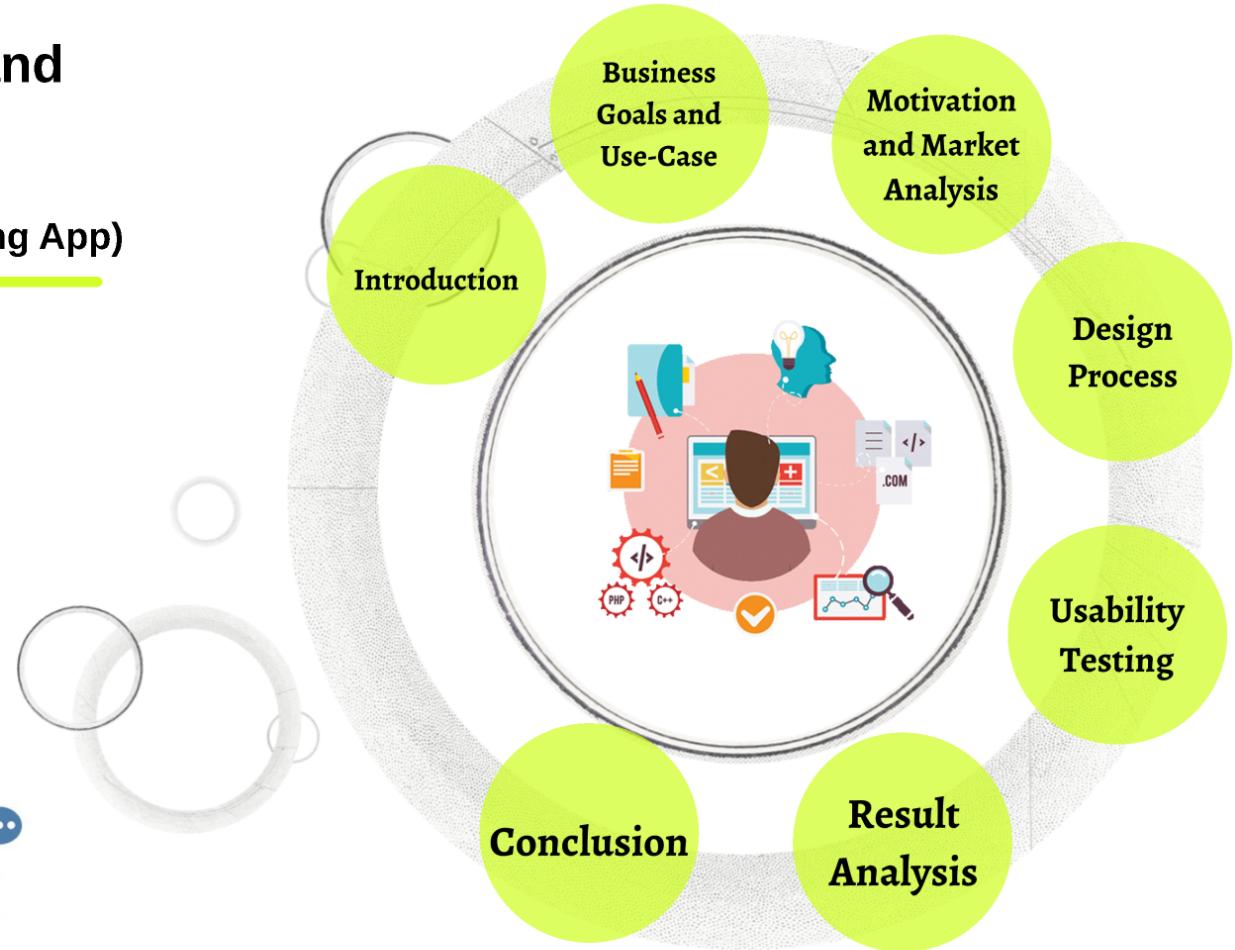
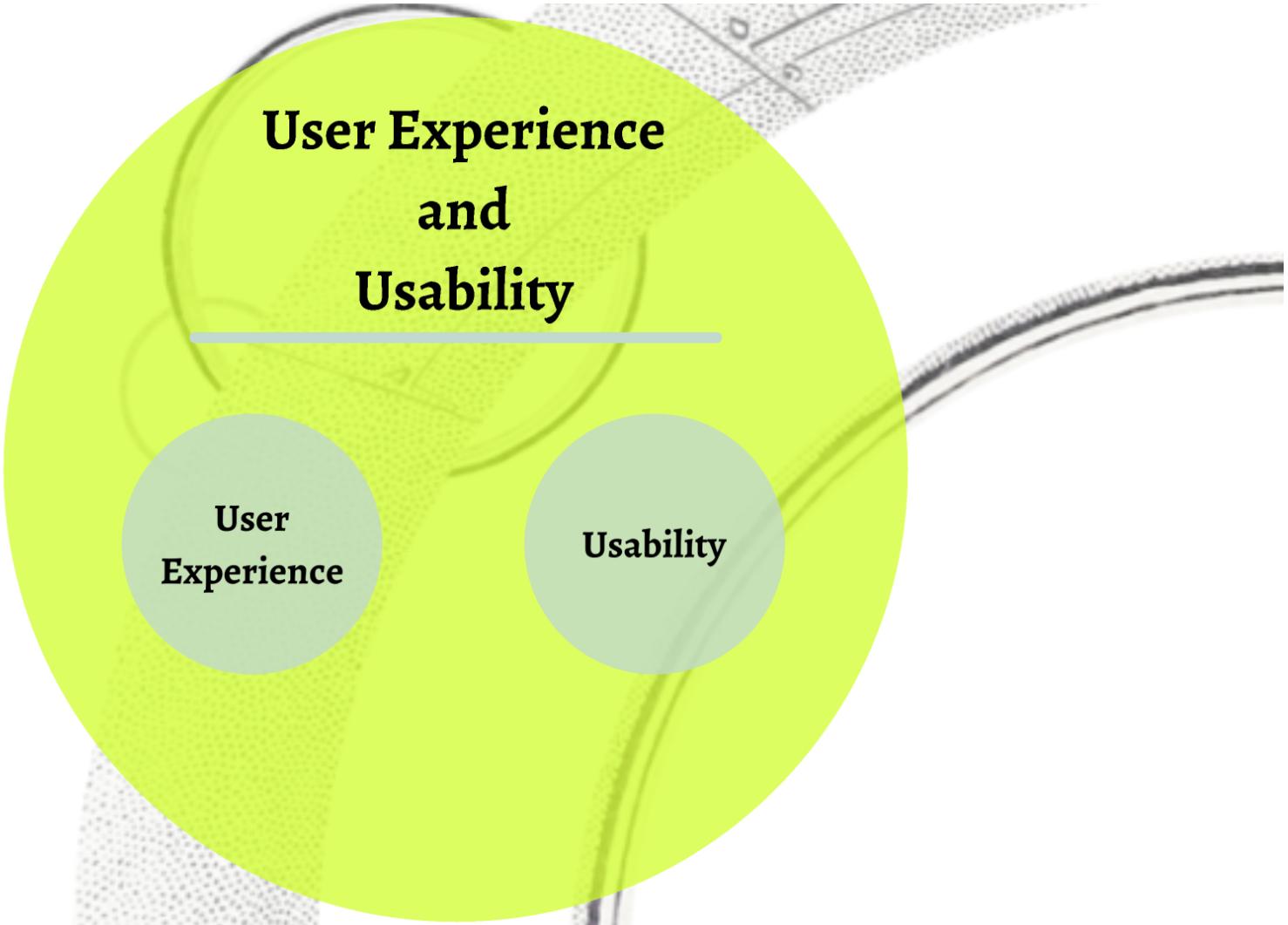


