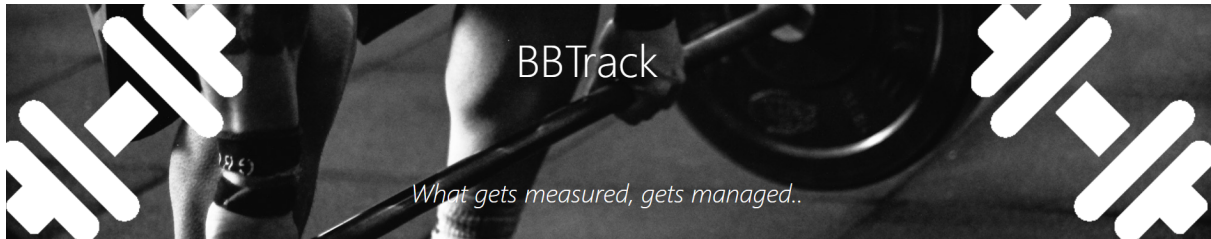


# User Manual for Barbell Track



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## 1. *General Information*

### 1.1 **System Overview**

Barbell Track is a web app that is capable of recognizing and tracking the end of a barbell through either live video recording, or uploaded video. After analysing the video Barbell Track gives the user their customised rpe values whilst keeping track of the user's progress. The application is also capable of critiquing the users form.

### 1.2 **Organization of Manual**

The user's manual is split into 3 sections. First section is *General Information* which has the sub headings *Systems Overview* and *Organization of Manual*. Second section is *Getting Started* which has the sub headings *Registering* and *Logging In*. Third section is *Using the System* which has the sub headings *Upload/Record* , *Stash* and *Logging Out*

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## 2. Getting Started

### 2.1 Registering

When the user loads the homepage successfully they must register before they can use the features of the application. To register the user must simply click the *Register* button.

Capture Video   Stash   Home   Login   **Register**

Once the *Register* button is clicked, the user is sent to the register page where they will fill in their information and when done will click the *Create Account* button.

### Create Account

First Name:

Last Name:

Username:

Email:

Password

Retype Password

Create Account

[Already Have an Account?](#)

## 2.1 Logging In

When the user loads the homepage and presses the *Login* button they will be sent to the login page.

[Capture Video](#) [Stash](#) [Home](#) [Login](#) [Register](#)

User must use the data they used to register to login

### Log In

Username:

Password:

Remember Me

☐

Log In

[Don't Have an Account?](#)

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## 3. *Using The System*

### 3.1 Upload/Record Video

To upload a video simply click the Capture Video button.

[Capture Video](#) [Stash](#) [Home](#) [Login](#) [Register](#)

This will lead you to the picker page where you will have the option to select the colour of the tracking paper and your type of lift.

Pick What Lift You Will do  
And The Colour Your Tracking Paper Will Be!

Please Ensure Your Colour Resides Between The Lightest and Darkest Shades of the Colour Selected


### Pick Lift

Lift:

Squat

Colour

Red



Select

After the user chooses their colour and lift, the *Select* button will lead them to the recorderupload page

To upload a video, the user must press the *Upload File*.

To Record a video, the user can simply press the *Record*. This leads them to the video page where the user can start, end and save their video.

## Record

Welcome test

Hello test! Here you can record a video of your Squat, or, upload your own!

START  
RECORDING

STOP  
RECORDING

Save  
Video

Once the video is saved, the user will be prompted to enter their RPE values to submit on the left hand side.

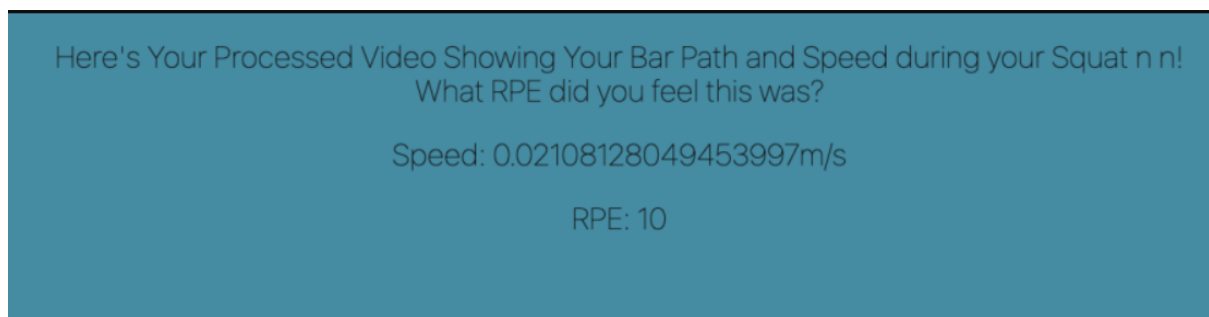


**What Do You Think?**

RPE:

SUBMIT

On the right side of the page information on the processed video will be displayed for the user.



