# o o o t

#### INTRO

# The session will be broken up into 5 parts:

- 1. Your physical therapy experience
- 2. Introducing concepts
- 3. Concept analysis
- 4. Introducing technology
- 5. Technology analysis

# Things to keep in mind:

- There are no right or wrong answers.
- You are evaluating these concepts to help me improve them so both positive & negative feedback is welcome.
- Ask questions!

INTRO

Concepts shown in this survey are focusing on at home physical therapy for below knee amputee patients.

PART 1

# YOUR EXPERIENCE

Tell me your story.

If you could describe your recovery journey in one word, what would it be?

Enter text here...

PART 2

# **INTRODUCING CONCEPTS**

The images shown in this phase are concepts exploring at home physical therapy for below knee amputees.

This concept includes a pressure sensitive board to stand on, along with digital pucks. The pucks light up, signifying which one to tap. They can be arranged in multiple ways.

#### **QUESTIONS**

# Ease of use & learnability:

Describe what you see here.

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

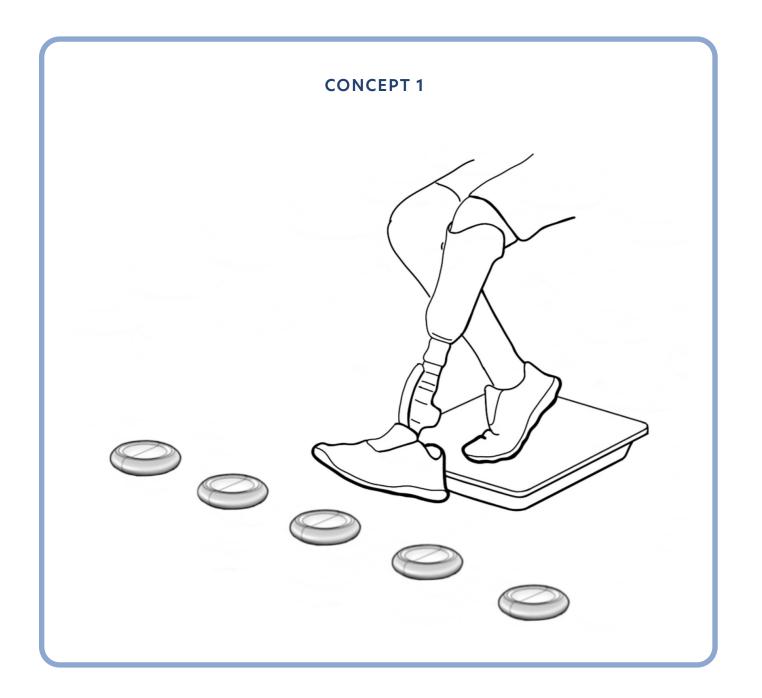
On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

# **Desirability & Benefits:**

Where would you envision this existing in your home?

How might this have helped you in your recovery goals/process?

What changes would you make to improve it?



This concept includes a series of small projectors which project light on the ground. The projected light acts as the obstacle.

#### **QUESTIONS**

# Ease of use & learnability:

Describe what you see here.

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

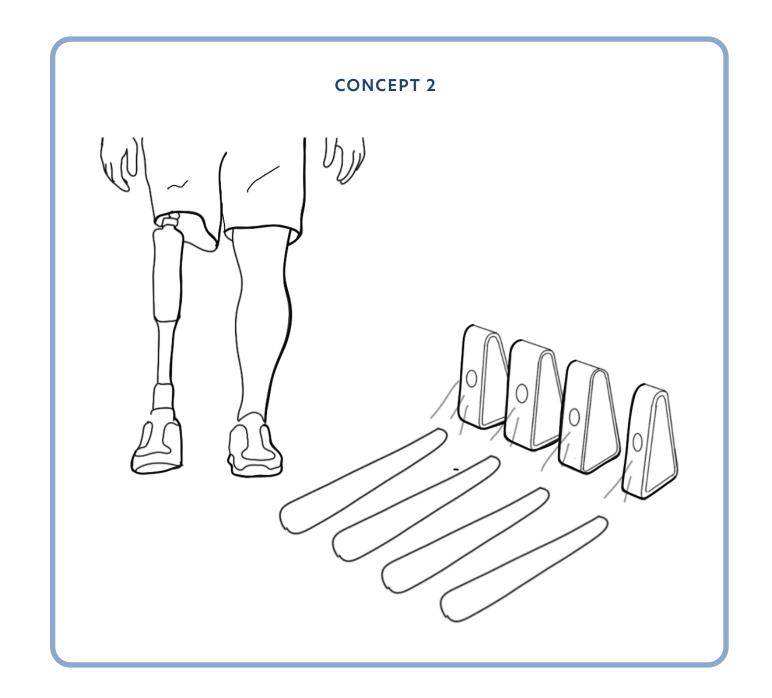
On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

# **Desirability & Benefits:**

Where would you envision this existing in your home?

How might this have helped you in your recovery goals/process?

What changes would you make to improve it?



This concept includes a motion tracking camera installed above a mirror, along with pressure sensitive pads. The pads measure imbalances in pressure as the patient does exercises.

#### **QUESTIONS**

# Ease of use & learnability:

Describe what you see here.

