing mockups of clothes after school. His classmates encouraged him that his designs were great and that they would actually buy from him because they loved his designs. At first Jeremiah was reluctant but, after talking to his dad about it he encouraged him to get a part time job to fund some prototypes of his designs and as single dad in NYC he does not have the money to help him fund it. Jeremiah did just that and absolutely fell in love with the process of bring his designs to life. Eventually he saved enough money from his job to order small batches of his designs and started selling them in school. Jeremiah would quickly sell out of all the designs he made because his schoolmates loved them all. About a year later Jeremiah has graduated and has decided to start a tiktok for his clothing brand & designs and make videos about it there. His account absolutely blew up overnight and now fans across the country are asking to buy his clothes. The only problem is Jeremiah is now a working college student with minimal time and money but, he does not want to let people down with selling his clothing designs online. He promised his dad he would stay in college at least part time while he pursues this because he knows his dad wants to make sure he gets his education.

4. Functional Requirements

Content

This is a specification for each atomic functional requirement. Each requirement contains the following information according to the syllabus: ID number, type, description, rationale, fitr criterion, priority, and dependencies.

What you need to know

The priority of each requirement is separated into 3 categories: high, medium, and low. The **High** priority requirements are important because customers need the capability and it is urgent because they need it in the next release. If a release is shippable without a particular requirement, then it is not a high priority per this definition. The **Medium** priority requirements are important (customers need the capability) but not urgent (they can wait for a later release). The **Low** priority requirements are neither important (customers can live without the capability if necessary) nor urgent (customers can wait, perhaps forever).

| ID Numbe r | Туре | Description | Rationale | Fit Criterion | Priorit y | Depende ncies | Defense Necessar y |
|------------------|--------------------|--|--|---|--------------|------------------------------|--------------------------|
| 1.0 | Overall Project | There will be service and payment modules in this online system | This needed to provide an online marketplace for our target users. | The online system is able to service sellers, buyers, and process payments. | High | All High Requirem ents | Needed |
| 1.1 | Payment Method | There will be a process that allows the users to pay for services and products in this online system | Need for sellers to be paid for purchases, consumers make purchases, and system host to be paid for service | The system is able to accept payments at purchase point. | High | | |
| 1.2 | Credit Card | The payment process can accept credit cards as methods of payment | Needed as a primary method of payment | The system is able to accept credit card information as a payment method | High | 1.1 | |

| 1.3 | Paypal | The payment process can accept paypal as methods of payment | Needed as a secondary method of payment. Gives users more options. | The system is able to accept paypal information as a payment method | Mediu m | 1.1, 1.2 | |
|-----|-----------------------------|---|--|---|------------|------------------------|--------|
| 1.4 | Payment Verificati on | The system will have a process to verify if the payment method is valid | Needed to deter fraud and valid payment. Needed for security. | The system transfers the users credit card data to their card issuer for verification | High | 1.1, 1.2 | |
| 1.5 | Purchase | The system will have a process to allow an user to purchase product | Needed for buyers to buy desired products | The user is able to purchase the desired product. | High | 1.1, 1.2 , 1.4, 1.7 | |
| 1.6 | Browse | The system has a process that allows users to browse for items | Needed for users to find desired products | The user is able to search for the desired product. | High | | Needed |
| 1.7 | Select | Process that allows users to select desired products. The selection displays more details about the product. | Needed for users to see more details and prepare for purchase. | The user is able to select the desired product and see more details. | High | 1.6, 1.5 | Needed |
| 1.8 | Search | This process allows users to type desired products in a search bar and the system provides results based on entry. | Needed for users to find desired products quickly | The user is able to enter search query and the system pulls up available options | High | | Needed |
| 1.9 | Cart | Process allows users to add desired products to a cart to purchase at a later time. | Needed so users can purchase item at a later time and continue shopping | The user is able to select a button to add to cart and the item is saved in that cart for later | High | 1.7, 1.5 | Needed |
| 2.0 | Create Account | Process allows users to create account that saves their info (Name, address, card info, email, address, order history, cart info, phone number) for later | Needed so users can return to use the system with all their necessary info saved. | The user is able to click a button to create account and enter all prompted data and protect it with a password | High | | Needed |

