

Byte
by
Byte

Health and Wellness

Prosthetics are artificial devices to replace or augment a missing or impaired part of the body. Prosthetic limbs are made from plastic polymers, which bond fabric-based layers together to make a prosthesis that is strong yet lightweight. Manually made prosthetic devices may lack the accuracy of measurements in lengths and circumference. We are designing a UI/UX design of an app/software that can take accurate measurements to make prosthetics of the precise and perfect fitting.



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Members:-

**Byte By
Byte.**

**Utsav
Saurav
Aavishkhar**

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Team Roles

- Design the interface and logo and presentation

Utsav- Research about Prosthetics, AR used in Prosthetics, Types of Prosthetics and Prices of Prosthetics

- Research in Measurement apps, Name for the App,



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UI/UX design of an app/software that can
take accurate measurements to make
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- 1. Name for our website?**
- 2. What type of presentation?**
- 3. What is Byte By Byte?**



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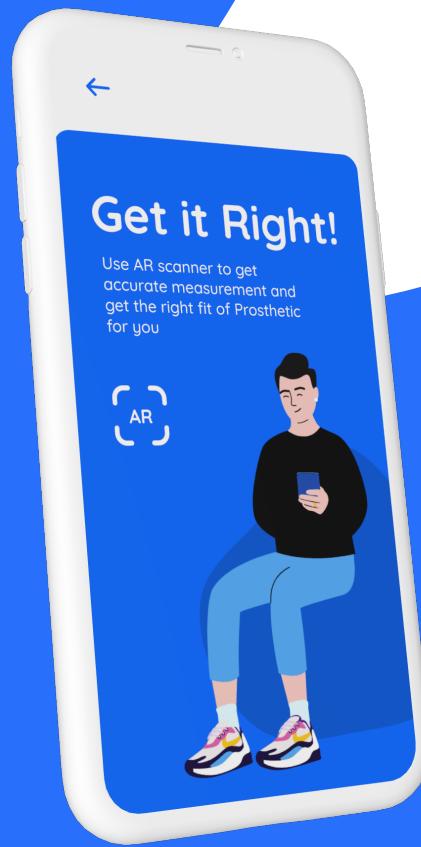
Idea/Solution