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User Experience and Usability

**User
Experience**

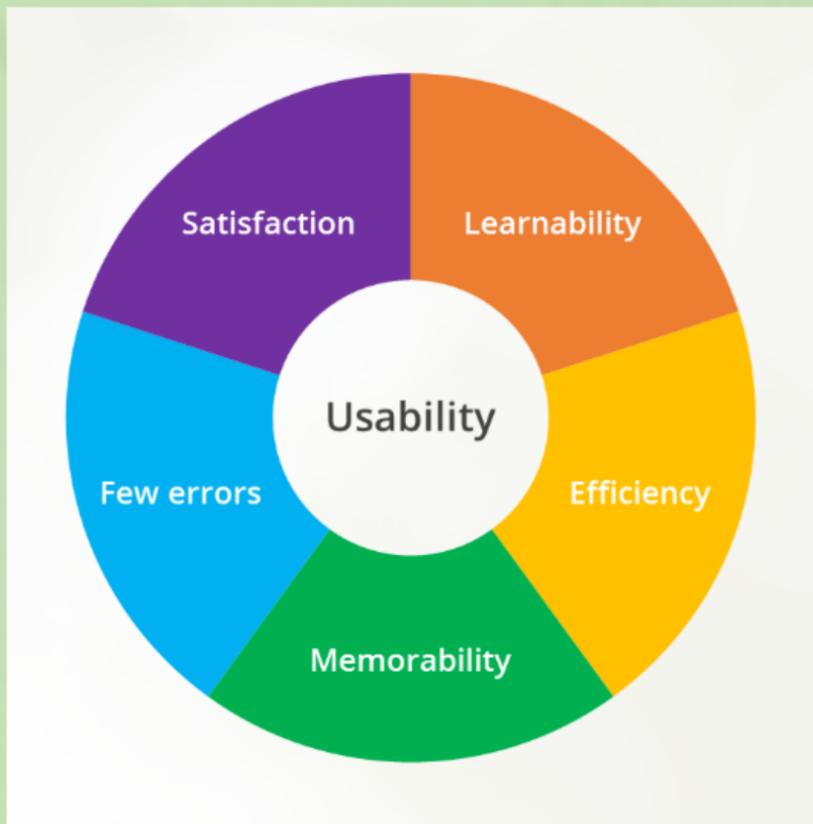
Usability



User Experience

- Traditional Usability and Emotional Aspects
- Person's Perception and responses

Figure. Peter Morville's UX Honeycomb and facets of UX



Usability

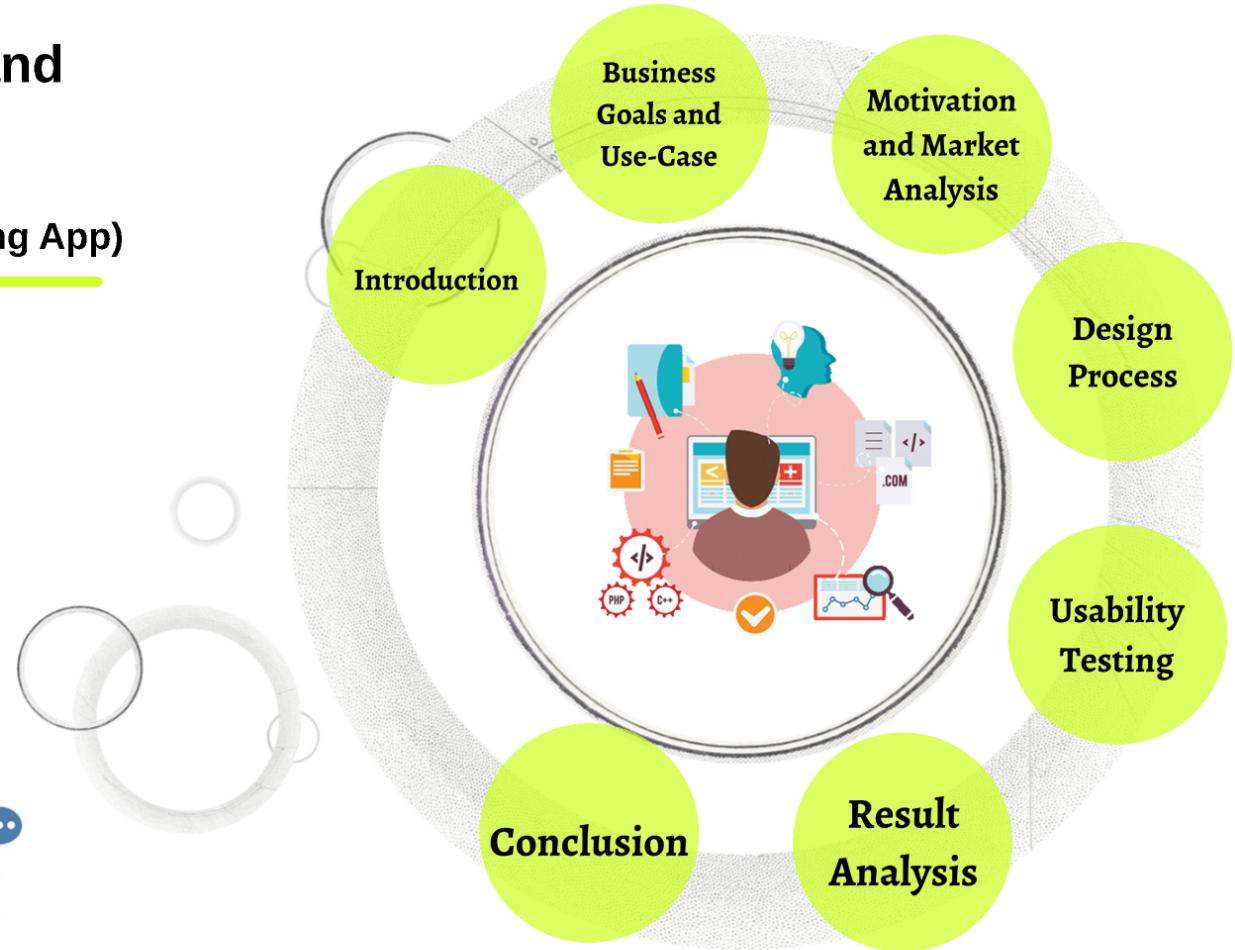
- **Usability is a key element of User Experience**
- **Achieve quantified objectives with effectiveness, efficiency, and satisfaction**

Figure 2. Jacob Nielsen's usability attributes

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BUSINESS
GOALS



USE-CASE



Business Goals

- Sell fashion products like shirt, t-shirts, jeans, shoes etc.
- Improve sense of fashion and making profit.
- Acquire new customers