| | | use and protects this info with a password | | | | | |
|-----|---------------------------------------|--|--|--|-------|----------|--------|
| 2.1 | Verificati on Account method | Process verifies users identity after they create an account by sending an verification code to their email or phone number and prompts the user to enter that code on that webpage. | Needed so, the system host can verify the identity of the new user's account. | The system generates a unique code and sends it to the user's phone or email based on their desired method. User types in code on appropriate webpage. | High | 2.0 | Needed |
| 2.2 | Update Account | Process allows the user to change, update, or review their account information | Needed so, users can update their account or review their account information. | The user is able to change desired information and the system saves that information when the users clicks the save button | High | 2.0, 2.1 | Needed |
| 2.3 | Delete Account | Process allows users to delete their account. User clicks the delete account button then the system prompts "are they sure?" if yes then the account is deleted. If no account is not deleted. | Needed so, users can delete their account if its no longer desired | The user is able to delete the account and then the account no longer exists. | High | 2.1, 2.0 | Needed |
| 2.4 | SignIn | Process allows users to sign into previously created accounts using email address or username and password. The system verifies credentials and lets the user in. | Needed so users can access their saved account info. | The user is able to use the correct credentials to access account information. | High | 2.0, 2.1 | Needed |
| 2.5 | Reset password | Process allows the user to ask the system to reset their password. The system ask for the phone number or email used during account creation | Needed in case the user forgets their password but, they need to recover their account. | The user is able to successfully change their password and sign in using a new password. | High. | 2.0, 2.1 | |

| 2.6 | Select Categorie s | then sends them a verification code to enter to verify their identity then allows the user to change the password. Process allows the user to sort items by categories so, when they select their desired category the system takes them to a webpage pertaining to that category. | Need so users can search products based on categories | When the user selects a category it takes them to a webpage pertaining to that that selection | Mediu m | 2.7 | |
|-----|-----------------------------|---|---|---|------------|-----|--------|
| 2.7 | Home Page | Process loads the home page as the main page when the website is accessed. | Need a main page users can navigate to other webpages from | When the client server requests the address for the home page of the website. The home page is loaded. | High | | Needed |
| 2.8 | Men's Category | Process allows the user to sort products defined as mens and when selected the system takes the user to a webpage pertaining to mens products | Need a webpage dedicated to men's items to help users navigate to desired products | When the client server requests the address for the men's categories of the website. The web page for that category is loaded. | Mediu m | 2.7 | |
| 2.9 | Women's Categorie s | Process allows the user to sort products defined as womens and when selected the system takes the user to a webpage pertaining to mens products | Need a webpage dedicated to women's items to help users navigate to desired products | When the client server requests the address for the women's categories of the website. The web page for that category is loaded. | Mediu m | 2.7 | |
| 3.0 | New Arrivals Category | Process allows the user to sort products defined as new arrivals and when selected the system takes the user to a webpage pertaining to mens products | Need a webpage dedicated to women's items to help users navigate to desired products | When the client server requests the address for the new arrivals categories of the website. The web page for that category is loaded. | Mediu m | 2.7 | |
| 3.1 | Best Sellers category | Process allows the user to sort products defined as best sellers and when | Need a webpage dedicated to best seller's items to help users | When the client server requests the address for the best sellers categories | Mediu m | 2.7 | |