Proppy

One stop for your
Prosthetic

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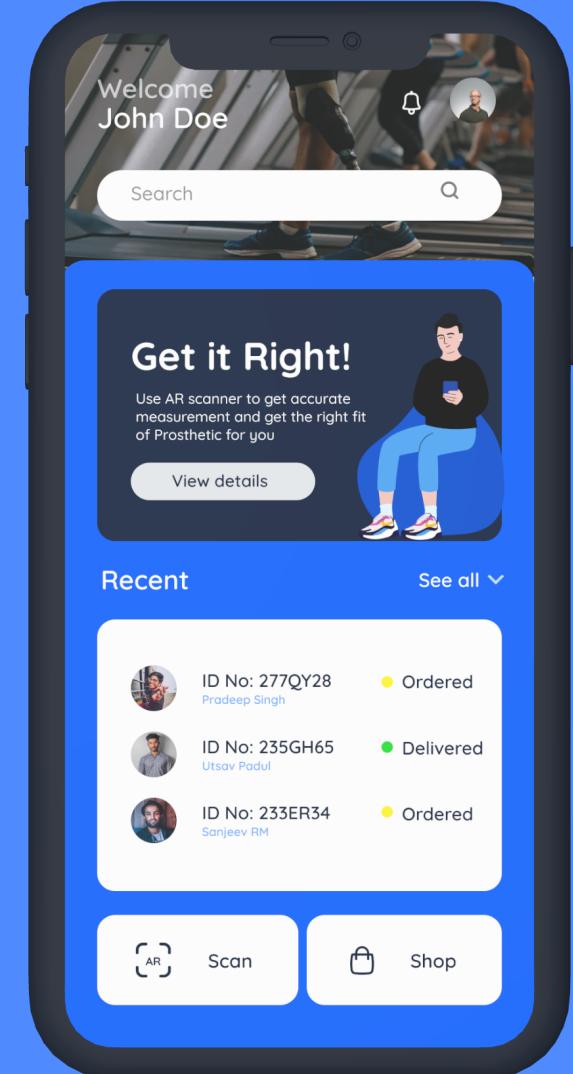
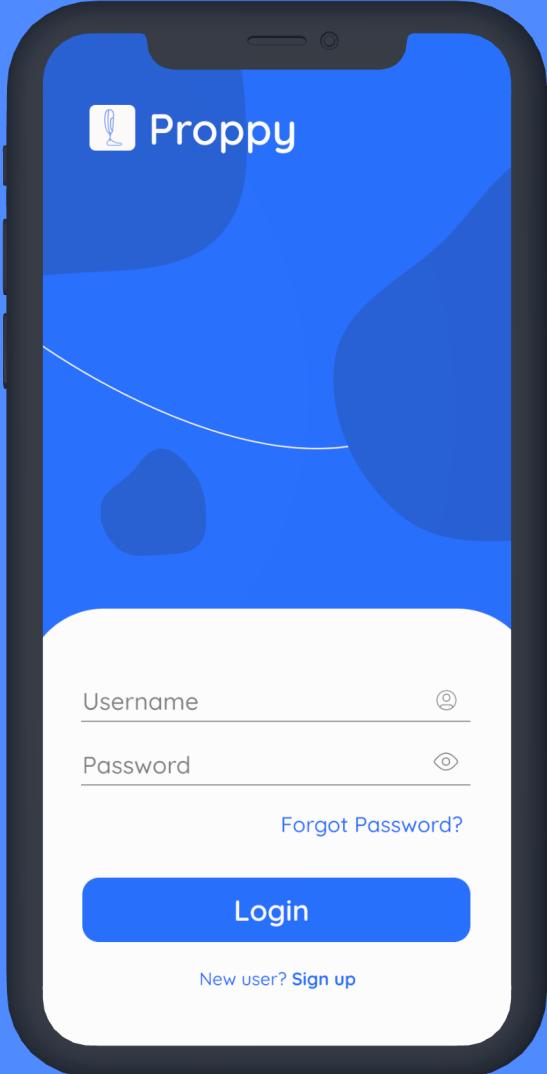
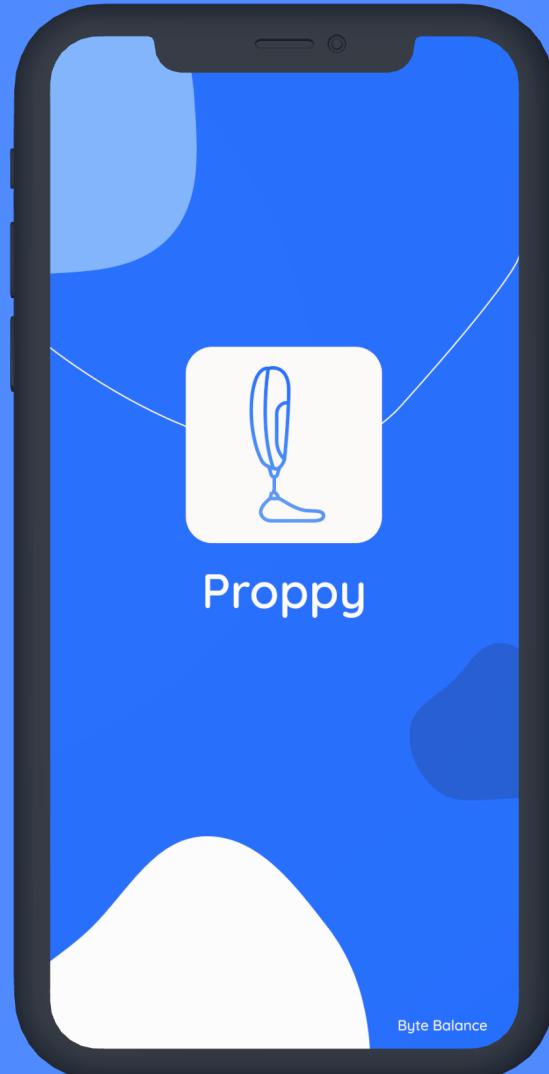




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Idea/Solution



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NAMES:

--> P² [Perfect Prosthetics]