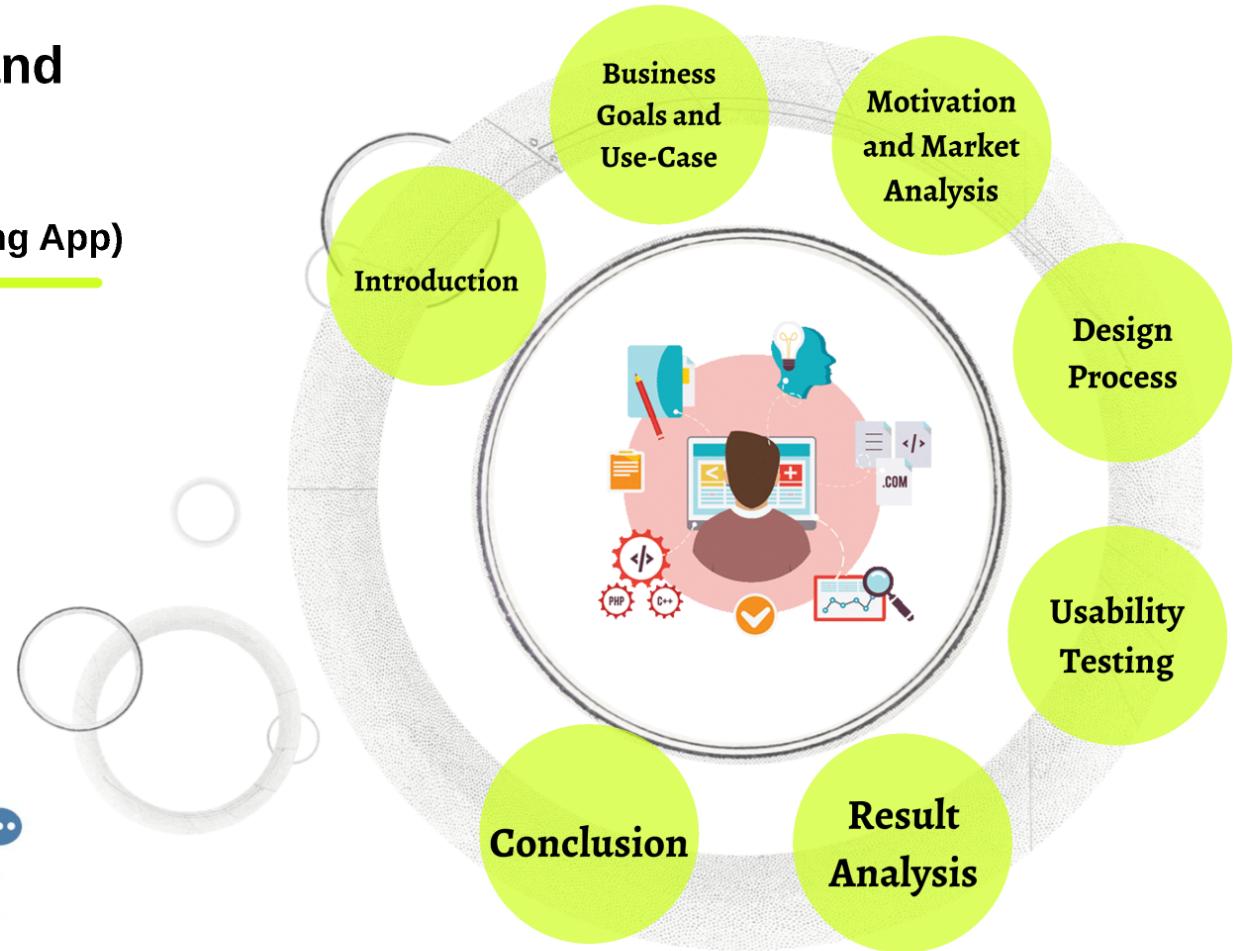
Use-Cases (Fashion Shopping App)

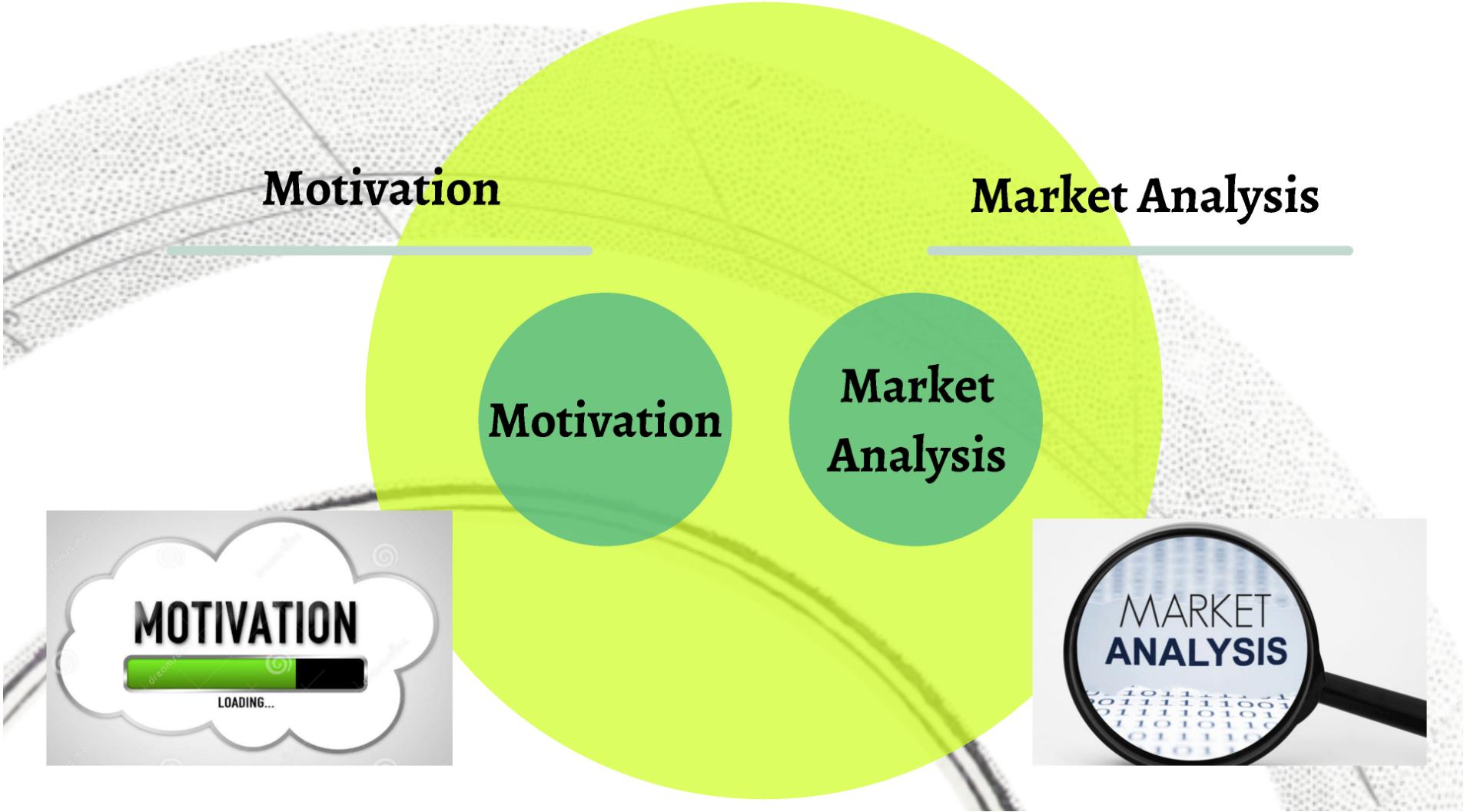
- Application for users who need to buy fashion products(upper, lower and shoes) online
- Access application without creating account or logging in
- Select a particular product
- Add the product(s) to cart
- See nearby store for a particular product
- Remove particular product(s) from cart
- Clear Cart.

