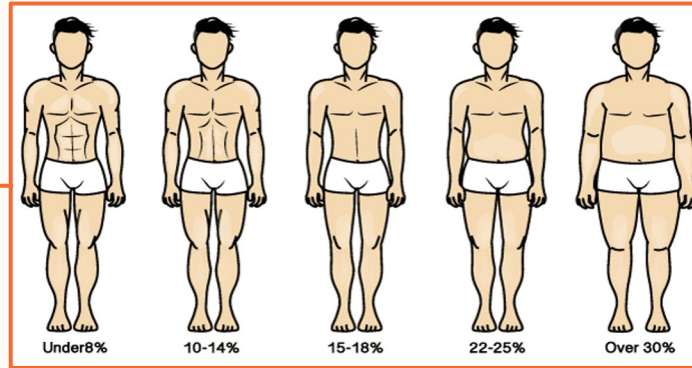




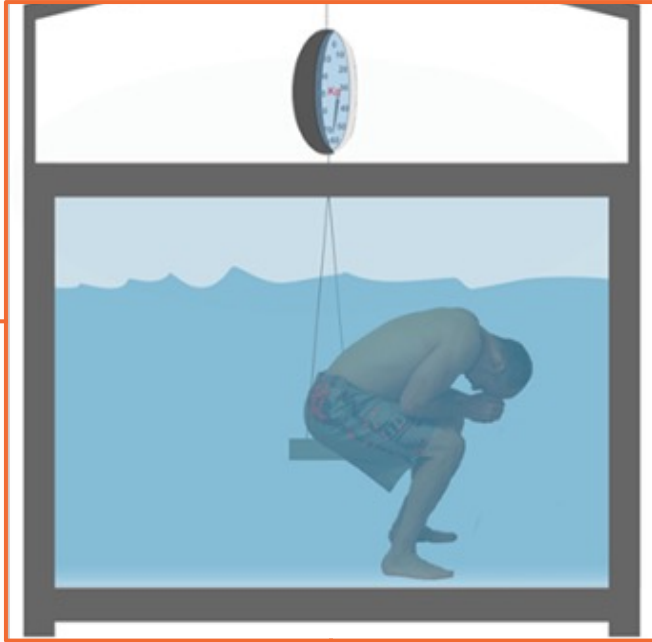
BODY FAT PREDICTION



Predict for Your Health 

Ziru (Lucy) Xu

PROJECT MOTIVATION



- Hydrostatic weighing is the gold standard for calculating body fat



time-consuming

require special equipment



- This app aims to help users
 - easily obtain their body fat percentage information
 - Better understand their health condition



WEB APP DEMO



Body Fat Prediction

This body fat calculator estimates your body's percentage of body fat for YOU!

Please enter your body measurement information below to GET PREDICTION RESULTS:

Name:

Age:

Height:

Weight:

Neck Circumstance(cm):

Chest Circumstance(cm):

Abdomen Circumstance(cm):

Hip Circumstance(cm):

Thigh Circumstance(cm):

Knee Circumstance(cm):

Ankle Circumstance(cm):

Biceps Circumstance(cm):

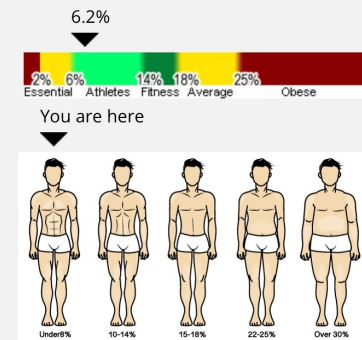
Forearm Circumstance(cm):

Wrist Circumstance(cm):

Calculate 

Result

Body Fat: 6.2%



DATA

Kaggle Dataset:
[Body Fat Prediction Dataset](#)



DATA SIZE



252 males

FEATURES



age, weight, height,
and ten circumference measurements
(e.g., neck, chest waist, etc.)

