

DIGITAL INNOVATION CHALLENGE

LOS RETOS DE LA INNOVACIÓN DIGITAL



SaúdeMotrizApp

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Saúde Motriz

- What Saúde Motriz does:
 - Fitness programs for health and wellness
 - Swimming Lessons for children (2yo – 4yo and 5yo – 9yo)
 - Daytime and Post-Work Gymnastics (Mainly Elderly Population)
 - Zumba Classes
 - Step Classes
 - Hydrogymnastics lessons





Saúde Motriz

- Who:
 - Trained and licenced professionals
 - Outsourced for Specific Classes (Not Full Time Employees of Saúde Motriz)
- Where:
 - Rented Venues (Madeira Only Currently)
 - Community Pools
 - School Gyms





Saúde Motriz App (Under Development)

- Why the Saúde Motriz App
 - Improve General Awareness of Saúde Motriz
 - Spread the Knowledge of the Mission, Schedule and Locations
 - Track Progression of Current Clients and New Areas of Interest
 - Obtain Target Population Overview by Location (No Current Data Available in Madeira)
 - Self Evaluation of Users
 - Physical Aptitude Testing is Time Consuming and Expensive on Current Business Model
 - Trainers Keep Track of Their Current Population General State and Adapt Accordingly
- Target Audience
 - Elderly citizens (60+yo)



Saúde Motriz App -Technologies



Firestore

Registration and
Authentication



Google Calendar

Saúde Motriz
Classes and Events



Cloud
Firestore

Single Time Read Data
Critical Data For App Workings



FIWARE

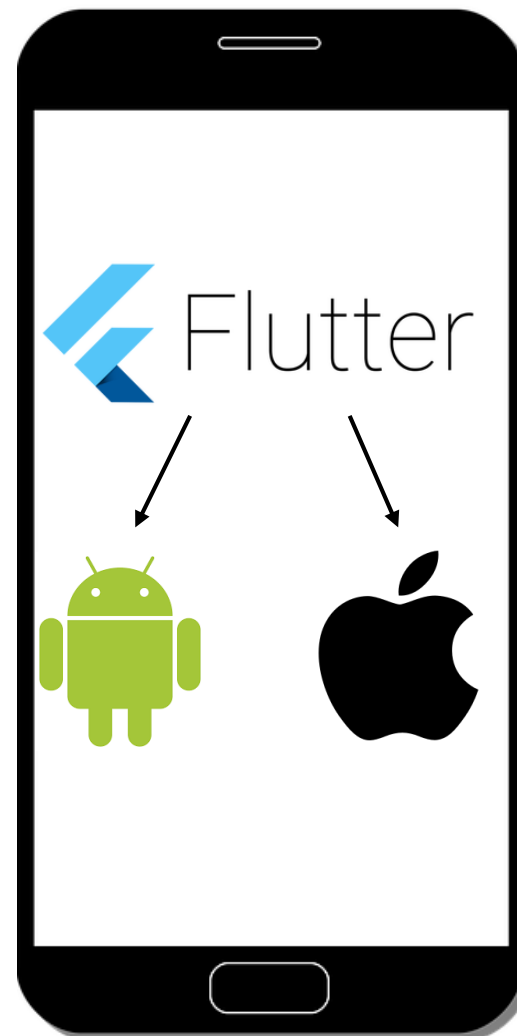


orion

Relevant User Information
for Analysis

Auto Updated
Data Set

KNOWAGE



Saúde Motriz App - FIWARE

- Orion Context Broker – Free and Effective Way to Save State of Each User
 - Simple to Use and Update
 - Straightforward Connection With Knowage
 - No associated scaling Costs (Unlike Cloud Firestore)
- Knowage – Handle the Data as Is and Turn it Into Useful Information
 - Updated dataset in Real Time
 - User Friendly Analysis and Decision Support Through Cockpit Widgets