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

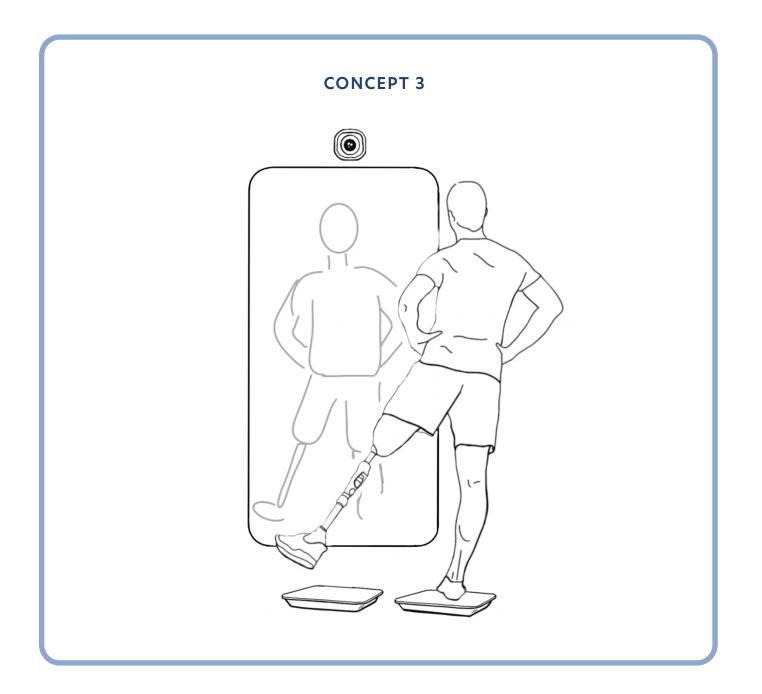
On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

# **Desirability & Benefits:**

Where would you envision this existing in your home?

How might this have helped you in your recovery goals/process?

What changes would you make to improve it?



This concept includes a smart mirror along with a pressure sensitive mat. The mirror can track movements and guide the user through exercies, while the mat measures pressure imbalances.

#### **QUESTIONS**

# Ease of use & learnability:

Describe what you see here.

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

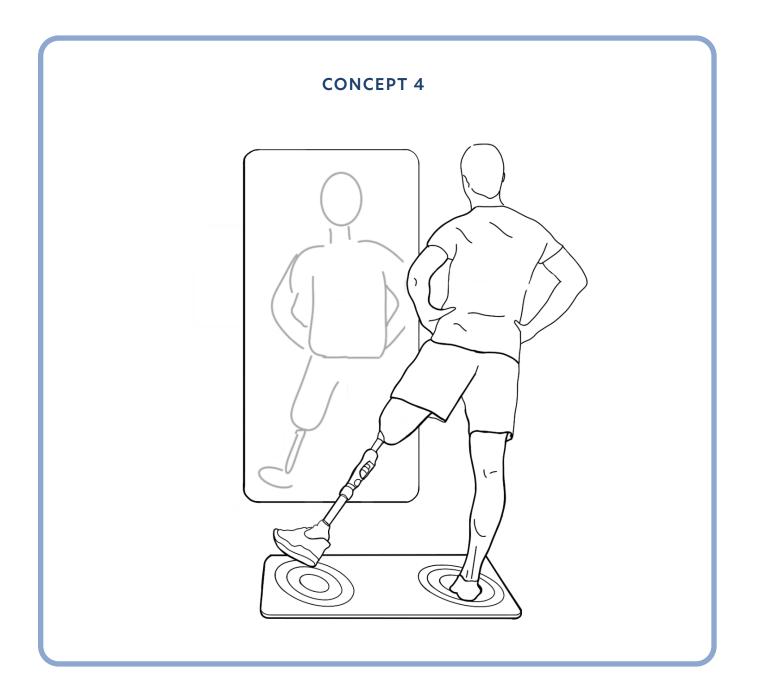
On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

# **Desirability & Benefits:**

Where would you envision this existing in your home?

How might this have helped you in your recovery goals/process?

What changes would you make to improve it?



This concept includes a series of pucks arranged on a mat. The pucks light up signalling to the user to move to tap it. The pucks initiate different movements & practicing changing direction unexpectedly.

#### **QUESTIONS**

# Ease of use & learnability:

Describe what you see here.

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

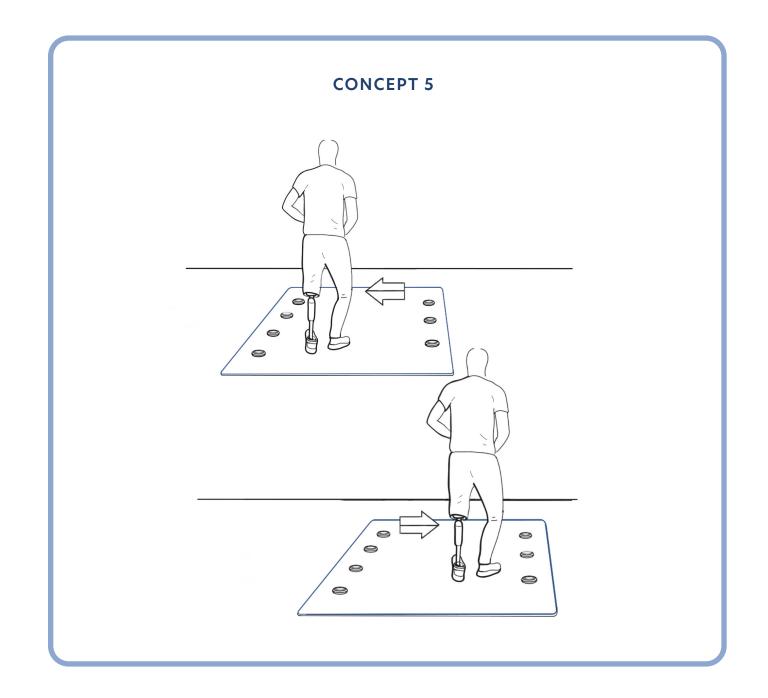
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# **Desirability & Benefits:**

Where would you envision this existing in your home?