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Motivation

- User meets their fashion needs thereby checking the products quality and size in store
-
- Prevent long delivery waiting times



Competitor Analysis

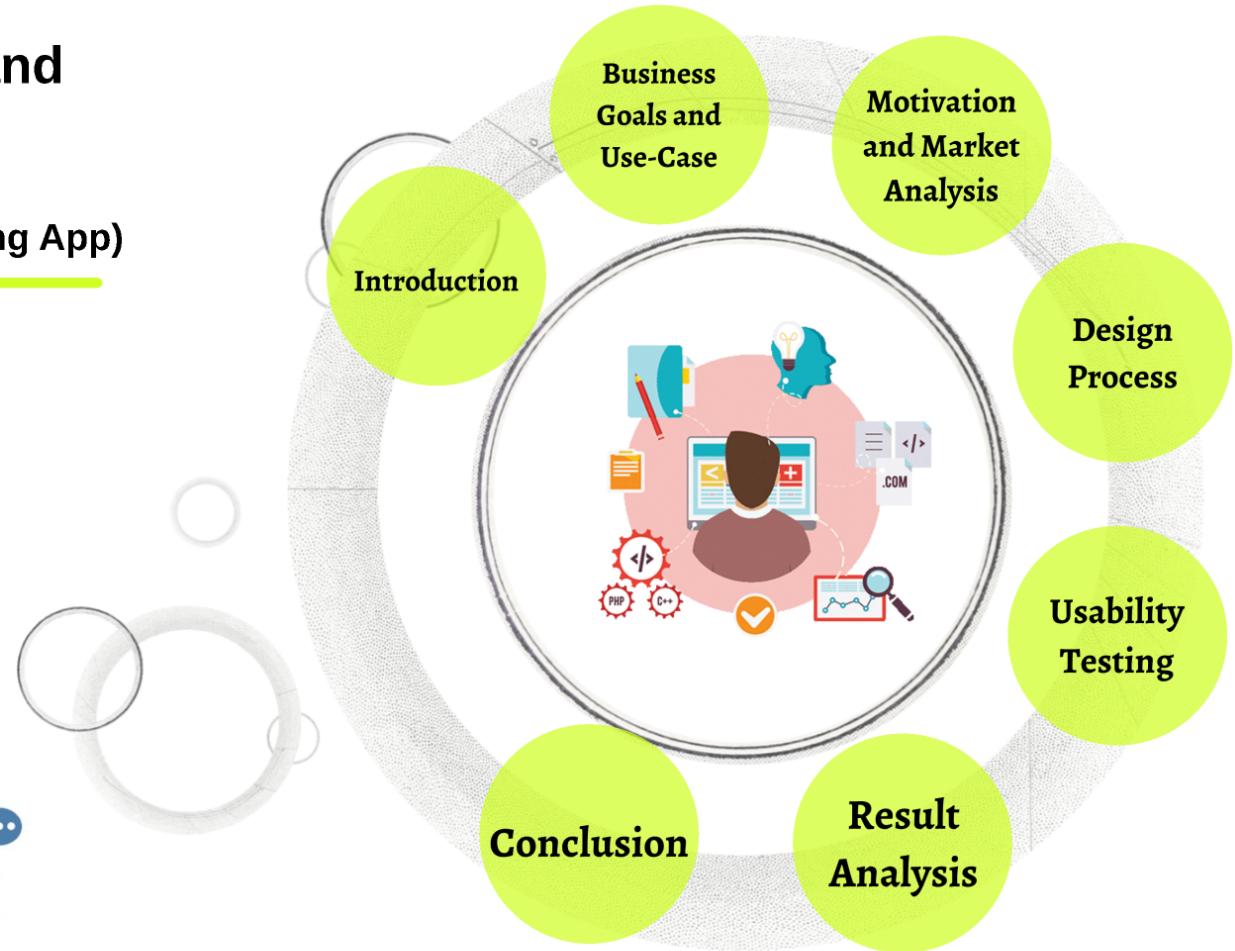


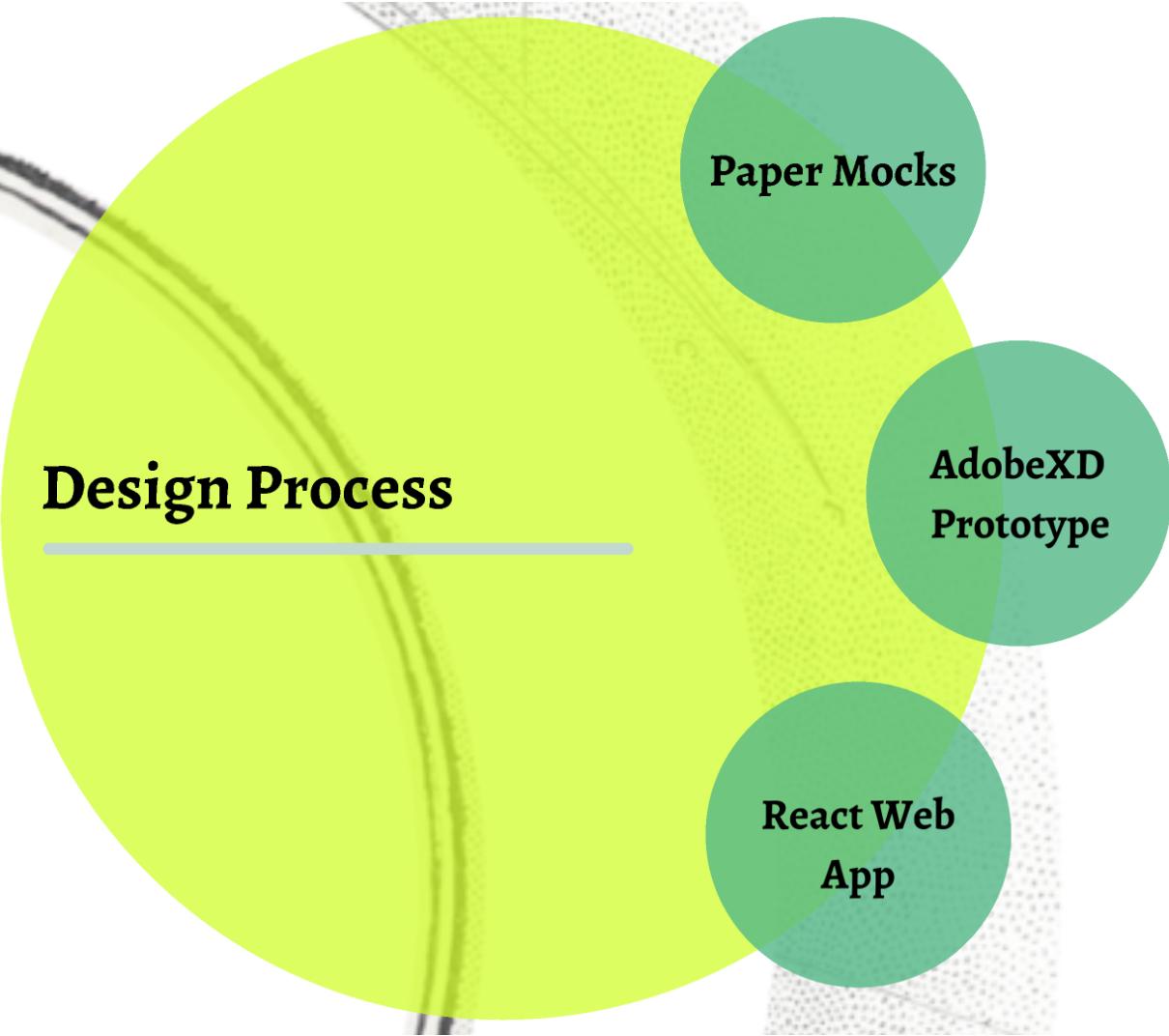
- Ecommerce Giants like Amazon, Aliexpress dont have an option to find the products in nearby stores
 - Long delivery times