Saúde Motriz App - FIWARE

SAUDEMOTRIZ - UTILIZADORES

FILTRAR DADOS POR SEXO

☐ Feminino

☐ Masculino

FILTRAR DADOS POR LOCALIDADE

☐ Santana

☐ Funchal

☐ Calheta

USERS

Data de Nascimento	Localidade	Indice de Massa Corporal	Sexo	Altura	Peso
02/04/1960	Calheta	0.00	Masculino	1.77	70.00
02/10/1987	Funchal	31.88	Masculino	1.78	101.00
03/04/2019	Calheta	23.88	Feminino	1.65	67.00
06/09/1973	Calheta	19.88	Feminino	1.78	63.00
10/02/1964	Santana	0.00	Feminino	1.55	64.00
22/06/1975	Calheta	26.31	Masculino	1.88	93.00

MEDIA IMC, ALTURA E PESO POR SEXO

User			
Sexo	IMC	Altura	Peso
Feminino	14,59	1,66	64,67
Masculino	19,40	1,81	88,00

MEDIA IMC, ALTURA E PESO POR LOCALIDADE

User			
Localidade	IMC	Altura	Peso
Calheta	17,52	1,77	73,25
Funchal	31,88	1,78	101,00
Santana	0,00	1,55	64,00

PESO

Peso Mínimo - 63.00

Peso Máximo - 101.00

Peso Médio - 76.33

Utilizadores com dados válidos - 6.00

ALTURA

Altura Mínima - 1.55