How might this have helped you in your recovery goals/process?

What changes would you make to improve it?



This concept includes wearable motion tracking sensors used in conjunction with a smart tablet. The tablet tracks the user as they perform exercises, allowing the user to review their form afterwards.

#### **QUESTIONS**

# Ease of use & learnability:

Describe what you see here.

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

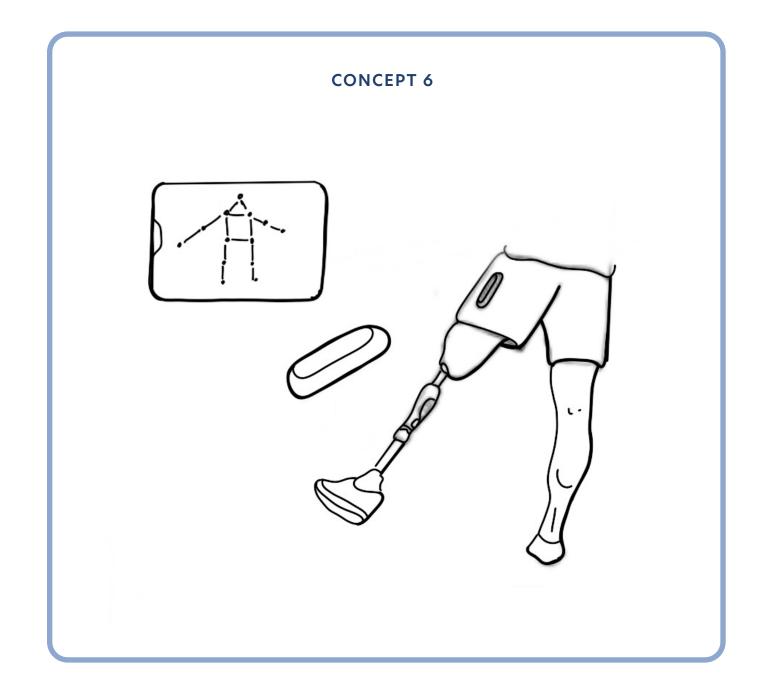
On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

# **Desirability & Benefits:**

Where would you envision this existing in your home?

How might this have helped you in your recovery goals/process?

What changes would you make to improve it?



PART 3

# **CONCEPT ANALYSIS**

This portion will take you through a series of sorting activities in order to understand your preferences & priorities.

## RANK IN TERMS OF IMPORTANCE TO YOU

1

2

3

4

5

6

7

**BALANCE** 

**MOTIVATION** 

**STRENGTH** 

**AGILITY** 

**RANGE OF MOTION** 

**ALIGNMENT** 

**CONFIDENCE** 

#### MATCH WORDS WITH RELEVANT IMAGES

**BALANCE** 

**MOTIVATION** 

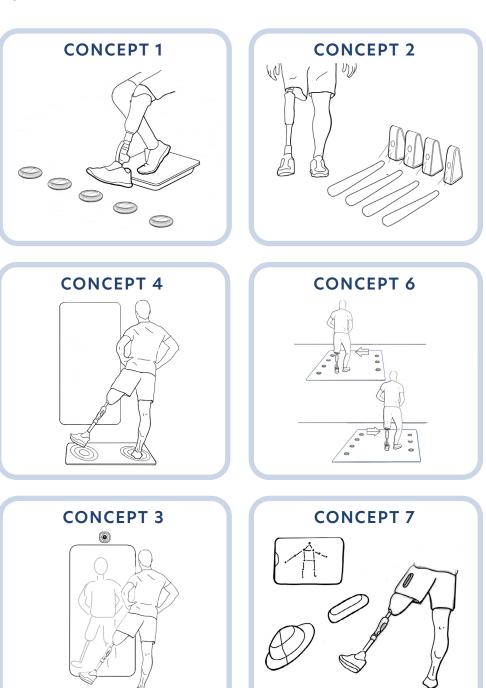
**STRENGTH** 

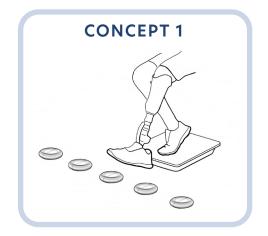
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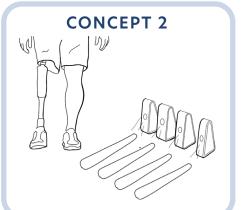
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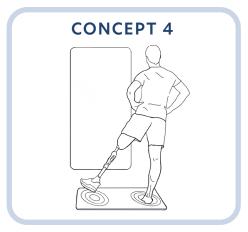
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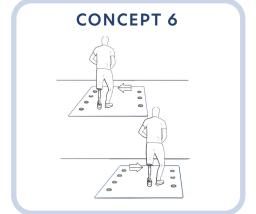
**CONFIDENCE** 