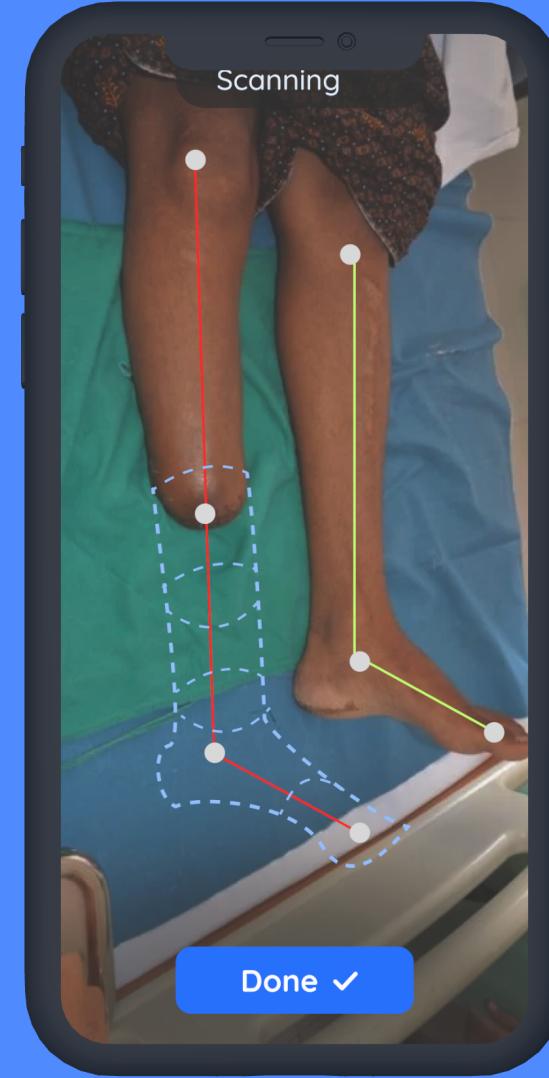
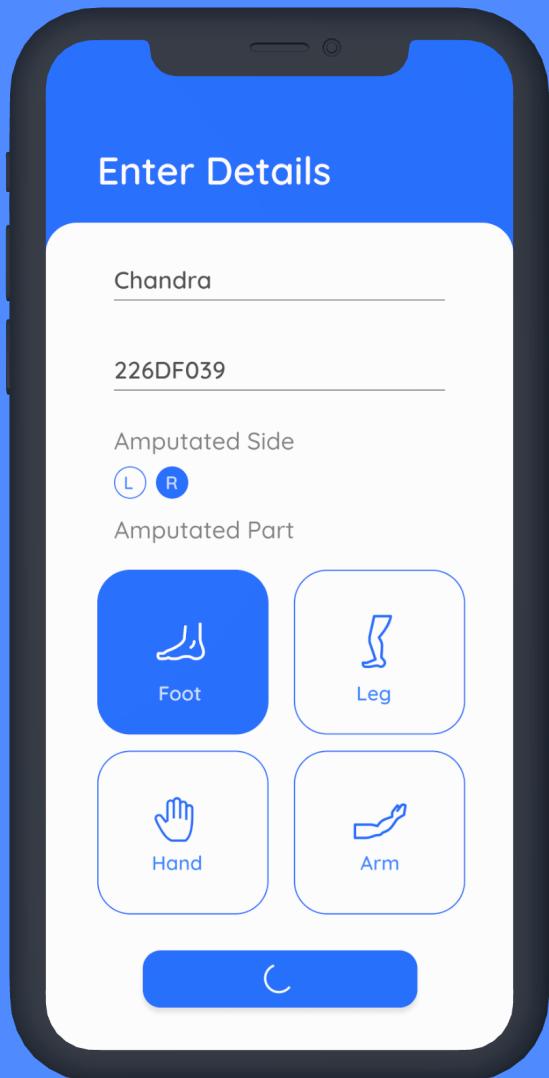
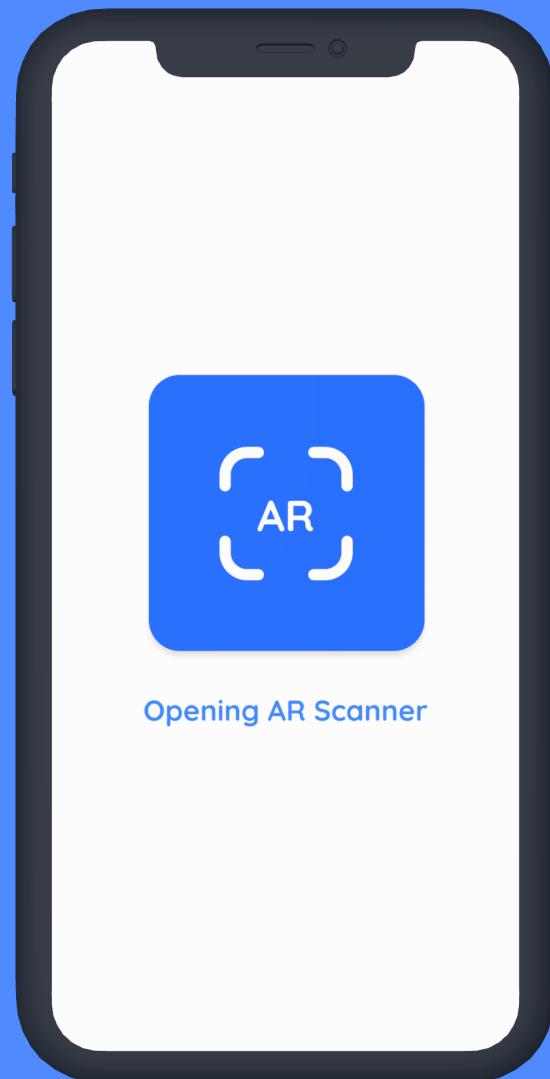
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