Altura Máxima - 1.88

Altura Média - 1.74

Utilizadores com dados válidos - 6.00

INDICE DE MASSA CORPORAL

IMC Mínimo - 0.00

IMC Máximo - 31.88

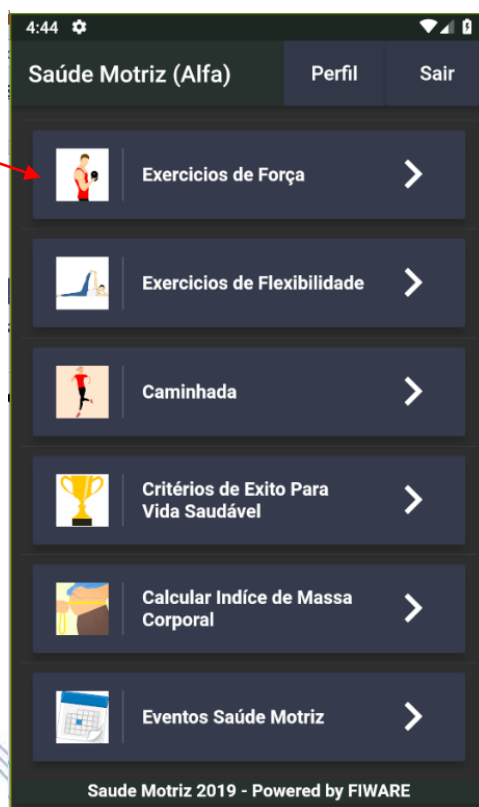
IMC Médio - 16.99

Utilizadores com dados válidos - 6.00

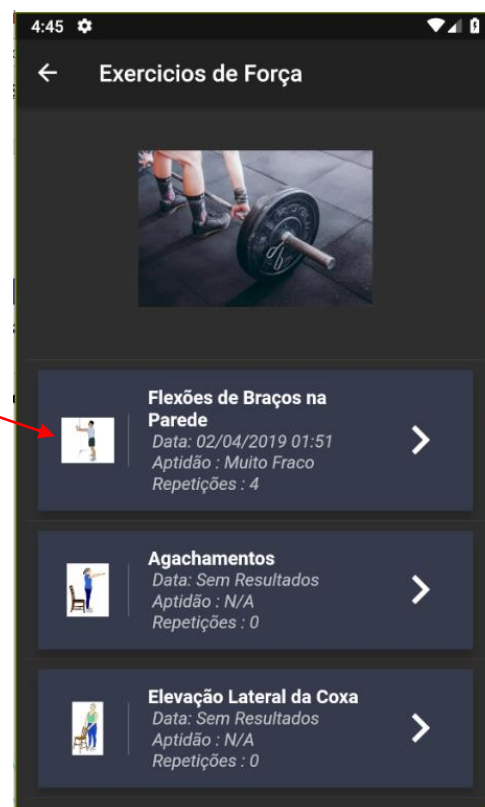
Saúde Motriz App – Key Features

- Physical Aptitude Test With Strength Exercises

1
Select Strength
Exercises
From List

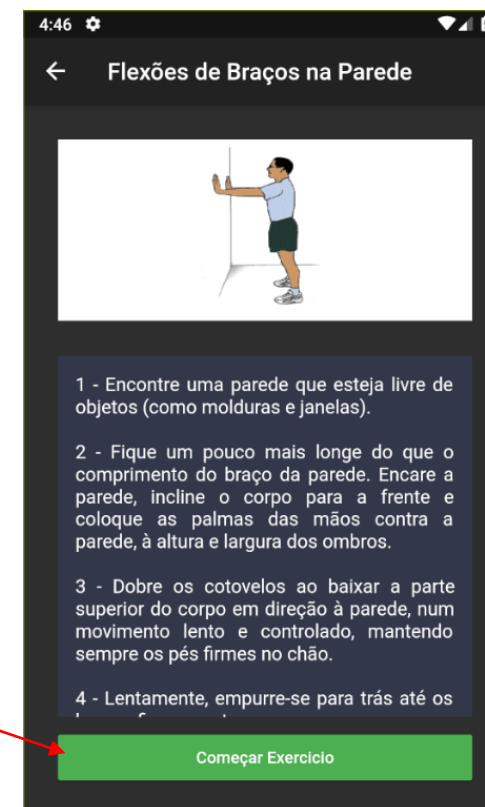


2
Select
Specific
Exercise
To Do



Read
Description
And Start
Exercise

3



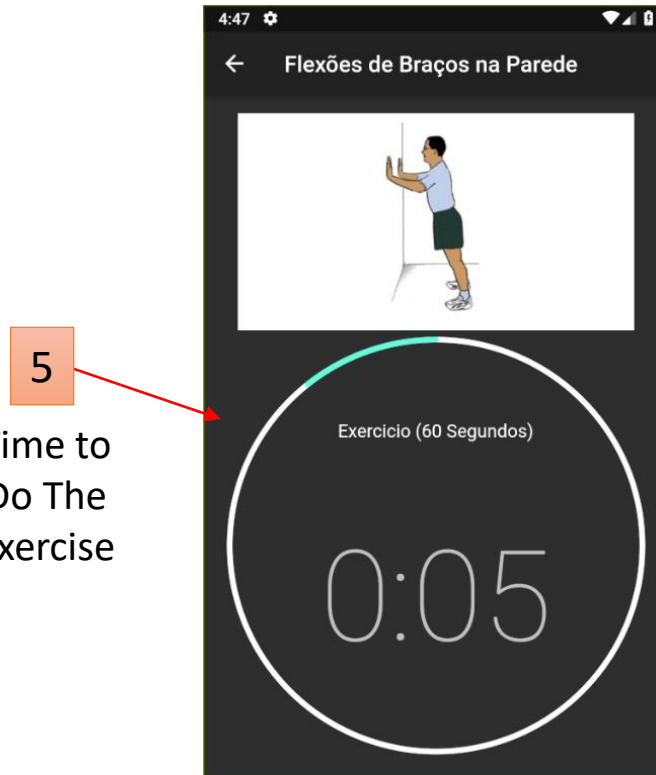
Saúde Motriz App – Key Features

- Physical Aptitude Test With Strength Exercises



4

Time to
Assume
Position to
do Exercise

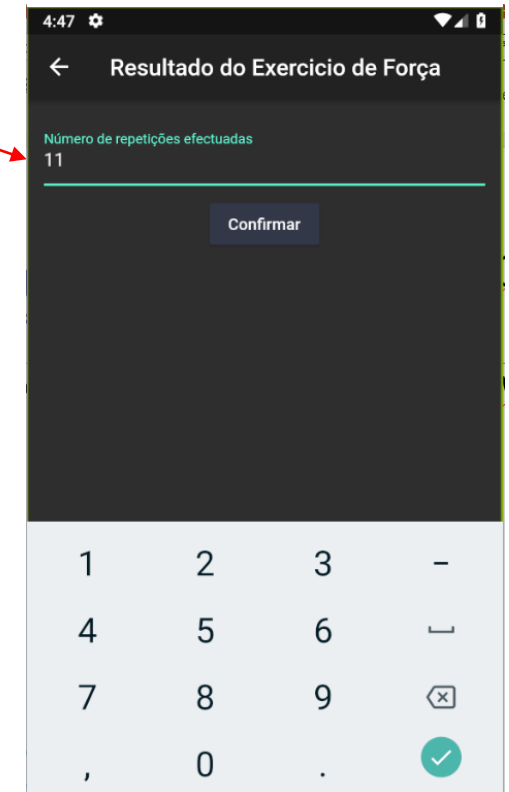


5

Time to
Do The
Exercise

6

Input
Amount of
Repetitions
You Were
Able to Do

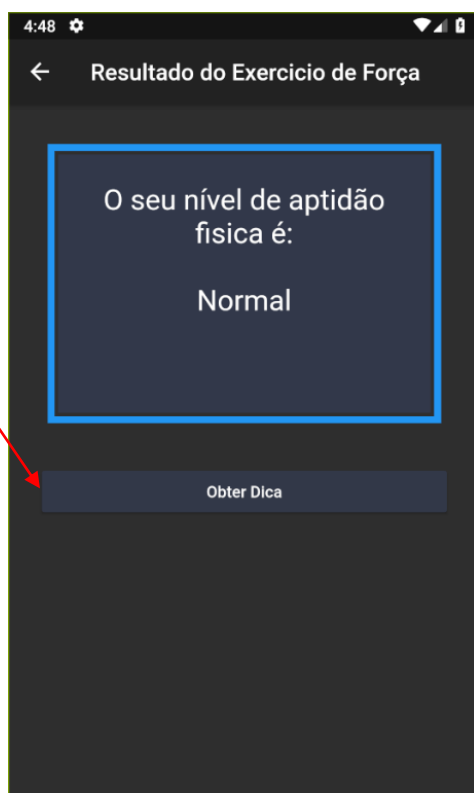


Saúde Motriz App – Key Features

- Physical Aptitude Test With Strength Exercises