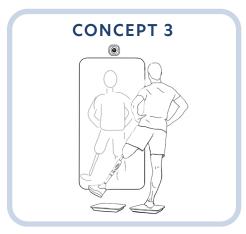


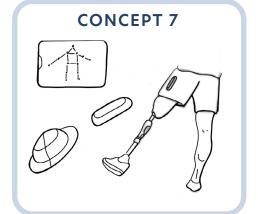


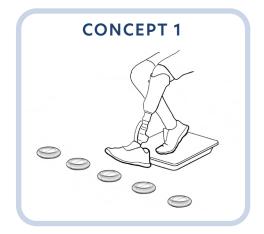


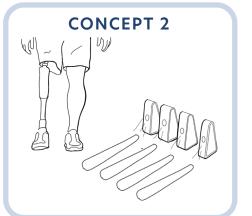


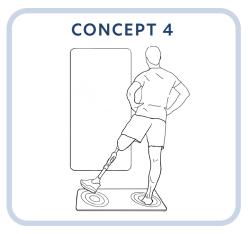


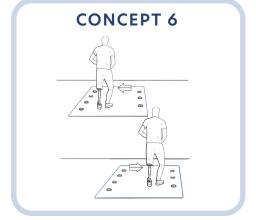


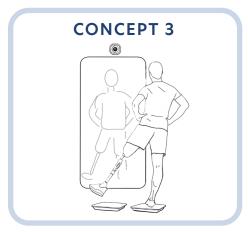


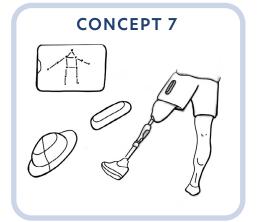












# **INTRODUCING TECHNOLOGY**

This portion will take you through different types of technology to understand your view of it along with its' viability.

Are you familiar with this device?

# If yes:

- Do you own or currently use one?
- Why do you use it?
- What does it help you do?

## If no:

- Why not?

How do you think this device might affect the concepts we discussed earlier?



Are you familiar with this device?

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- Why do you use it?
- What does it help you do?

## If no:

- Why not?

How do you think this device might affect the concepts we discussed earlier?



PART 5

# **TECHNOLOGY ANALYSIS**

This portion will take you through a series of sorting activities in order to understand your preferences & priorities.

# RANK IN TERMS OF IMPORTANCE TO YOU

**VISUAL MOTIVATIONAL VERSATILE IMMERSIVE ACCESSIBLE RELIABLE** 

#### MATCH WORDS WITH RELEVANT IMAGES

**VISUAL** 

MOTIVATIONAL

**VERSATILE** 

**IMMERSIVE** 

**ACCESSIBLE** 

**RELIABLE** 



























#### INTRO

# The session will be broken up into 5 parts:

- 1. Getting to know you
- 2. Introducing concepts
- 3. Concept analysis
- 4. Introducing technology
- 5. Technology analysis

# Things to keep in mind:

- There are no right or wrong answers.
- You are evaluating these concepts to help me improve them so both positive & negative feedback is welcome.
- Ask questions!

INTRO

Concepts shown in this survey are focusing on at home physical therapy for below knee amputee patients.

PART 1

# YOUR EXPERIENCE

What types of patients do you most commonly work with?

Is there an area you would consider your specialty?

Have you ever worked with amputees?

PART 2

# **INTRODUCING CONCEPTS**

The images shown in this phase are concepts exploring at home physical therapy for below knee amputees.

This concept includes a pressure sensitive board to stand on, along with digital pucks. The pucks light up, signifying which one to tap. They can be arranged in multiple ways.

#### **QUESTIONS**

## Ease of use & learnability:

Describe what you see here.

When working with amputee patients:

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

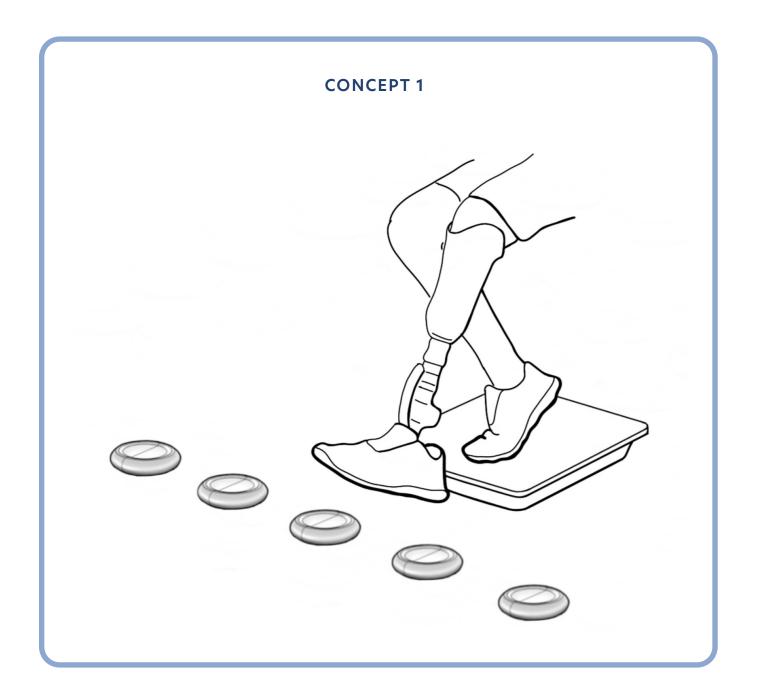
On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

## **Desirability & Benefits:**

Where would you envision this existing in an amputee's home?

