



Peoria High School

# NEDC/Mobile App Creation

Designing for Equity in Our Community

## Pocket PT

Marina Lemus & Aiden Rodriguez



### Problem Statement

More than 20 million people are injured in auto accidents yearly, which are the most common personal injury accidents with the highest amount of direct medical costs, including physical therapy.

### Objective

- Reduce the cost of rehabilitation
- Create a safe and accommodating experience
- Contact certified physical therapists to deliver the absolute best results
- Nutritional help for the maximum recovery
- Facilitate personal recovery

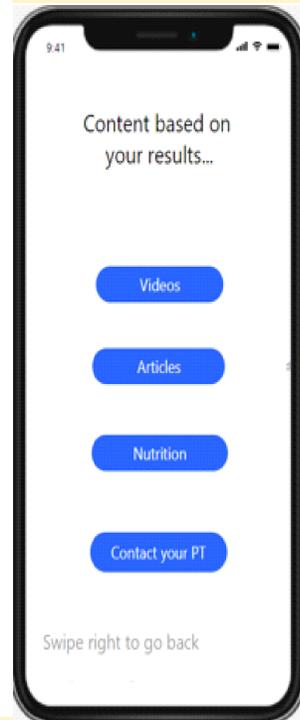
### User Requirements

- |   |  |
|---|--|
| Implicit:   | Explicit:  |
| <ul style="list-style-type: none"> <li>• Smartphone</li> <li>• Internet access</li> <li>• Room to move</li> </ul> | <ul style="list-style-type: none"> <li>• Physical assistance</li> <li>• Dexterity</li> <li>• Professional diagnosis</li> </ul> |

### Testing Process

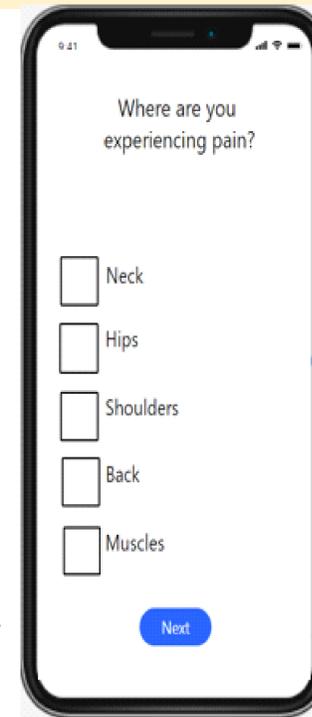
- Classmates tested the app
- Tested by a physical therapist & gave suggestions
- Tested by real patients in need of physical therapy

### Prototype Graphic & Details



One of three check-in screen in which user checks off where, how and how bad the pain feels

The best solutions and suggestions of articles and videos that show up on this screen

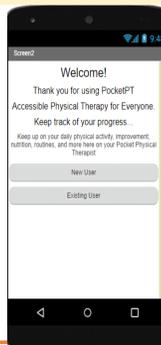


### Visual Data 1 (Out of 10)

User	Usability	Satisfaction	Encouragement	Effectiveness
Tester 1	7	8	5	8
Tester 2	8	8	6	7
Tester 3	9	7	7	9
Tester 4	9.5	9	6	8

### Design Process

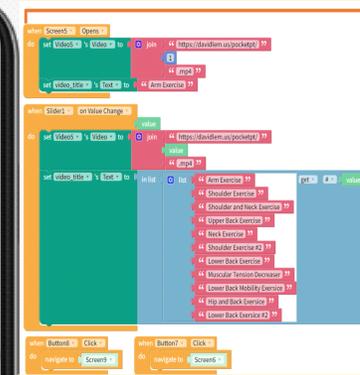
We began designing the app on MIT App Inventor



### Design Iteration

After we realized we couldn't test the app progress on our phones, we began designing and programming on thinkable.com

### Source Code



The code on display is the code that made it possible for us to integrate the videos we made into the app

### Visual Data 2



### Results

- |   |  |
|---|--|
| <ul style="list-style-type: none"> <li>• Easy to use</li> <li>• Helpful tools</li> <li>• Assistance provided</li> <li>• User felt more independent</li> </ul> | <ul style="list-style-type: none"> <li>• Steady progress</li> <li>• Self-Paced</li> <li>• Accessible anywhere</li> </ul> |
|---|--|

### Conclusion

The progress we have made is motivating us for further projects. There is room for us to grow and learn. As the next few weeks approach, we hope to make a fully operational, effective PT app this is easy to use, encouraging, and reliable.