

## App Description – BFR Team

### **App Idea:**

The purpose of this application is to provide a well thought out and easy way to conduct blood flow resistance (BFR) training for a wide range of users. Using blood pressure, age, sex, thigh circumference, and the equipment readily available, a user will be able to determine the amount of pressure to be given (a percentage of the AOP) for this training.

### **Users:**

The intended users of this application include but not limited to:

- Personal trainers
- Athletic coaches
- Physical Therapists

### **Application Usage:**

A user will first fill out a medical screening to ensure that BFR training will not increase the risk to cause bodily harm to a patient or athlete, depending on their answers they will then be prompted to select which specific form of training and the equipment deemed safe to use. The users then will be able to input blood pressure, age, sex, thigh circumference, and the equipment readily available to determine the arterial occlusion pressure (AOP) using equations provided by Mr. Wedig. The user then will be given a list of percentages of that specific AOP to use while training (if applicable).

### **Data:**

The following list will be the data we as a team intend to use for this project which is subject to change:

- Equations provided by Mr. Wedig
- Photos of each type of cuff used during this form of training
- Websites for each cuff to explain usage of said cuff (if one is readily available)
- Medical screening test provided by Mr. Wedig