In your clinic, how might this have helped an amputee patient with their recovery?

What changes would you make to improve it?



This concept includes a series of small projectors which project light on the ground. The projected light acts as the obstacle.

#### **QUESTIONS**

## Ease of use & learnability:

Describe what you see here.

When working with amputee patients:

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How would you expect to control it?

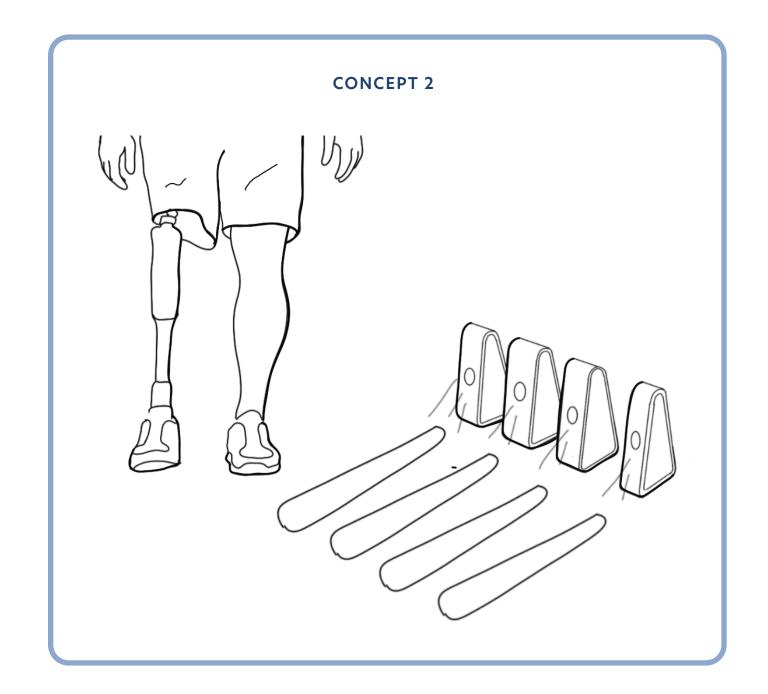
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What changes would you make to improve it?



This concept includes a motion tracking camera installed above a mirror, along with pressure sensitive pads. The pads measure imbalances in pressure as the patient does exercises.

#### **QUESTIONS**

## Ease of use & learnability:

Describe what you see here.

When working with amputee patients:

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How would you expect to interact with it?

How would you expect to control it?

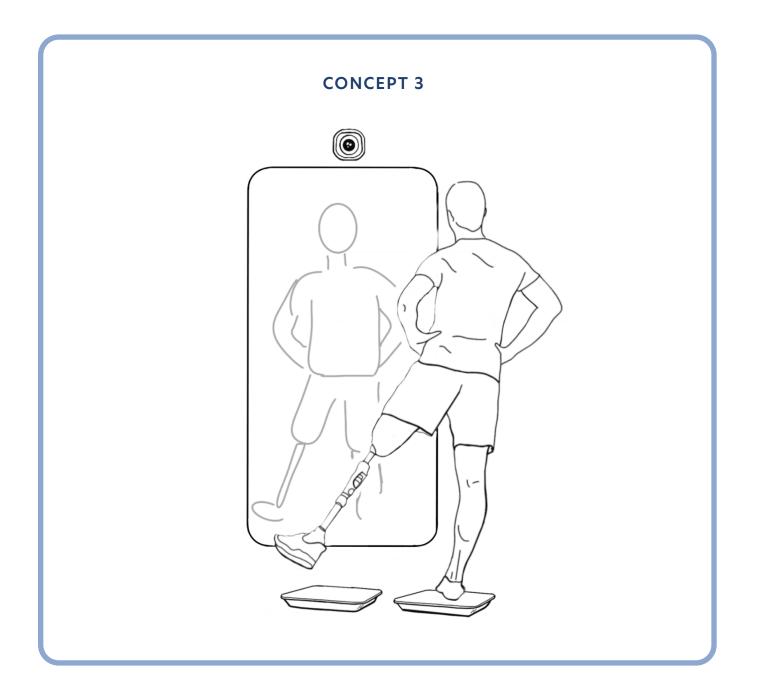
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Where would you envision this existing in an amputee's home?

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What changes would you make to improve it?



This concept includes a smart mirror along with a pressure sensitive mat. The mirror can track movements and guide the user through exercies, while the mat measures pressure imbalances.

#### **QUESTIONS**

## Ease of use & learnability:

Describe what you see here.