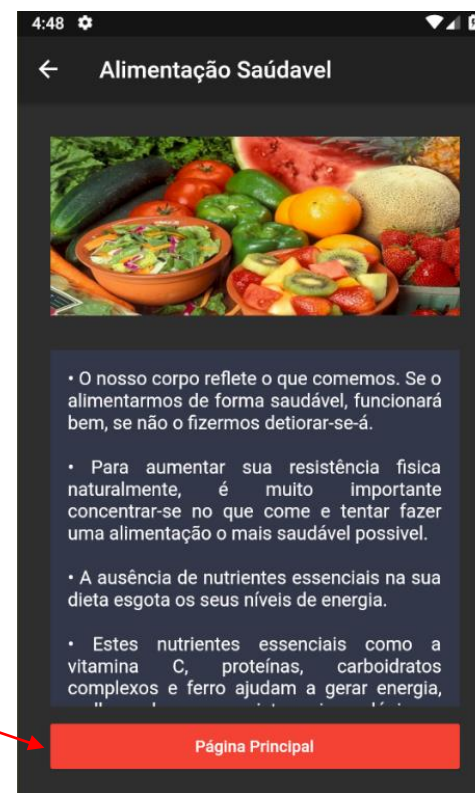
7

Get an Aptitude
Level Based on
Your Input
And Get Tip on
How to Improve



Read Tip
Based on Your
Result And
Return to
Main Screen

8



Saúde Motriz App – Key Features

- Physical Aptitude Test With Flexibility Exercises

The image displays three sequential screenshots of the Saúde Motriz app interface, illustrating the steps to perform a flexibility exercise.

Screenshot 1 (Left): The main menu of the app. A red arrow points from the number '1' to the 'Exercícios de Flexibilidade' (Flexibility Exercises) option in the list. Below the arrow, the text 'Select Flexibility Exercises From List' is written.

Screenshot 2 (Middle): The 'Exercícios de Flexibilidade' screen. A red arrow points from the number '2' to a specific exercise card titled 'Teste de Flexibilidade dos Ombros' (Shoulder Flexibility Test). Below the arrow, the text 'Select Specific Exercise To Do' is written.