TARGET



Body Fat Percentage

RDS



User Input

MODEL & SUCCESS CRITERIA

LASSO REGRESSOR

Online Model

FEATURES

age, weight, height,
ten body measurements

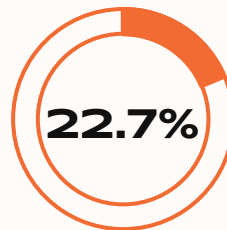
TARGET

body fat percentage

Mean Squared Error

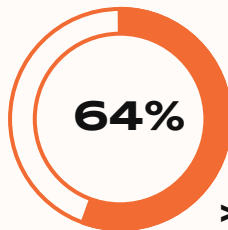
24.56

Mean Absolute
Percentage Error



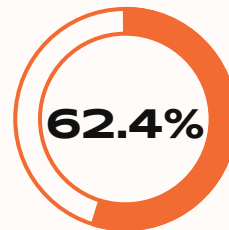
<25% ✓

R-Squared

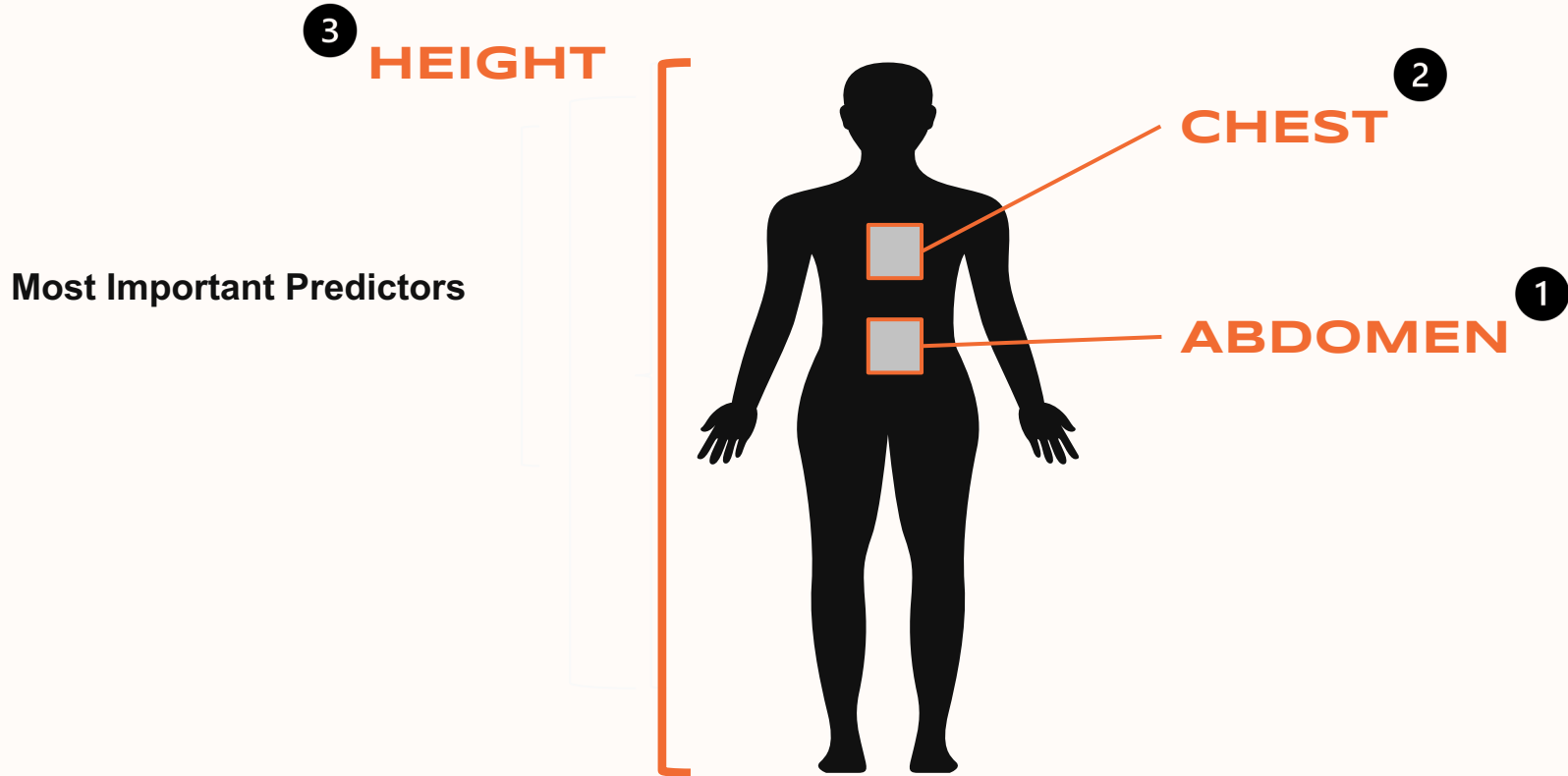


>60% ✓

Adjusted R-Squared



INTERESTING INSIGHT



THANKS!

Do you have any questions?

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