When working with amputee patients:

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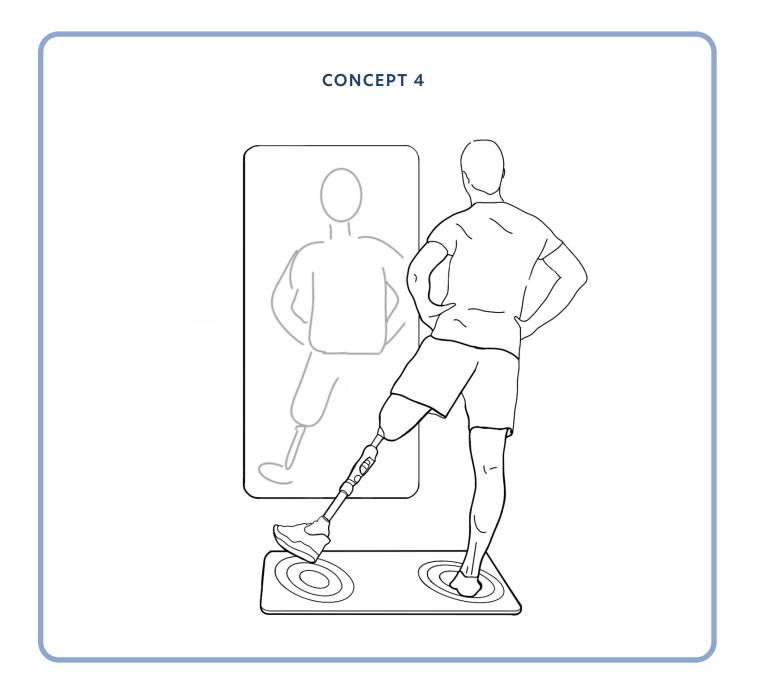
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# **Desirability & Benefits:**

Where would you envision this existing in an amputee's home?

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What changes would you make to improve it?



#### **CONCEPT DESCRIPTION**

This concept includes a series of pucks arranged on a mat. The pucks light up signalling to the user to move to tap it. The pucks initiate different movements & practicing changing direction unexpectedly.

#### **QUESTIONS**

## Ease of use & learnability:

Describe what you see here.

When working with amputee patients:

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

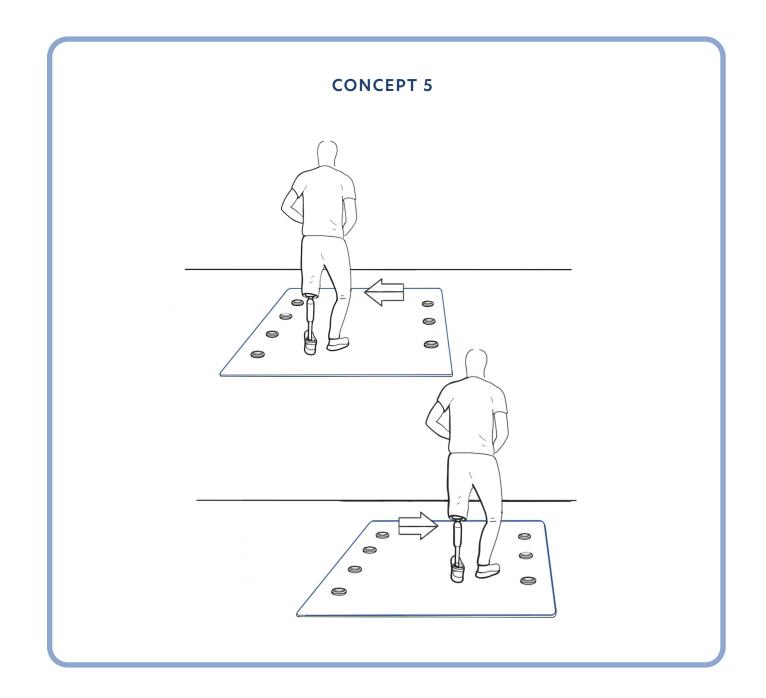
## **Desirability & Benefits:**

Where would you envision this existing in an amputee's home?

In your clinic, how might this have helped an amputee patient with their recovery?

What changes would you make to improve it?

How does this compare to other PT exercises/devices you have used?



#### **CONCEPT DESCRIPTION**

This concept includes wearable motion tracking sensors used in conjunction with a smart tablet. The tablet tracks the user as they perform exercises, allowing the user to review their form afterwards.

#### **QUESTIONS**

## Ease of use & learnability:

Describe what you see here.

When working with amputee patients:

How would you expect to set this up?

How would you expect to interact with it?

How would you expect to control it?

On a scale of 1-7, with 7 being the best, how would you rate the expected setup experience?

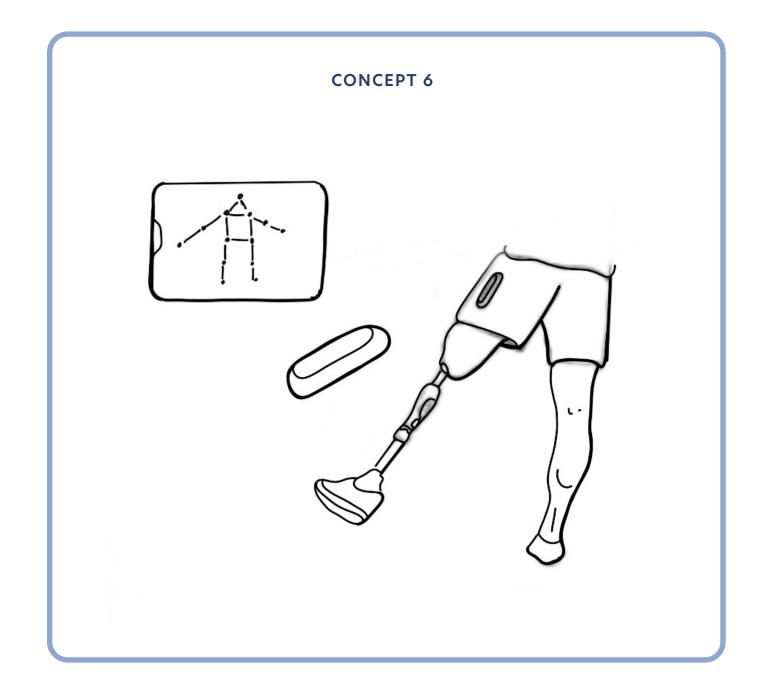
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PART 3

## **CONCEPT ANALYSIS**

This portion will take you through a series of sorting activities in order to understand your preferences & priorities.