| | | selected the system takes the user to a webpage pertaining to mens products | navigate to desired products. | of the website. The web page for that category is loaded. | | | |
|-----|----------------------------------|--|--|--|------|-------------------------------|--------|
| 3.2 | Categorie s hover function | Process when the user hovers mouse over category a drop down menu appears showing sub categories | Need a way to show all categories without overcrowding the webpage | When the mouse hovers over the main category a drop down appears showing an appropriately subcategory. | Low | 2.7, 2.8, 2.9 | |
| 3.3 | Open Shop | Process that allows users to open a shop that allows them to sell their products in the marketplace. The system asks the user to name their shop and choose what payment method they want to use to pay for service. | Needed so users that want to sell their products cna have a digital store within the system. | When the user is able to open a unique shop on the system and that shop is recorded in the system and searchable on the system. | High | 2.1, 2.2, 2.3, 2.4, 2.5 | Needed |
| 3.4 | Upload product | Process allows users to upload product in shop and record appropriate attributes (quantity, type, price, description, size, colors) | Needed so users can make products available in theri store to sell. | When the user is able to successfully upload and save a product in your store. | High | 3.3 | Needed |
| 3.5 | Product live | Process allow the user to put a product online in their store which makes their product available in the online marketplace | Needed so, users can make products in their store available in the online marketplace. | When the user is able click a button that makes the product saved in their store go live in the marketplace. Therefore that product will now be searchable for purchase in the marketplace | High | 3.4 | Needed |
| 3.6 | Make Product offline | Process allows users to put a product offline which makes their product unavailable in the online marketplace | Needed so, users can make products unavailable to purchase in their store because they either no longer sell it or | When the user is able to click a button that makes the saved product offline. Therefore, their product will no longer be searchable for | High | 3.5 | Needed |

| | | | need to change something. | purchase in the online marketplace. | | | |
|-----|---------------------------|---|---|---|------|--|--------|
| 3.7 | Seller Orders data | The system records all the order information when a buyer makes a purchase with a seller and records all relevant info (Order #, date, Item description, shipping type, order status) in a database for the seller so they can appropriately fulfill the order. | Needed so, the seller can keep track of orders and successfully fulfill them as orders are placed. | When a buyer makes a purchase all necessary info is recorded and sent to the sellers database under an order number, | High | 3.5, 3.4, 3.3, 1.1, 1.2, 1.4, 1.5 | Needed |
| 3.8 | Order Confirmat ion | The system sends an order confirmation number to the buyers email address after they make a purchase in the online marketplace. | Needed so, buyers can know their purchase successfully went through and they have a record of their purchase. | When a buyer makes a purchase the system generates a unique order confirmation number and sends it to the purchaser's email address successfully. | High | 3.6, 3.3, 3.5, 3.4 | |
| 3.9 | Update Product | The seller is able to go into inventory and update product information (quantity, size, color, type, description, title). | Need so, seller cna update information on products they have saved when necessary | When a seller can click a button to pull up up product information fields and update their desired fields then save the new information | High | 3.3, 3.4 | Needed |
| 4.0 | Delete Product | The seller is able to go into inventory and delete a product that they have saved. A pop up should show to verify if the seller truly wants to delete the product. This completely deletes the product and no info will be retained. | Needed so, sellers can completely delete a product they no longer need in their store. | When a seller is able click a button that prompts them if they want to delete this product. If yes is selected then the system delts the product. | High | 3.3, 3.4 | Needed |