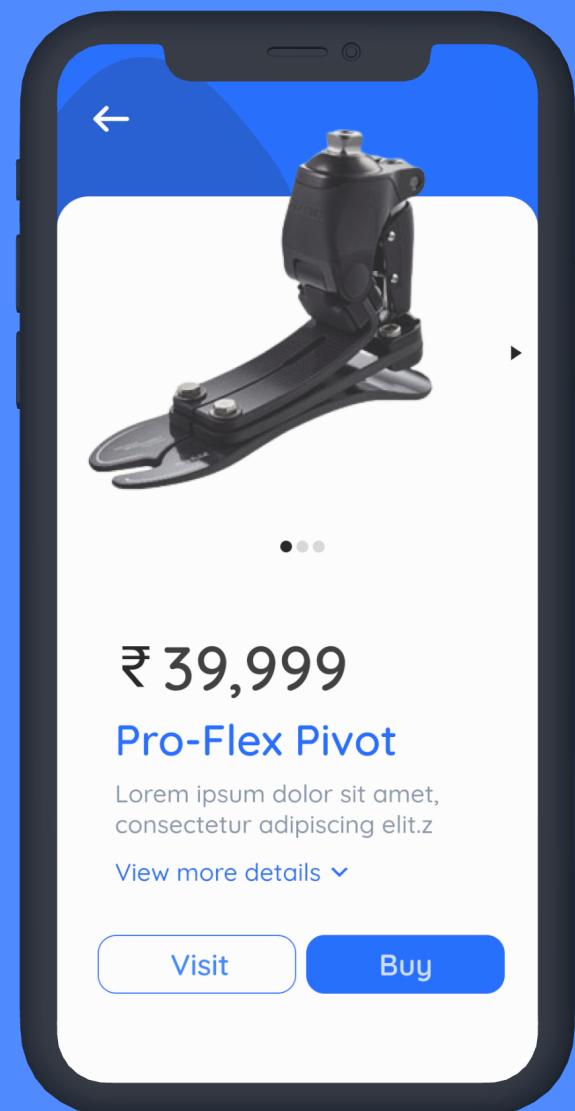
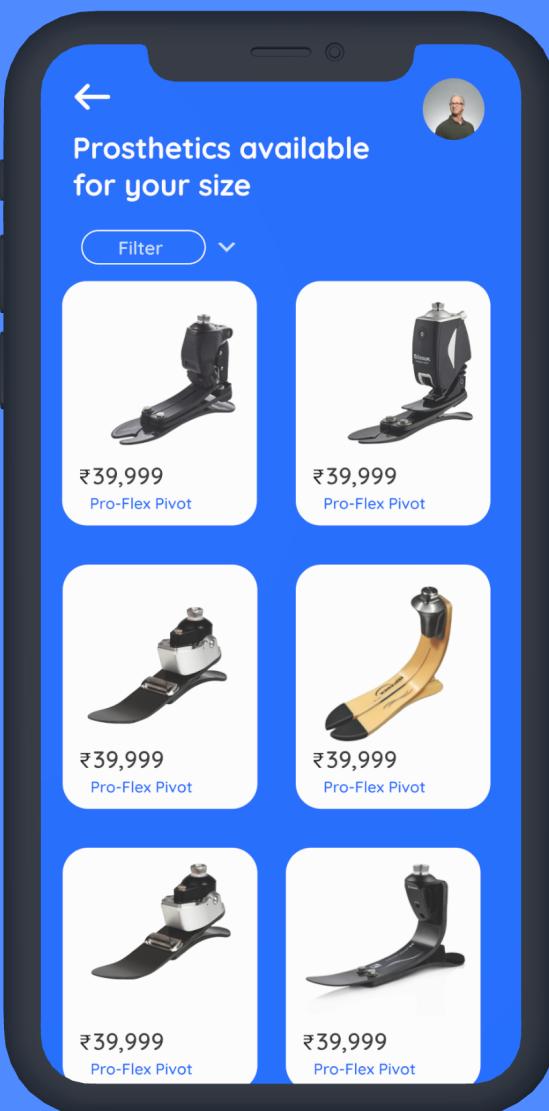
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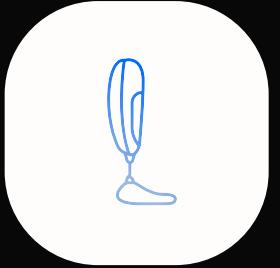