## RANK IN TERMS OF IMPORTANCE TO YOU

1

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**BALANCE** 

**MOTIVATION** 

**STRENGTH** 

**AGILITY** 

**RANGE OF MOTION** 

**ALIGNMENT** 

**CONFIDENCE** 

#### MATCH WORDS WITH RELEVANT IMAGES

**BALANCE** 

**MOTIVATION** 

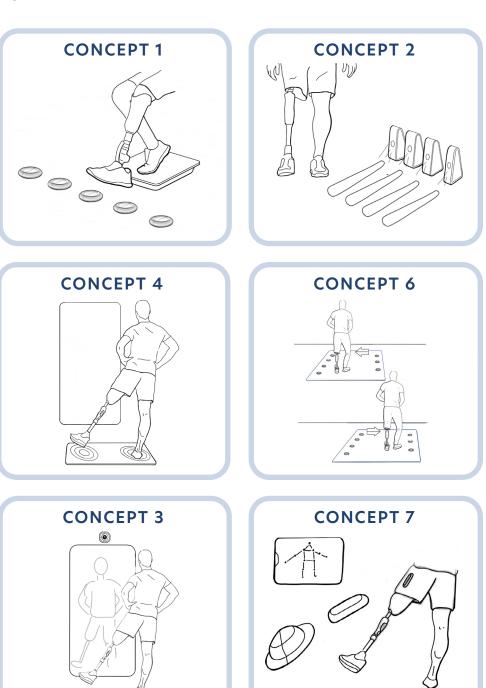
**STRENGTH** 

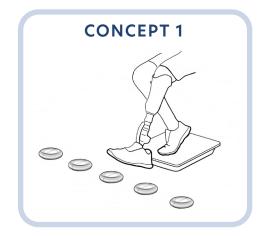
**AGILITY** 

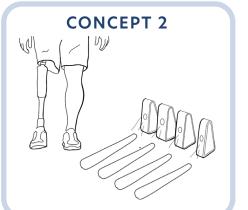
**RANGE OF MOTION** 

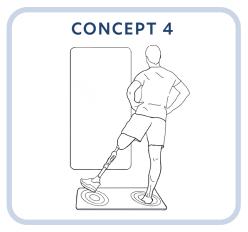
**ALIGNMENT** 

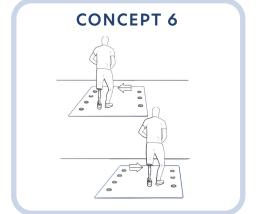
**CONFIDENCE** 

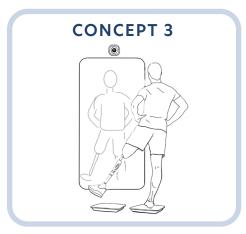


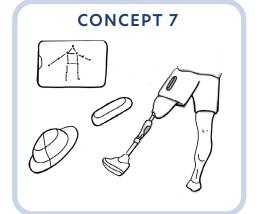


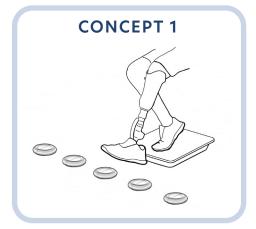


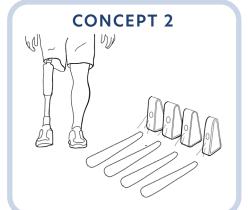


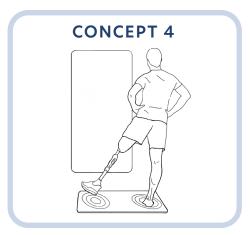


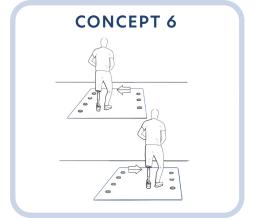


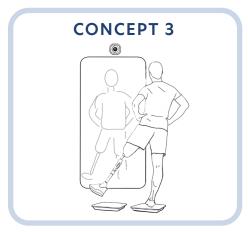














## **INTRODUCING TECHNOLOGY**

This portion will take you through different types of technology to understand your view of it along with its' viability.

Are you familiar with this device?

# If yes:

- Do you own or currently use one?
- Why do you use it?
- What does it help you do?

## If no:

- Why not?

How do you think this device might affect the concepts we discussed earlier?



Are you familiar with this device?