Here's Your Processed Video Showing Your Bar Path and Speed during your Squat n n!

What RPE did you feel this was?

Speed: 0.02108128049453997m/s

RPE: 10

Once the user submits their RPE value, a page showing the users video and their very own customised RPE chart will be displayed. Here the user will have the option to see the body tracking of the video uploaded.

Here's Your Processed Video Showing Your Bar Path and Speed during your Squat n n!  
What RPE did you feel this was?  
Speed: 0.02108128049453997m/s  
RPE: 10

RPE(10)	[100, 92.5, 85.0, 77.5, 70.0, 62.5, 55.0, 47.5, 40.0, 32.5]
RPE(9)	[92.5, 85.0, 77.5, 70.0, 62.5, 55.0, 47.5, 40.0, 32.5, 25.0]
RPE(8)	[85.0, 77.5, 70.0, 62.5, 55.0, 47.5, 40.0, 32.5, 25.0, 17.5]
RPE(7)	[77.5, 70.0, 62.5, 55.0, 47.5, 40.0, 32.5, 25.0, 17.5, 10.0]
RPE(6)	[70.0, 62.5, 55.0, 47.5, 40.0, 32.5, 25.0, 17.5, 10.0, 2.5]

See Body Tracking

Rep: 0

Once the user clicks the Body Tracking button, the bodytracking page will be shown.

Bar Tracking

Body Tracking

You Scored 1/3!

Maybe you're just having an off day. Try again next time, but be careful!

Bar Position

Oops! You allowed the bar to go forward too much throughout the lift.  
Try to sit back more against the weight push your hips backwards  
Going too far forward can cause your centre of gravity to move and, in turn cause you to lose balance

Depth

Well Done! You hit the correct depth for a Squat when your hip went below your knees  
Great Job!

Knee and Hip Extension

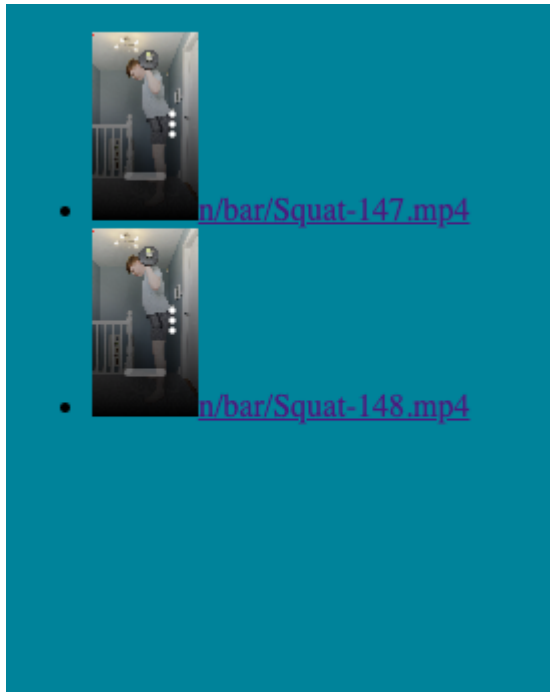
Oops! Your knees and hips didn't extend and contract simultaneously throughout the lift.  
Try to not let your hips rise before the weight begins to move or at a faster pace than your upper body.  
Think about the cue "Chest Up" when performing the lift to ensure the weight moves optimally.  
Extending your knees and hips at the same time allows for better leverage when moving the weight on the bar.

### 3.2 Stash

Stash allows the user to check their saved videos. If a user wants to check a saved video they must press the *Stash* button in the header of the homepage.



This will lead them to the stash page where they can view their saved videos. For example a link will be shown on the left side of the page which contains their saved video.



When the user clicks a video they will be sent to another page where more information on their clicked video will be readily available.

Bar Tracking

Body Tracking

**You Scored 1/3!**

Maybe you're just having an off day. Try again next time, but be careful!

**Bar Position**

Oops! You allowed the bar to go forward too much throughout the lift.

Try to sit back more against the weight push your hips backwards

Going too far forward can cause your centre of gravity to move and, in turn cause you to lose balance

**Depth**

Well Done! You hit the correct depth for a Squat when your hip went below your knees

Great Job!

**Knee and Hip Extension**

Oops! Your knees and hips didn't extend and contract simultaneously throughout the lift.

Try to not let your hips rise before the weight begins to move or at a faster pace than your upper body.

Think about the cue "Chest Up" when performing the lift to ensure the weight moves optimally.

Extending your knees and hips at the same time allows for better leverage when moving the weight on the bar.

### 3.3 Logging Out

To log out of your account or exit out of the application you will need to press the Logout button found on the header of the page.



Capture Video   Stash   Home   Logout test