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PAPER WIREFRAMES

PRODUCT PAGE

Men Women Kids

FILTERS

BRAND

PRICE

COLOR

DISCOUNT

Sort By

Prod 1 Rs. 800

Prod 2 Rs. 500

Prod 3 Rs. 400

Prod 4 Rs. 900

Cart Page

Bag

My Bag

Prod 1

size qty

Prod 2

size qty

PRICE DETAILS

Bag Total —

Prod Discount —

order Total —

Delivery —

Total —

PLACE ORDER

Checkout Page

Enter Address

Enter Payment

Checkout

ADOBE XD Prototype

FOR HER
"I have enough clothes," said no woman ever!
40-70% OFF
+ SHOP

TOPWEAR FOR HIM TO ROCK
UPTO 40% OFF
+ EXPLORE

Anubhutee
Women Teal Blue & White Printed Kurta with Palazzos
Rs. 1249
(incl. of all taxes)

PRODUCT DETAILS
Teal and white printed kurta with palazzos
Teal blue and golden printed straight calf length kurta, has a round neck, three-quarter sleeves, straight hem, side slits
White and golden printed palazzos, has elasticated waistband, drawstring closure

ADD TO CART **BACK TO PRODUCTS**

PRODUCTS	NAME OF PRODUCT	PRICE	QUANTITY	REMOVE	TOTAL
	VISHUDH Women Kurta	Rs. 1249	- <input type="button" value="1"/> + <input type="button" value="-"/>		Rs. 1249
	ANUBHUTEE Women Kurta	Rs. 1249	- <input type="button" value="2"/> + <input type="button" value="-"/>		Rs. 2498