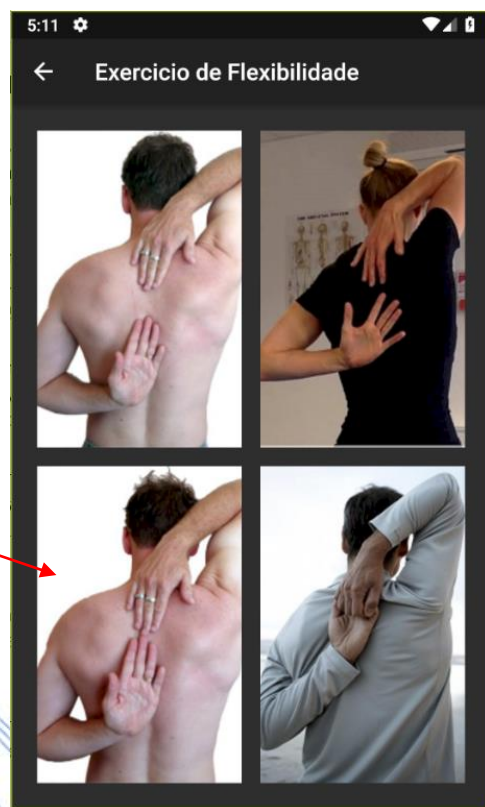
Screenshot 3 (Right): The detailed view of the 'Teste de Flexibilidade dos Ombros' exercise. A red arrow points from the number '3' to the 'Começar Exercício' (Start Exercise) button at the bottom. Below the arrow, the text 'Read Description And Start Exercise' is written.

The exercise description in the third screenshot includes the following steps:

- 1 - Levante o braço direito paralelo à cabeça.
- 2 - Dobre o cotovelo direito e deixe a palma da mão direita na parte de trás do pescoço, com a palma para baixo.
- 3 - Com a mão esquerda, alcance as costas e descanse a mão na coluna, com a palma para cima.
- 4 - Sem mover-se excessivamente, deslize a mão direita pelo pescoço e a mão esquerda pela coluna em direção ao outro.
- 5 - Depois de chegar o mais longe possível, ..

