# **REQUIREMENTS SPECIFICATION**

### **User Stories**

ID	User Story			
1	As someone who is busy			
	I want to interact with a PT in my own time			
	So that I can work out whenever I feel like.			
2	As someone who has started going to the gym			
	I want to see demonstrations of exercises			
	So that I can use the correct form.			
3	As someone who goes to the gym			
	I want workout plans			
	So that I can tailor my workouts based on my needs and abilities.			
4	As I have recently dislocated my shoulder			
	I want relevant exercises			
	So that they can help to rebuild and strengthen my shoulder.			
5	As a user			
	I want to see visual demonstrations of workout exercises and text instructions			
	So that I can correctly perform the exercises with additional guidance.			
6	As a user			
	I want to see realistic animations and real-time responses			
	So that my experience is satisfactory.			
7	As a user			
	I want to set my own goals with the Personal Trainer			
	So that I have targets to aim for.			
8	As a user			
	I want to have fitness tests			
	So that I can monitor my progress.			
9	As a user			
	I want nutritional recommendations			
	So that I can change my diet.			
10	As a returning user			
	I want the chatbot to recognise me when I open it			
	So that my user experience is satisfactory.			
11	As someone who is embarrassed to go to the gym			
	I want to work out in my home			
	So that I can lose weight.			
12	As someone who is busy			
	I want to have spinning classes in my own time			
	So that I can complete the class in my own time.			

# **Functional Requirements**

Functional Requirements detail actions or activities that the system can perform, along with actions the user can do on the system, for example...
"Can I log in?"

# **Non-Functional Requirements**

Non-functional requirements describe how well a system should behave, for example... "Can I log in within 5 seconds?"

### **MoSCoW Analysis**

#### **Must Have**

Critical to current delivery timebox for it to be a success. If even 1 is not included, the project delivery should be considered a failure. They can be downgraded over time when new requirements are deemed more important.

#### **Should Have**

Important but not necessary for delivery in the current delivery timebox. They aren't often time-critical.

#### **Could Have**

Desirable but not necessary and could improve user experience or customer satisfaction for minimal development cost, if time and resources permit.

#### Won't Have (this time)

Agreed as least-critical or not time appropriate.

#### **Key: PTB = Personal Trainer Bot.**

ID	Title	Functional or Non-Functional?	Description	MoSCoW
1	Open Application	Functional	Can I open the application?	М
1.1	-	Non-Functional	Can I open the application 24/7?	М
1.2	-	Non-Functional	Can the application open and load within 30 seconds?	М
2	General Communication	Functional	Can I communicate with PTB?	М
2.1	-	Functional	Can PTB communicate with me?	М
2.2	-	Non-Functional	Can communication occur in real time?	М
2.3	-	Functional	Can PTB motivate the user to keep exercising?	S
2.4	-	Non-Functional	Does PTB look realistic?	М
3	Workouts	Functional	Can I request workouts?	М
3.1	-	Functional	Can PTB output workouts?	М
3.2	-	Non-Functional	Can PTB output workouts in real time?	M
4	Exercise Descriptions	Functional	Can I request exercise descriptions?	M
4.1	-	Functional	Can PTB output text exercise descriptions?	M
4.2	-	Non-Functional	Can the chatbot output descriptions in real time?	М

5	Muscles Affected	Functional	Can I request the muscles affected by the exercise?	М
5.1	-	Functional	Can the chatbot output the relevant muscles diagram?	М
5.2	-	Non-Functional	Can the chatbot output diagrams in real time?	М
6	Exercise Demonstrations	Functional	Can I request a demonstration of the exercise?	М
6.1	-	Functional	Can the chatbot play a video of the exercise?	М
6.2	-	Non-Functional	Can the chatbot play the videos in real time?	М
6.3	-	Functional	Can the virtual human animate to demonstrate the exercise?	С
6.4	-	Non-Functional	Can the virtual human animations happen in real-time?	С
7	User Profile	Functional	Can I create my own user profile?	С
7.1	-	Functional	Can the chatbot recognise different users?	С
7.2	-	Functional	Can I customise my profile by inputting gender and height/weight?	С
8	Nutritional Guidance	Functional	Can I ask for nutritional advice?	С
8.1	-	Functional	Can the chatbot provide nutritional advice?	С
9	Rehabilitation	Functional	Could I ask for rehabilitation exercises?	С
9.1	-	Functional	Can PTB output rehabilitation exercises?	С