CLEAR CART

SUBTOTAL: Rs. 3747
TAX: Rs. 374
TOTAL: Rs. 4121

React Web App

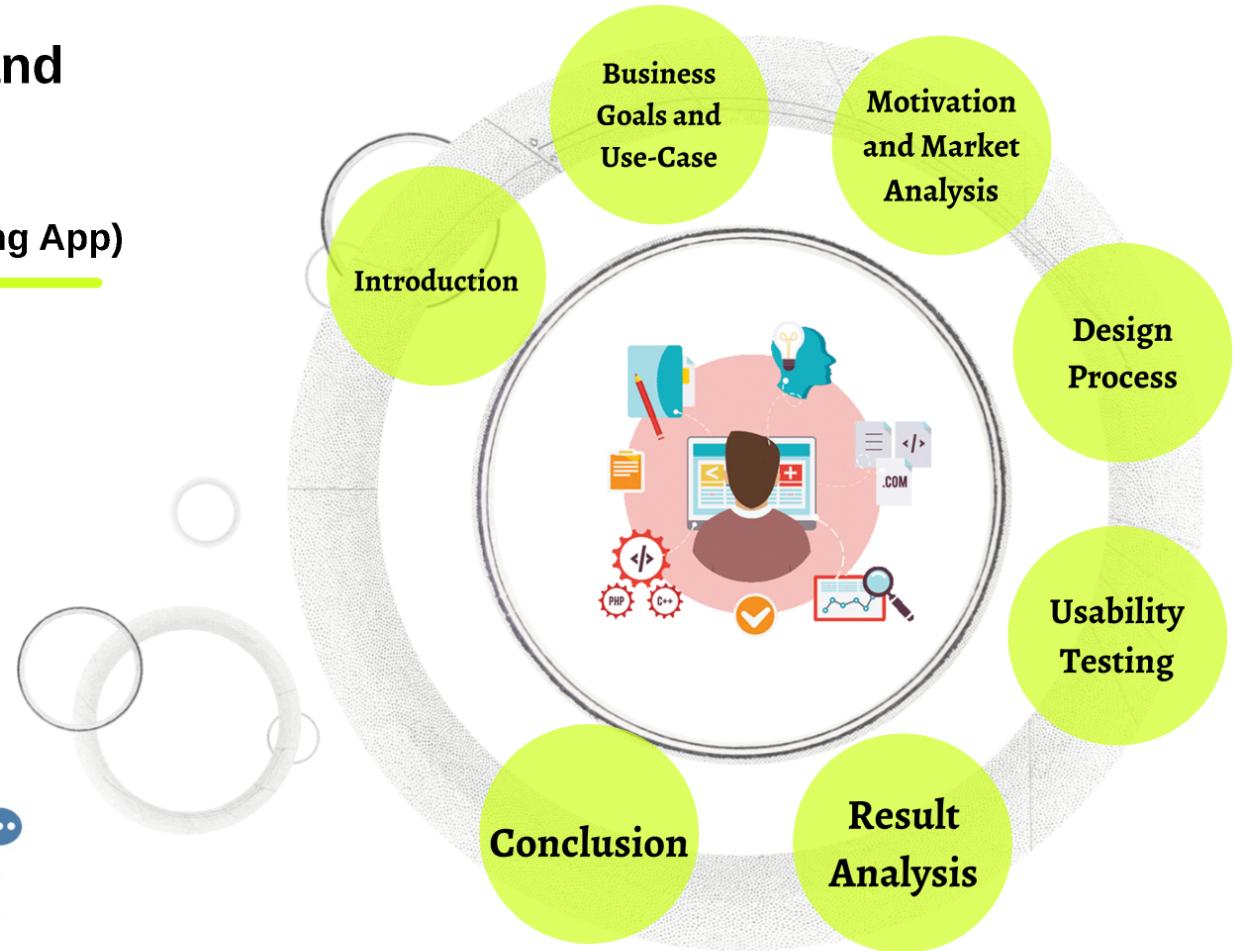


**Development of web
application using React
JS framework.**

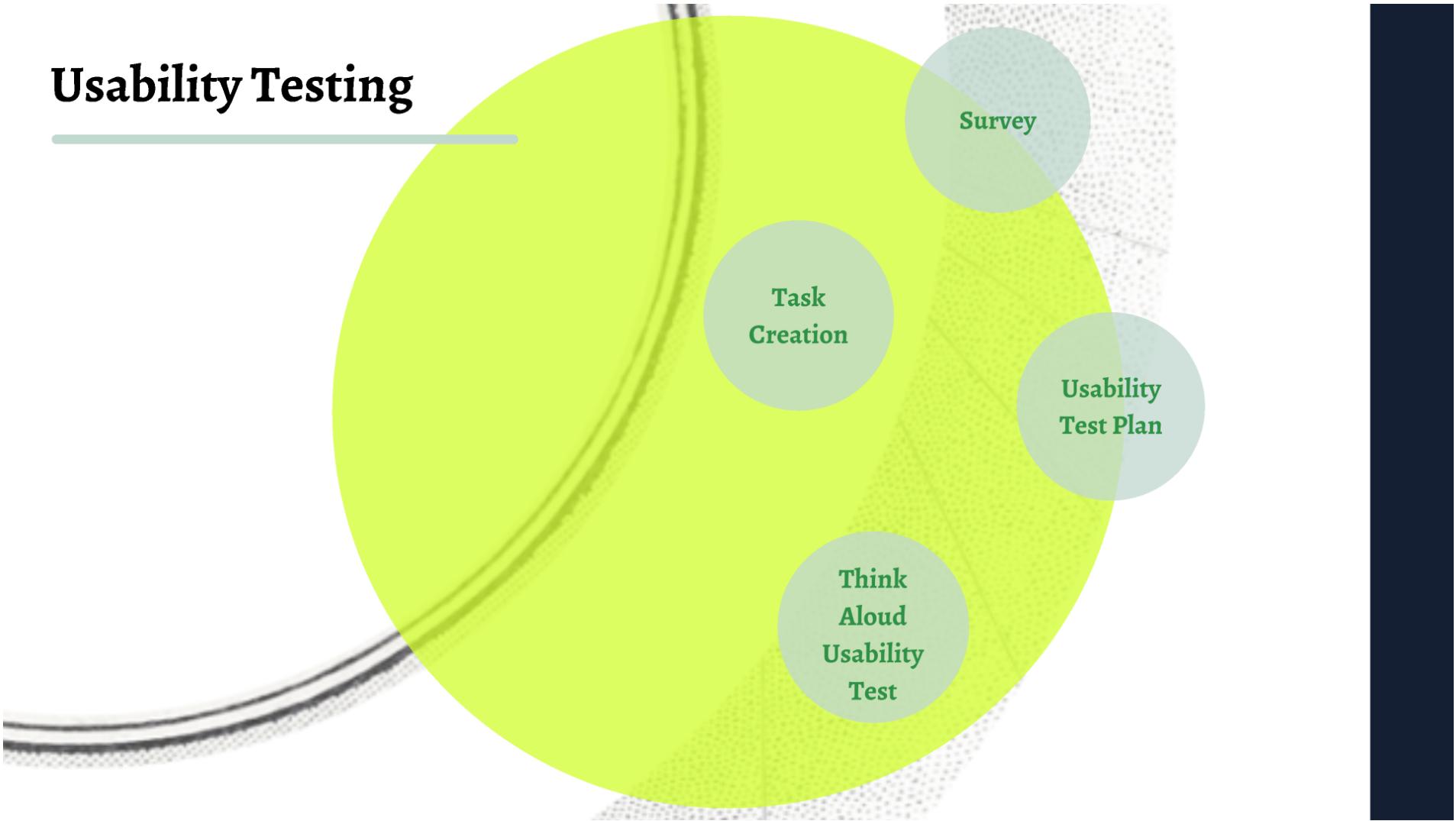
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Usability Testing



Identified Red Routes

Survey Link: <https://www.surveymonkey.de/r/DR92QLH>

All of the Time			Search products online and add them to cart	Sort and Filter Products Online
Most of the Time		Interested to buy online	Receive ordered products within 2-3 days	Find nearby store for the same product which is online
Some of the Time			Buy products in the store	
Little of the Time	Wait for long deliveries			
	Little of the People	Some of the People	Most of the People	All of the People

Tasks and User Stories

Task 1: Browse Home page and navigate to Men's product page.

Want to gift a great fashionable tee for your loved one, visit our Fashio app and buy it from there.

Task 2: See for a particular product and find the nearby store for that product

Dont want to wait for delivery time and buy the same online product in the store, visit our app

Task 3: Add the product to the cart

Found your favorite branded shirt. Add it to cart and buy fast until the stock lasts.

Task 4: Add multiple products to cart

Confused between two great jeans. Add both to the cart and buy

Tasks(cont..)

Tasks and User Stories

Task 5: Navigate to Cart and change the quantity of the products

You have twin babies. Both of them need the same wear. Visit the cart and add an extra quantity

Task 6: Remove the particular product(s) from the cart

Liked a another jeans and dont need the initial liked jeans, remove it from Cart.

Task 7: Clear the whole cart

Messed up between multiple product choices. Clear the whole cart and start with the new choices

Task 7: Check for subtotal, tax and total price of the products in the cart

Managing budget is a problem. Check for instant total value of your cart with tax included as soon as you add the products.

Usability Test Dashboard

USABILITY TEST PLAN DASHBOARD

AUTHOR	CONTACT DETAILS			FINAL DATE FOR COMMENTS
Aditya Shelar	adityashelar710@gmail.com +49 17669006701			
PRODUCT UNDER TEST What's being tested? What are the business and experience goals of the product? Fashion Shopping App (React)	TEST OBJECTIVES What are the goals of the usability test? What specific questions will be answered? What hypotheses will be tested? If users understand the purpose of online fashion shopping? If users have trust in our app and would rely on that for the requirements? Do people understand the online and offline shopping and would choose particular according to their convenience?	PARTICIPANTS How many participants will be recruited? What are their key characteristics? 5 participants. Should know to use basic browser and understand the gist of online shopping.	TEST TASKS What are the test tasks? <ul style="list-style-type: none">- Browse Men's product- Find the nearby store for that product- Add the product to the cart- Add multiple products to cart- Navigate to Cart and change the quantity of the products- Remove the particular product(s) from the cart- Clear the whole cart- Check for subtotal, tax and total price of the products in the cart	RESPONSIBILITIES Who is involved in the test and what are their responsibilities? Aditya Shelar (Interviewer, Data Logger and Moderator)
BUSINESS CASE Why are we doing this test? What are the benefits? What are the risks of not testing? Evaluate the users need and providing users with a viable product. Not performing would result in app failure	EQUIPMENT What equipment is required? How will you record the data? <ul style="list-style-type: none">-Laptop-Closed Room to conduct test-Pen, Pencil, Book, Data Logger Sheet			LOCATION & DATES Where and when will the test take place? When and how will the results be shared? Am Steinigarten 14, SAP, SRH Campus 11 March 2019
PROCEDURE What are the main steps in the test procedure?	 <ul style="list-style-type: none"> Plan the test and create survey Recruit Participants Prepare Tasks and User Stories Setup the test and environment Conduct Test Analyze and report results 			

The Usability Test Plan Dashboard is licensed under the Creative Commons Attribution-Share Alike 3.0 Unported License. Attribution: www.userfocus.co.uk/dashboard

Think Aloud Usability Test

- Welcome the participant (5 min)
- Self Introduction (10 min)
- Pre-Test Interview of the participant (10 min)
- Brief Demo of the application(20 min)
- Task Questions(40 min)
- Post - Test Feedback(15 min)
- Small present for the user.