Saúde Motriz App – Key Features

- Physical Aptitude Test With Flexibility Exercises

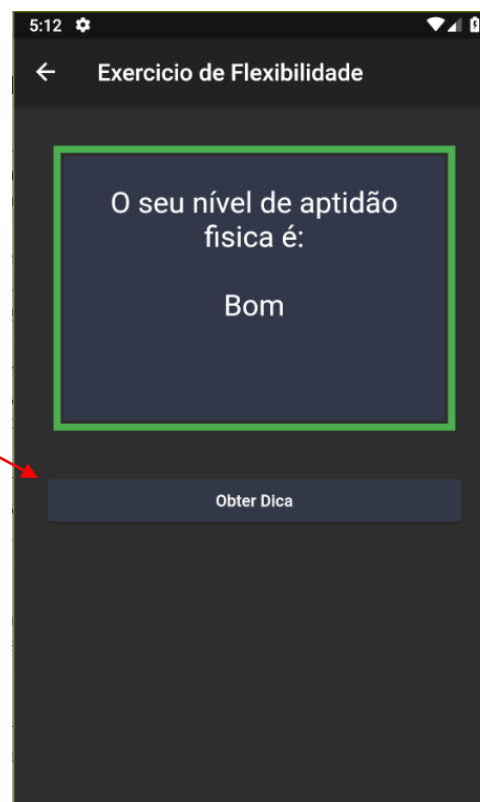


4

Select Closest
Image to Your
Level

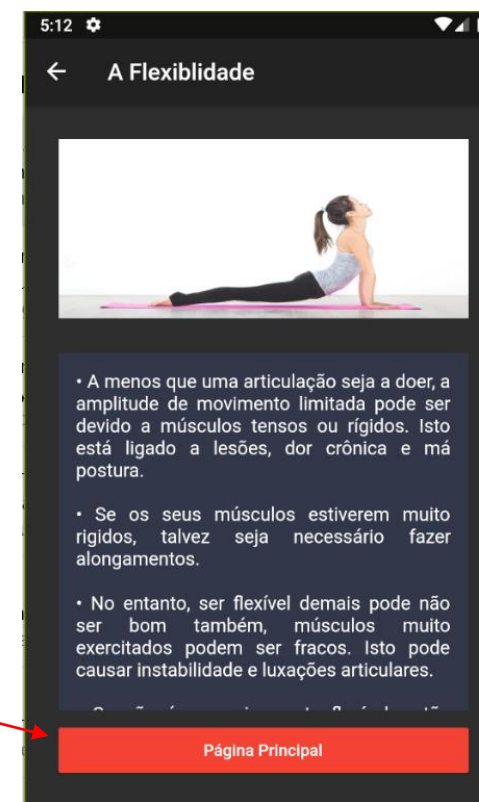
5

Get an
Aptitude Level
Based on Your
Selection
And Get Tip on
How to Improve



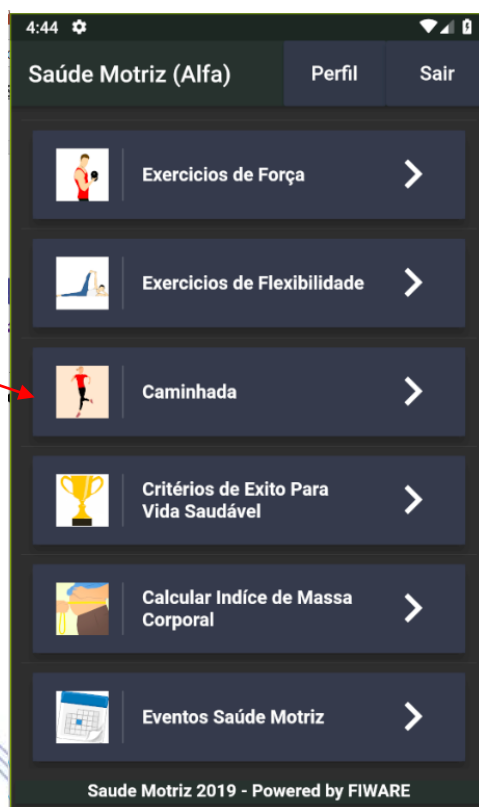
Read Tip
Based on
Your Result
And Return
to Main
Screen