| 4.1 | Out of stock updates | When an item in the seller's quantity reaches zero the item's status switches to out of stock and becomes no longer purchasable on the online marketplace. | Needed, so buyers cannot purchase items that are no longer in stock | When the product quantity updates to 0 the system automatically sets that item's status to out of stock and updates that info on the product page while making it no longer buyable. | High | 3.3, 3.4, | Needed |
|-----|----------------------------|--|---|---|------|------------------------------------|--------|
| 4.2 | Automate d quantity | The system automatically updates the quantity of product whenever a product is purchased. One product purchase equals minus one quantity. | Needed, so product quantity is automatically updated and accurately keeps track of quantity to avoid purchases happening when a product is not available. | When the system automatically updates the quantity of the product being purchased based on the quantity being purchased | High | 3.3, 3.4 | Needed |
| 4.3 | Automate d Taxes | The system will calculate the appropriate sales tax amount based on the price of the product and the sellers and buyers sales tax information based on location. | Needed so, the appropriate sales tax is collected which is needed for the seller to stay in compliance with the government when it's time to file taxes. | When the system is able to calculate the correct sales tax amount based on the price of the product, the seller's shipping address, and the buyer's shipping address. | High | 3.3, 3.4, 1.1, 1.2, 1.4, 1.5 | |
| 4.4 | Shipping | When a buyer makes a purchase and chooses their shipping method, Shipping cost is automatically calculated based on method and the shipping information is sent to the appropriate carrier so they can ship the product. The shipping info also needs to be stored on a digital label that is printable. | Needed so, all shipping fees and duties are paid for accurately and the correct shipping information is sent to the appropriate carrier so they can ship the product to the buyer in a timely manner. | When the correct shipping cost is calculated based on method and location. When the shipping information (Buyer and shippers name, buyers address) is sent to the designated carriers database so they can ship the order when they receive the product. Also when the shipping info is stored in a printable label format. | High | 4.3 | |

| 4.5 | Size | When a buyer is viewing a product to purchase they are able to select their desired product if the product has a size attribute. If that suze is out of stock the screen display will tell the user and they won't be able to purchase that size. | Needed so, buyers can purchase products based on appropriate size. | When the buyer is looking at a product they are able to click a button to select their desired size. If the size is out of stock they will not be able to select it. | High | 3.4, 3.5, 1.6, 1.7 | Needed |
|-----|--------------------|---|--|---|-------------|------------------------------------|--------|
| 4.6 | Quick View | When the buyer is browsing products the are able to select a click view option on the product triggers a pop up that shows an enlarged more detailed view of the product. | Needed so, buyers can quickly view a product in more detail without having to got to another webpage. It improves browsing speed. | When the buyer clicks the "quick view" button an enlarged and more detailed view | Low | 3.3, 3.4, 2.7, 1.6, 1.7, 1.8 | |
| 4.7 | Customer Review | Users are able to leave reviews on products containing the products rating, subject, and description. | Needed so, users can see previous purchasers experience with this product and gauge whether or not they should purchase as well. This feature is important for driving sales. | When the customer is viewing a products page there is a button that says leave review. When they click that button they can leave a review on the product using the following fields: 5-star rating, subject, description. | Mediu m | 3.3, 3.4, 2.7, 1.6, 1.7, 1.8 | |
| 4.8 | Preorders | The system allows sellers to set the status of their product as purchasable for pre order. This will display the product as pre order on the product page for buyers | Needed so, sellers can sell their items as a pre order if they do not have the product in stock yet. This is useful for sellers that may not have the funds to have a starting inventory to sell with. | When the seller is viewing their products information there's a button that allows them to set the product as a preorder. When the button is selected the product's status is set to preorder and the item in the marketplace is viewed as purchasable as a | Mediu m, | 3.3, 3.4, 2.7, 1.6, 1.7, 1.8 | |

| | | | | pre order. | | | |
|-----|--------|--|--|---|-----|-----|--|
| 4.9 | Filter | The system allows buyers to filter their search results within a category by color, size, style, and price. This is done by the attributes of the product being displayed on the web page and the buyer is able to check off those attributes and filter through all products on that webpage to show the checked off results. | Needed, so buyers can browse for their desired items more efficiently. | When the buyer checks off the specific categories they want to filter for and click the filter button the system displays a narrowed array of products based on the user's selection. | Low | 1.0 | |

5. Non-Functional Requirements

Content

Nonfunctional requirements are not related to the system functionality, rather define how the system should perform. The types of Non-functional requirements are style, usability, security, reliability, availability, and scalability.