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USP

- Only app in the market like this.
- Accurate measurements.
- One-stop place for your prosthesis.
- Our app's ability to search over the internet and give the best options for our customer specially personalised for them.



Interesting facts

- 1. Prosthetic is basically a Greek word. And, if you translate it to English Language, it means 'addition'.**
- 2. 77% of all the amputation processes are performed on males.**
- 3. The average prosthesis lasts no more than 5 years. An amputee has to change it after a course of 5 years whether it is worn out or not.**
- 4. Thermoplastic prostheses are the most light-weight ones.**
- 5. Currently, there are 2.1 million people living without a limb.**
- 6. 30% of the people lose their limbs due to depression or anxiety.**



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Market Research



A faint background image shows a white car accident scene. Several people are gathered around the vehicle, which appears to be involved in a collision. A road sign is visible in the background.

20-50M

People worldwide suffer non-fatal road
injuries every year

WHO.com

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Market Research



4,21,104

road accidents in India



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Market Research



1 in 200

People lose their limb or hand



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Market Research



A photograph showing a person's hand holding a white prosthetic arm. The prosthetic arm has a dark, textured elbow joint and a light-colored, segmented forearm. The background is a soft-focus blue and white.

30M

People are in need of prosthetic devices worldwide



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Market Research



A photograph showing two people outdoors. One person in the foreground is sitting on the grass, wearing a purple hoodie and black pants, looking down at a laptop. Another person in a green shirt is visible in the background. The image serves as a background for the main text.

30%

Amputees are unsatisfied with their prosthesis



Market Research

Frequent Replacement

- Very active amputees put a lot of wear in the devices. Especially athletes.
- Children need more frequent replacements to keep pace with their growth.
- A child who is 12 years old may grow 4 inches and gain 10 kg in a year so a new prosthetic is needed.





Market Research

Market fragmentation

- There is no single or small group of companies that dominate the market.
- No company has more than 2% of the overall prosthetics market.
- So the possibilities are very high.

BMC

Partners	Key Activities	Value Proposition	Customer Relationships	Customer Segments	
<ul style="list-style-type: none"> None currently, but we plan to strategically partner with franchises of hospitals (so we could reach and help a lot of people) and Big Manufacturers of prosthetic implants 	<ul style="list-style-type: none"> Focus on online marketing campaigns Develop pricing strategies Keep developing and updating our measuring tool as advancements keep happening in this technology 	<ul style="list-style-type: none"> Accurate measurements for prosthesis Receive algorithmic recommendations Only products specialised for the amputee's need is shown This tool can be used anywhere anytime 	<ul style="list-style-type: none"> Easy navigation through the app Exceptional experience as the customer is happy when they receive their perfect prosthesis 24/7 customer care if any issues 	<ul style="list-style-type: none"> Amputees wanting perfect fitting prosthesis Amputees who are athletes Amputees who are children Hospitals Prosthetic Manufacturers Doctors with amputee patients 	
Key Resources		<ul style="list-style-type: none"> Human Resources : Software engineers, AI specialists Patent for the measuring tool Investments as the tech is expensive 		Channels	
Cost Structure		Revenue Streams			
<ul style="list-style-type: none"> Cost of AI Cost of LiDAR(expensive) Advertising and marketing costs 				<ul style="list-style-type: none"> App Store, and Play Store Doctors would be offered a subscription type of model Customers would be charged a certain amount for the purchase they make [It's not going to be much but LiDAR is expensive] 	

1. Body measurement app :
**[https://play.google.com/
store/apps/details?
id=com.bodygram.bodygra
m&hl=en&gl=US](https://play.google.com/store/apps/details?id=com.bodygram.bodygram&hl=en&gl=US)**

**2. We could use the same
method to get the
measurements.**



Technology Stack

- Utility :
 - Python [AI]
 - Opencv
 - Open3d
 - C#, C++ [AR]
 - Spark AR
- App Development :
 - Java (android)
 - Koitlin (android)
 - Swift (iOS)
 - Flutter(cross-platform)
 - React-Native
- Design :
 - Figma
- Github
- LiDAR sensors
- AR and AI



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Future Prospect

- As we move forward in the future the LiDAR technology will become better day by day
- With new updates to the AI in the app, it will provide better recommendation.
- There's over 1.38B smartphone users in India
- There's over 500,000 Amputees and 25,000 people gets added every year in India



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Thank You for
watching

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