6

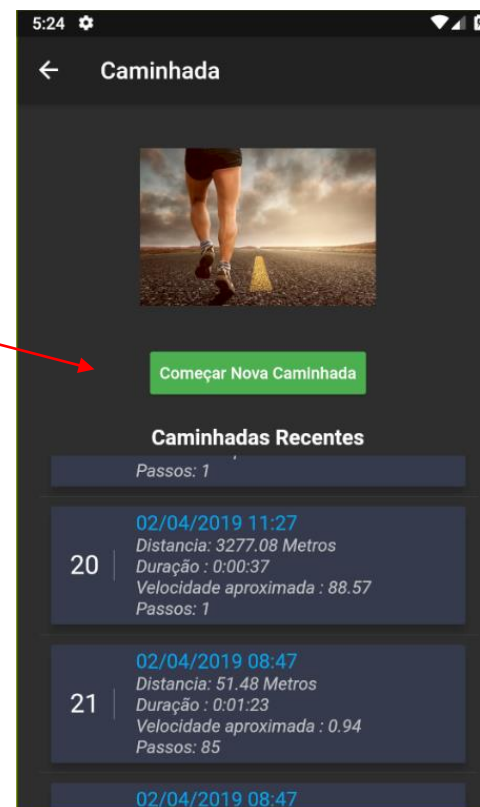


Saúde Motriz App – Key Features

- Walk / Jog Tracking



Select Walk
From List

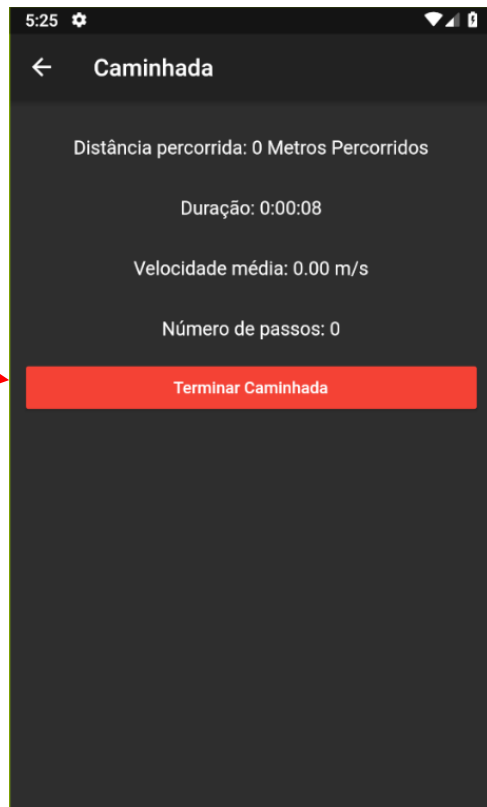


Select Start
New Walk

Saúde Motriz App – Key Features

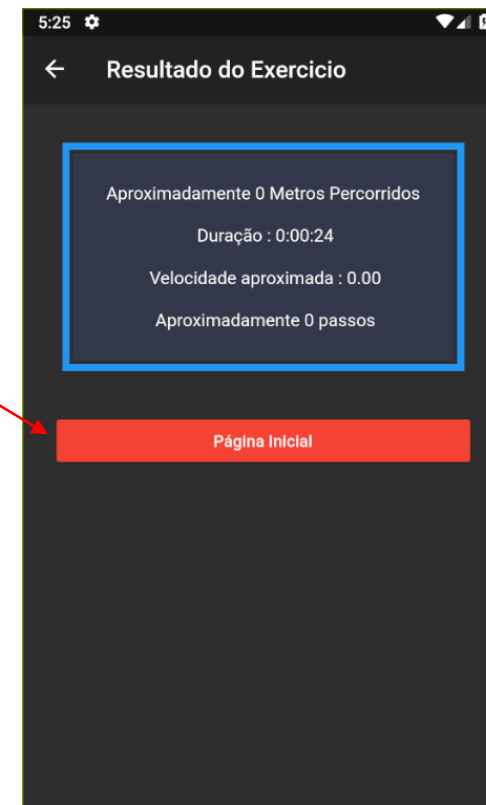
- Walk / Jog Tracking

3



Track Your Progress
Using the Phone
Accelerometer, GPS and
Timer to Determine
Distance, Steps Count,
Duration and Average
Speed
In Real Time

