

## Appendix

### Design Brief Template Sample: Part 1

(NOTE: Completion is required via template, this is for reference)

School: Peoria High School

State: Arizona

Division:  Middle School  High School

Team Members: Aiden Rodriguez and Marina Lemus



**Project Title:** Readers should have a glimpse at what the project is about and want to read more. (25 word maximum)

Pocket Physical Therapy (Pocket PT)  
Accessible Physical Therapy For Everyone

**Project Purpose:** In one or two sentences explain what this project intends to do. (50 word maximum)

Our purpose is to design a mobile phone app that includes coding to solve a problem in our community. Goals we have in mind are "ensure healthy lives and promote well-being for all ages." Using our PT app.

**Abstract:** Briefly describe the people who will benefit from the project and the challenges they face. Include any inequity that the project hopes to address. (100 Words Maximum)

People who have suffered severe motor accidents that have trouble paying for rehabilitation through physical therapy. Our intended users who suffered a motor accident may have to pay large amount of medical bills with the addition of paying for the physical therapy sessions and insurance coverage. Our solution is to create an easy to use, effective app that will guide you through the process of helping yourself recover at home through advice and exercises made by the help of real physical therapists

**User Research:** Discuss key information about the users gathered through your research, interviews, and ongoing discussion with the user throughout the project. What did you learn about the user and the barriers they face? (200 word maximum)

We asked people via online polls surveys "People who suffered severe car accidents, what is your story, and did you need rehabilitation?" and "People who needed physical therapy from a severe car accident, was it worth it and why?" Through the results and responses, users are very fond of physical therapy but not of the extreme cost especially without insurance. Most users claimed that physical therapy is essential for a proper recovery but too expensive without proper healthcare. We interviewed real physical therapists what is needed to fully help our user. Answers included "user feedback is a must" and "safety is number one priority."

**User Insight:** Discuss your team's understanding of the experiences, emotions, and motivations of the users. This insight should inform the rest of the project and help the reader have a deeper understanding of the inequity of the user. What did you learn about how the barriers affect the user? (200 word maximum)

Through our understanding, physical therapy after motor accidents is needed but can be costly. Ranging from \$30 to hundreds of dollars per session depending on your healthcare. Having an app to help users rehabilitate themselves affordably will be favored. As one of our team members has recently been in a major motor accident we can understand how frustrating and difficult it can be finding the motivation, time, strength to attend the therapy sessions in person so we try to accommodate the solutions to those problems the best we can. Users also show a strong desire to gain the same mobility they once had before the accident, we will make this a main goal in our development in the near future.

**User Needs:** Develop a specific list of the user's needs produced from the user insight. What does the user want to help them with the barrier? (100 word maximum)

User will need to/have

- Gain mobility equal to or close to before a severe car accident.
- Free access to PT info and nutritional advice.
- Less pain from movement related injuries.
- Have an affordable and effective alternative to physical therapy
- A time effective alternative in case user cannot make time for in person sessions

**Project Goals:** List project goals and describe how they are linked to and will adequately meet the user's needs and address inequities and/or barriers faced by the user. What do you want the project to do to help the user? (100 word maximum)

- Make a free app that gives PT information
- Give useful nutritional through professional advice
- Get feedback from real physical therapists and their insight on our design and process
- Have multiple users test and judge the app and find it effective enough to use
- Market the app as a real tool that can be used by people who genuinely need help by promoting to real physical therapists than can recommend the app to their patients.
- Make a user-friendly interface that is easy to understand
- Implement effective guides and tutorials to best help the user such as videos and instructions.

**Key Features of Design:** List key features, illustrating that the design will adequately meet project goals. How will the project help the user? (200 word maximum)

Customizable routines depending on what user needs

- Videos on routines demonstrated by practicing physical therapists.
- Extra information via articles recommended by real physical therapists
- Nutrition articles recommended by real physical therapists
- Easy to use and simple design (Simple layout and emphasizes the key features.)
- Easy contact towards physical therapists to let the users' voice be heard in case there are any questions or concerns

**Impact:** Discuss how design addresses inequities for the user and/or removes barriers. Input from users should be included. Does the project help the user? How? (200 word maximum)

- Our project challenges costly medical bills and insurance costs by giving the user a free, helpful, and safe alternative to physical therapy potentially savings hundreds.
- Challenges the anxiety users may face when needing real physical therapy such as being uncertain what may happen.
- This helps the user by showing how real physical therapy may go.
- Our project also gives access to ask any questions the users may need.
- May help the user's flexibility/mobility enough for them to go to in person sessions.

**Status of Project:** Describe the current status of the project, including feedback from users, and discuss potential next steps. What does the project do now? What would you like to work on in the future? (200 word maximum)

Our app has come a long way starting from using programs that didn't work and offered limited design options to having a functional app that does its job. Things we still need to include to fulfill our goals:

- Make it look better design wise.
- Ease of use for navigation throughout the app.
- Code multiple Booleans to ensure no bugs or confusing actions happen.
- Easier way of contacting real physical therapists.
- Make our "new and existing user" fully functional.
- Put better articles and advice in their respective tabs (Nutritional, exercise information).

**Reflection:** Show that the team has an increased understanding of human-centered design. Examples of personal growth and insights gained about designing for others and helping them overcome challenges should also be included. What did you learn during this project? (200 word maximum)

Overall, this project has been challenging and eye opening. Our goal is to truly help those in this crazy economy we have now but there have been many obstacles. Of course, we are not registered to give out physical therapy advice to those who genuinely need help, so we went out of our way to contact physical therapists for their help and input. It was crazy to find out how needed something like our project was in that field. Medical costs are INSANELY high in this country and the professionals we've worked with agree as well. Physical therapists and the judges loved this idea and say it should be an actual app, so we have determination to make this a real tool Overall we love this project and how it can be difficult but worth it to help others. Going into the future, were glad that this project made us better designers, researchers, and problem solvers for our future endeavors.

**Prototype Graphic:** A single graphic with key features adequately labeled. It should be easy to understand and the reader should have a general understanding of how the prototype functions by looking at the graphic.

## Prototype Graphic & Details

