

Dan Petruso

CMPT-220L

## **Milestone**

### **Abstract:**

The Wim Hof method combines breathwork, exercise, focus, and cold exposure in order for a person to feel in a happy and healthy state. My Java program will help people learn the Wim Hof method and keep a database of their progress. Wim Hof is a 58 year old dutch man who holds numerous world records for completing challenges that involve cold exposure and insane physical abilities. Some of the feats he has achieved are running a half marathon barefoot in nothing but shorts above the arctic circle, swimming under ice for 120 meters in one breathe, and running a full marathon in the Namib Desert without any water consumption. He achieved this through a method that he now teaches and the Java program that I want to make will help teach it and keep track of how much the user progresses.

One of the main components of Wim Hof method is breathwork. This is done by having the user take 30-40 deep breathes in and out in. After the 30-40 breathes, the user would then exhale all air out of their lungs and see how long they can hold that state with a timer. This is called the retention rate and both the breathing and retention is called one round. Typically, users would do around four rounds in one session and a database in my program would keep track of how long each retention would be for each of the rounds. The user would then be able to access all of their data and see their progress throughout each week. In addition to the retention, the database would keep track of the exercises the user does such as the amount of pushups he or she does while holding their breath after all the rounds.

### **Introduction:**

My motivation for creating the database is because I am someone who has been practicing the Wim Hof Method on and off for over a year now. It has helped me keep a happy and healthy lifestyle while also providing me benefits such as not getting sick, not

needing jackets or warm clothes during winter, and enhanced focus. Wim Hof Method has had life changing effects on me and I want to help spread what I have learned in order to help others with their problems. Wim Hof method has also been scientifically proven to help fight mental illness such as depression and anxiety, which is far too popular in today's society. The goal of my Java application is not to teach someone a complete new way of life, but it is to provide an introduction to the Wim Hof method.

### Detailed System Description:

Although the program is not finished, it is on the way there. I have already implemented the start screen which is a GUI with javafx that has a start button, help button, and check results button. The start button has a stopwatch in it to record how long the user retains breathe. Once the user stops clock, they are going to be able to choose whether or not they want to input that retention into the database. The help button will show the user how to perform the breathing exercises and answer and provide a brief description of what the program is about. The check results button will display the data from the sqlite database that they have been using. The database will have five columns, day, retention 1, retention 2, retention 3, pushup count.

WimHofTracker extends Application	Session
window : Stage -con : Connection	start : Button stop : Button stopWatchTime : Label
+start() : void	+setSceneClock() : Scene

  

StopwatchTimerTask extends TimerTask
-seconds : long
+run() : void +resetTime() : void +getSeconds : long

**Requirements:**

The problem is that Wim Hof Method is difficult to get into and start doing. The goal of my Java program is to lessen the difficulty curve and provide a very basic and beginner friendly version of the full Wim Hof Method. My program will also be free and very non committal, while the full Wim Hof Method is expensive and take a lot of time out of somebody's day.

**Literature Survey:**

There is a small activity tracker on the iOS app store that is similar to what I am making. The app allows you to store progress and to watch videos showing how to do various exercises. The app is around \$5.

**User Manual:**

The user will open up the application and have three buttons: start, help, check results. The start button will bring the user to a screen with a working stopwatch that will record retention rates and upload them to a database in addition to having an area where the user can add the push up count. The user can check their results and their progress over time with the check results button. The user will be able to have an in-depth tutorial of how to perform the breathing activity and push up portion.

**Conclusion:**

The goal of the program is to get more people into the Wim Hof Method. It is a method that is not well known, especially for how effective it is. It can lead people to live happy, healthier lives.

**Bibliography/References:**

<https://www.wimhofmethod.com/>