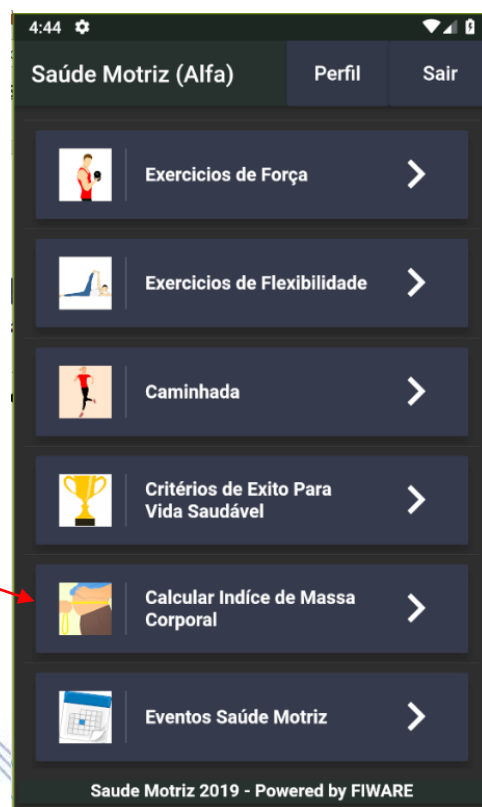
4



See Your
Results And
Return to
Main Screen

Saúde Motriz App – Key Features

- Body Mass Index Calculator

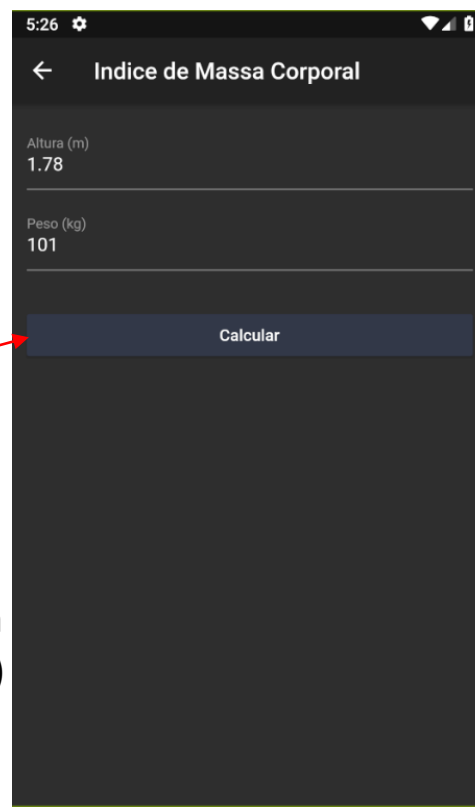


1

Select Body
Mass Index
Calculator

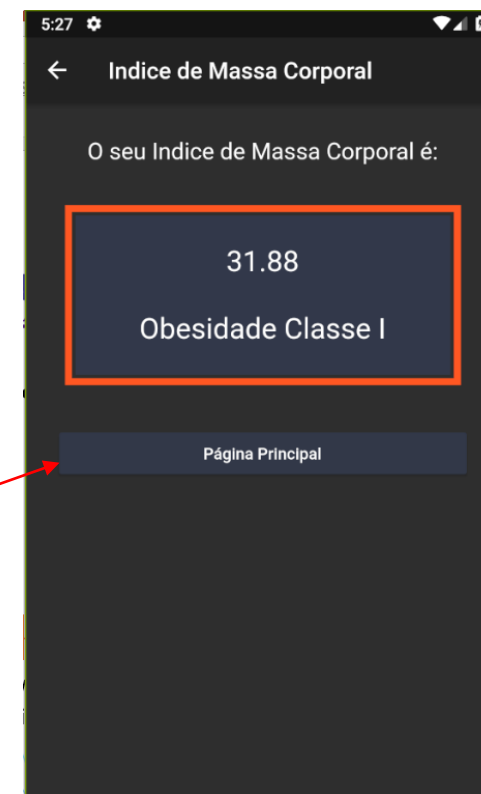
2

Add Your
Height and
Weight (if you
didn't set them
on your profile)



Obtain Your
BMI
Classification
And Return to
Main Screen

3



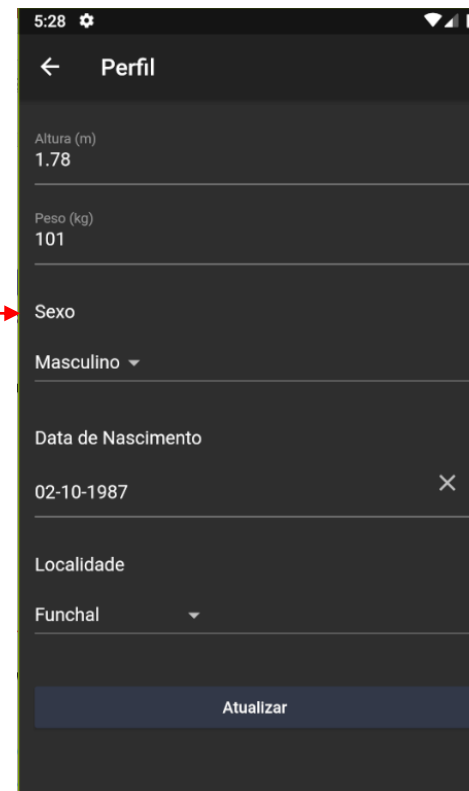
Saúde Motriz App – Key Features

- Other Features



Events And
Classes List
From Google
Calendars

2
Profile
Management



3
Random Tips
to Improve
Your Overall
Fitness



Questions?