What you need to know

The non-functional requirements will be written in the same format as the functional requirements with the inclusion of one more category for each requirement called "group". This category will indicate the "group" of non-functional requirements that is being listed.

| ID Num ber | Туре | Group | Description | Rationale | Fit Criterion | Priorit y | Depen dencie s | Defens e Necess ary |
|------------------|-------|-------|---------------------------|----------------------------|------------------------------|--------------|----------------------|------------------------------|
| 5.0 | Color | Style | The colors on the website | This is needed because the | All the text on thee product | High | | Neede d |

| | | | should be black and white. Text that indicates sales should be red. Announcement text color is yellow | colorway must be familiar to our target audience. These colors are often used in e commerce websites relating to fashion brands. | follows this colorway. | | |
|-----|------------------------|-----------------|--|--|---|------------|------------|
| 5.1 | Font | Style | Lato font is a commonly used font in ecommerce | This font will be familiar to users and easy to read. | All text on websites uses this font. | High | Neede d |
| 5.2 | Theme | Style | The theme should be minimal. | Minimal theme simplifies navigation and makes it easier for the user to find what they are looking for. | The theme can be defined as minimal nyt the head developer. | High | Neede d |
| 5.3 | Search Icon | Usabilit y | The UI has a search Icon that indicates to the user they can search for items. | Search Icon indicates to the user where they can find the search function. | The Icon can be found with the search function . | High. | Neede d |
| 5.4 | Cart Icon | Usabilit y | The UI has a cart Icon that indicates the user they can click that icon to initiate checkout | Cart icon indicates to the user where the check out function can be found. | The icon can be found with the check out function. | High | Neede d |
| 5.5 | Cloud Comput ing | Scalabili ty | The product will have cloud computing compatibility. | Cloud computing will all space for data to be dynamically allocated based on need. | As the amount of data grows the storage in the cloud grows as well. | High | |
| 5.6 | Mobile | Usabilit y | The website should be compatible with mobile phones. | Over half the users who visit ecommerce websites are using mobile | The website is able to be found on a mobile device and it gives a | Mediu m | |

| | | | | devices. | user experience that is capable of driving sales. | | |
|-----|----------------|---------------|--|---|---|------|------------|
| 5.7 | VPN | Security | This system will utilize a VPN to secure data and information online, | This is needed to protect against cyber attacks prevent financial loses, and keep customers information secure and protected. | When the measures taken show data breaches are below the average for other products in the same industry. | High | |
| 5.8 | SSL | Security | The system will have a SSL certificate installed to provide more security. | This ensures that all data passed between the webs server and browser remains private. | When the measures taken show data breaches are below the average for other products in the same industry. | High | |
| 5.9 | Shippin g | Usabilit y | The product will include shipping information for customers | Users need to know shipping information to give a better user experience. | The website includes an FAQ that explains shipping information. | High | |
| 6.0 | Return | Usabilit y | The product will include shipping information for customer | Users need to know return information to give a better user experience. | The website includes an FAQ that explains return information. | High | |
| 6.1 | Navigati on | Usabilit y | The product will have a navigation bar that is based on the left side of the screen. | Research has shown users spend 75% of their time on the left side of the screen. Putting the navigation bar on the left side would improve usability and navigation time. | The website has a navigation bar on the left side of the screen that includes all the most important web pages. | High | Neede d |

| 6.2 | Load Time | Reliabili ty | The system's load time between web pages must be no more than 2-seconds. | Fast load times will help combat website retention rate. | When the systems load times reflect lower retention rates when compared to longer load times. | Mediu m | |
|-----|--------------|-----------------|--|--|---|------------|--|
| 6.3 | Culture | Usabilit y | All sales on the system will take place in the United States. | At the launch of the product only the U.S. user base will be targeted to avoid international complications with regulations. | Only U.S. based vendors and buyers are able to do business. When it is not provided outside of the U.S. | High | |
| 6.4 | Currenc y | Usabilit y | All currency will be in U.S dollars on this system | All business will be done in the U.S. So, the local currency needs to be used | When the U.S. dollar is the only way to buy or sell products. | High | |