Some
glimpse of
test



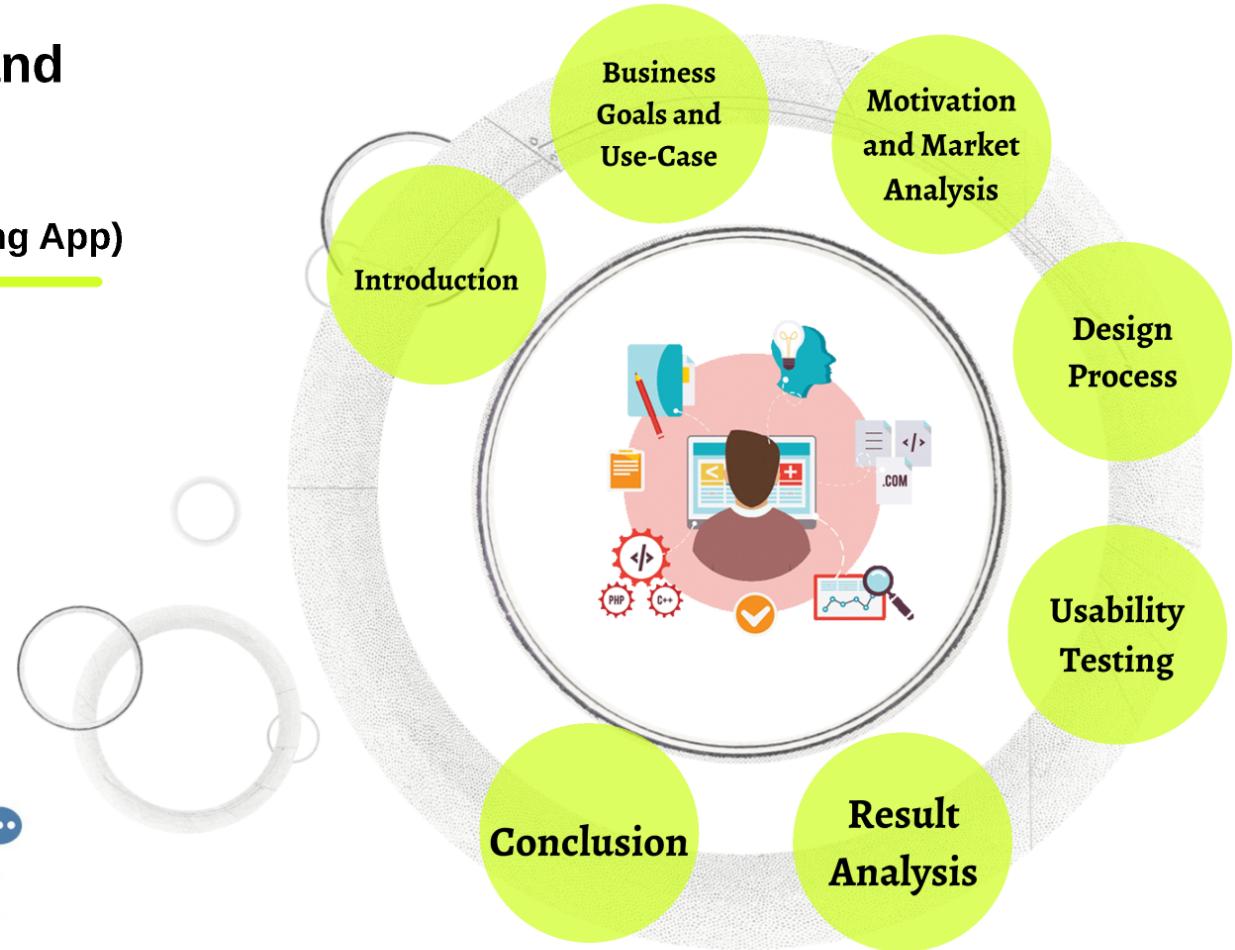
Usability Test with Prashant



Usability Testing and Verification

FASHIO (Fashion Shopping App)

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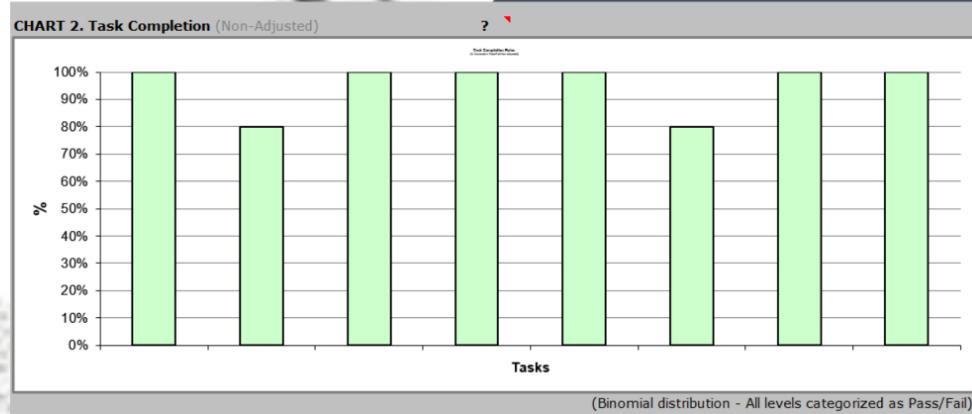
Result Analysis

Effectiveness

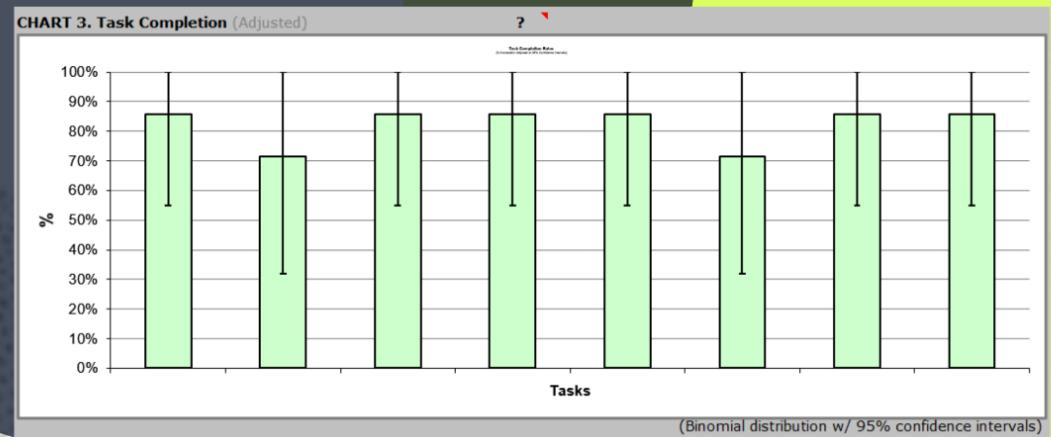
Efficiency

Satisfaction

Task Completion Rate



Binomial
Confidence
Interval



Binomial Confidence Interval

Calculated using CIC at <https://measuringu.com/wald/>

Confidence Interval Calculator for a Completion Rate

INPUT TABLE		RESULTS TABLE			
Passed	Total Tested	Confidence Intervals		Point Estimates	
<input type="text"/>	<input type="text"/>	Low	High	Margin of Error*	
<input type="button" value="Calculate"/>		<input type="radio"/> Adj. Wald	<input type="radio"/> Exact Score	<input type="radio"/> Wald	<input type="radio"/> Best Estimate
Confidence Level: <input type="text" value="95%"/>		<input type="radio"/> Using Alpha: <input type="text"/>	<input type="radio"/> MLE	<input type="radio"/> LaPlace	<input type="radio"/> Jeffrey's
Likely Population Completion Rate		<input type="radio"/> Unknown	<input type="radio"/> Wilson	<input type="radio"/>	<input type="radio"/>