# If yes:

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- Why do you use it?
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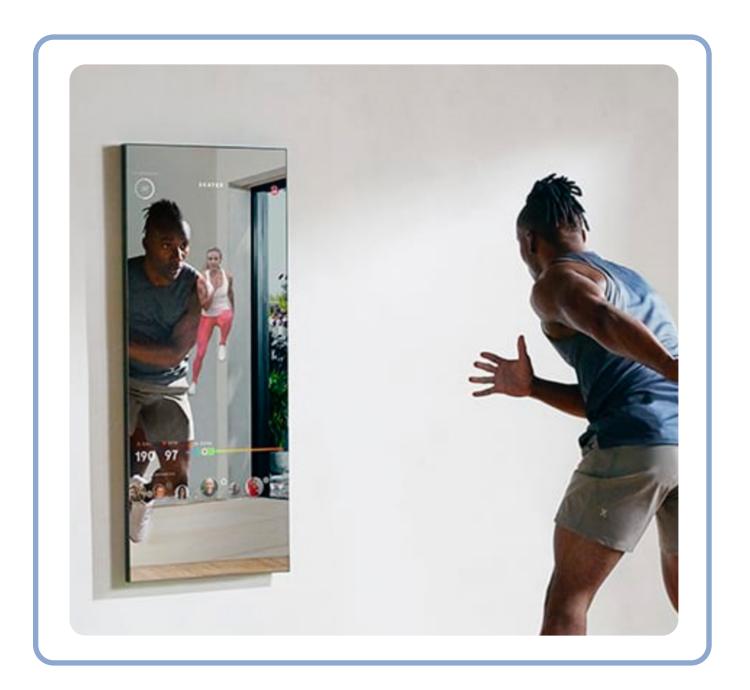
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How do you think this device might affect the concepts we discussed earlier?



PART 5

## **TECHNOLOGY ANALYSIS**

This portion will take you through a series of sorting activities in order to understand your preferences & priorities.

## RANK IN TERMS OF IMPORTANCE TO YOU

**VISUAL MOTIVATIONAL VERSATILE IMMERSIVE ACCESSIBLE RELIABLE** 

#### MATCH WORDS WITH RELEVANT IMAGES

**VISUAL** 

**MOTIVATIONAL** 

**VERSATILE** 

**IMMERSIVE** 

**ACCESSIBLE** 

**RELIABLE** 















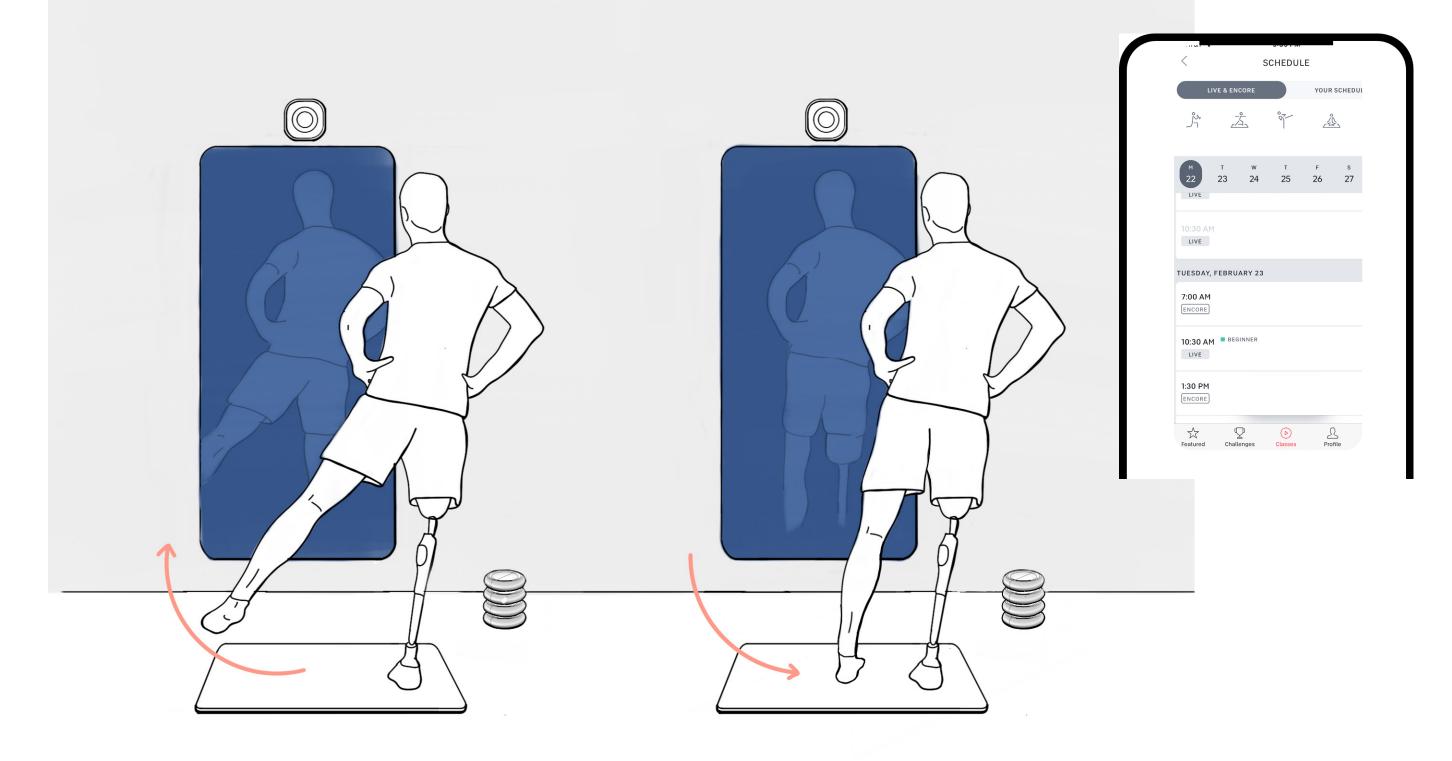












thank you