User	Input Table		Results Table			
	Passed Tests	Total Tests	Confidence Intervals			
		Low	High	Marginal error	Best Estimate	
Mahesh	7	7	0.6778 (67.7%)	1(100%)	0.1829	0.8889
Aastha	6	7	0.4665 (46.6%)	0.9947(99.4%)	0.2641	0.7778
Prashant	7	7	0.6778 (67.7%)	1(100%)	0.1829	0.8889
Takeshi	6	7	0.4665 (46.6%)	0.9947(99.4%)	0.2641	0.7778
Niranjan	7	7	0.6778 (67.7%)	1(100%)	0.1829	0.8889

$$\text{Effectiveness} = \frac{\text{Number of tasks completed successfully}}{\text{Total number of tasks undertaken}} \times 100\%$$

Time Completion Rate

		TASKS								
		Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	
Users	User 1	6	10	7	7	9	4	5	3	
	User 2	7		14	7	10	6	4	6	
	User 3	7	7	8	4	4	5	6	3	
	User 4	6	10	11	8	5		3	5	
	User 5	4	9	6	5	7	5	6	3	
	Average	6	9	9	6	7	5	5	4	
		Std. Deviation	1,095	3,762	2,925	1,469	2,280	2.097	1,166	1,264
		High	8,146	16.37	14.73	8,879	11,468	9,110	7,285	6,477
		Low	3,853	1,621	3,267	3,120	2,531	0.889	2,714	1,522

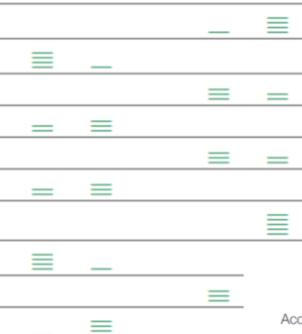
Satisfaction(System Usability Scale)

CHART 7. Satisfaction (System Usability Scale)

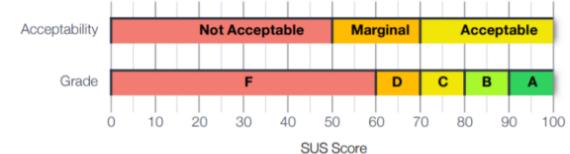
89.0 % SUS Score

System Usability Scale Histogram

	Strongly Disagree	Strongly Agree			
	1	2	3	4	5



- I think I would like to use this software product frequently.
- I found the product unnecessarily complex.
- I thought the product was easy to use.
- I think I would need Tech Support to be able to use this product.
- I found the various functions in this product were well integrated.
- I thought there was too much inconsistency in this product.
- I imagine that most people would learn to use this product very quickly.
- I found the product very cumbersome to use.
- I felt very confident using this product.
- I need to learn a lot about this product before I could effectively use it.



Based on Bangor, A., Kortum, P. & Miller, J. (2009). Determining what individual SUS scores mean: Adding an adjective rating scale. *Journal of Usability Studies*, 4 (3) 114-123.

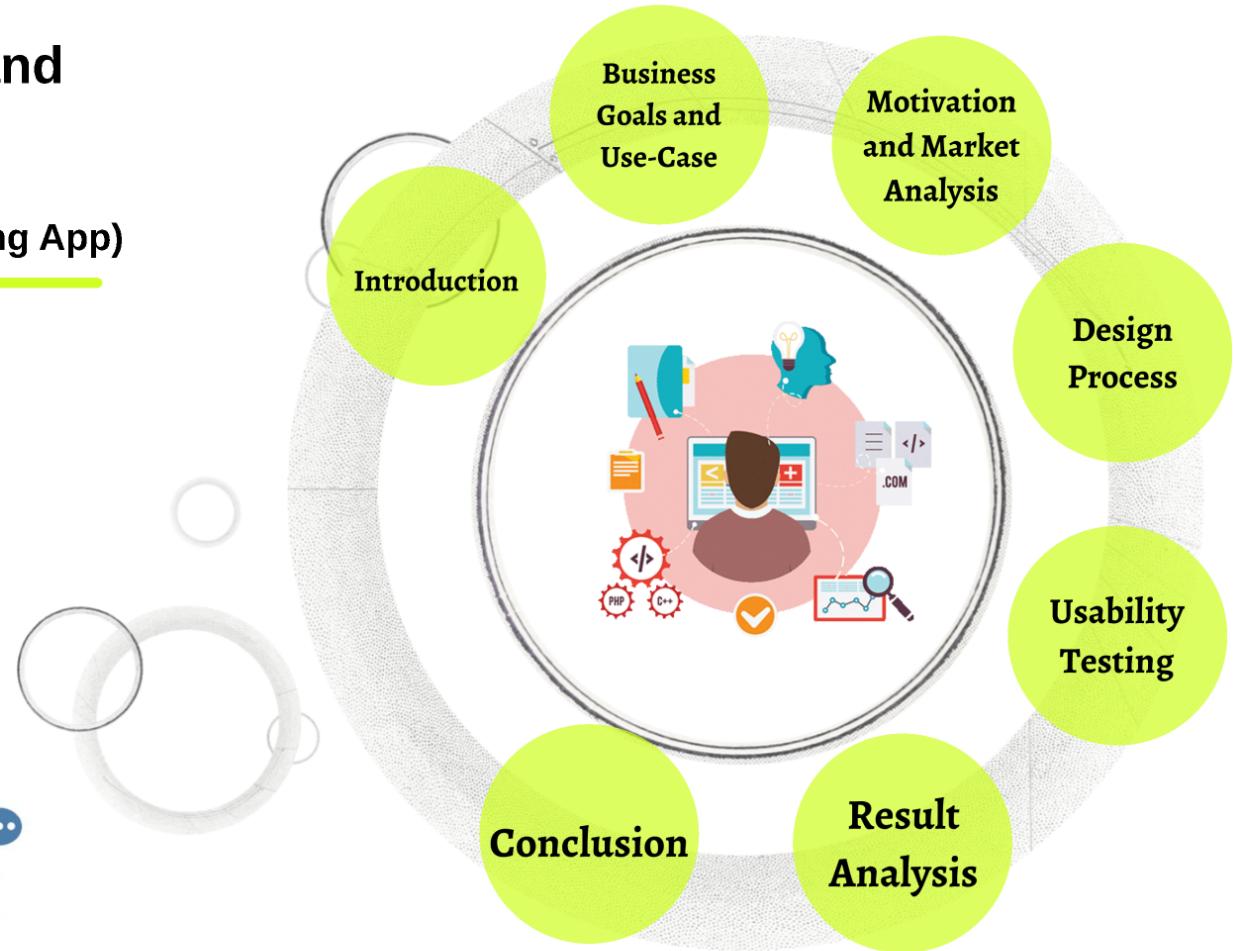
Communicating the results of a SUS score



Usability Testing and Verification

FASHIO (Fashion Shopping App)

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CONCLUSION

- 1. Development of web application using React and testing the same.**
- 2. Importance of Usability Testing in the world of User Experience**

Usability Testing and Verification

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