



CORE FITNESS

WEB APP BY AYUSH AND BHARAT



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Index

1. [Introduction](#)
2. [Requirements](#)
3. [Database Design](#)
4. [Project Structure](#)
5. [Functionalities](#)
6. [Functions in views.py](#)
7. [Use of Middleware in the project](#)
8. [Use of Syndication in the project](#)
9. [References](#)

Introduction

Core Fitness is a fitness website that provide you with fitness related tips like diet plans , exercices etc.

Requirements

1. Django
2. MySQL
3. Python-3

Our project is able to add new users' to the database and fulfill their requirement of diet plan and exercise routine.

Relational Schema

We have implemented three tables using models:

1. Person
2. Category_tips
3. Tips

The table “Person” have following attributes:

- 1. user – This is a foreign key from “User” table in django.contrib.auth.*
- 2. height – contains height of the user.*
- 3. weigth – contains weight of the user.*
- 4. bmi – contains body-mass-index of the user.*

The table “Category_tips” have following attributes:

1. category – this will contain the category of user based on bmi.
2. mortips – this attribute conatins the morning diet tips.
3. noontips – this attribute conatins the afternoon diet tips.
4. dintips – this attribute conatins the dinner diet tips.
5. exercises – this will conatin the suggested exercises for the user.

Constraints Used in Tables

1. Domain constraints are used for each attribute in each table.
2. Foreign key constraint is used in table “Persons”.

Project Structure

- Our main project folder is "ITW_2"
- It contains another folder "ITW_2."
- We have app named "fit"

Functionalities

- We have used a single app in this project named “fit”.
- “fit” contains all the database details, templates and the views.

Functions in views.py and mapping with urls in urls.py:

1. home : returns home page from index.html, mapped to url:'home/'.
2. category : update the table Category_tips with the category acc. to bmi calculated and returns the page category.html , mapped to url : 'home/category/'.
3. tips : displays exercises and diet according to the category of the user From tips.html mapped to url : 'home/tips/'.
4. contact : returns contact numbers of developers from contact.html mapped to url:'home/contact/'.

Functions in views.py and mapping with urls in urls.py:

5. `about` : shows the purpose of the project mapped to `url:'home/about/'` .
6. `Input` : takes input for the new users mapped to `url:'home/input/'`.
7. `login_view` : login the registered users and take them to Home page , mapped to `url:''`.
8. `logout_view` : Used to logout the user and redirect to “login.html” , mapped to `url:'home/logout/'`.
9. `register_view` : Used to register a new user rendering “signup.html” , mapped to `url:'home/register/'`.

Functions in views.py and mapping with urls in urls.py:

10. feedlink : Used to show RSS feed mapped to url:'home/feedlink/'.
11. dummy : Used to execute raw SQL query using cursor,
Mapped to url:'home/dummy/'.

Use of middleware in the project:

The custom middleware made in the project returns a 404 error page when an unknown url is requested.

Use of syndication in the project:

Syndication in the form of RSS feeds is used to show last five users who registered to the site.

References

We used the following resources to our convenience. We would like to thank their authors wholeheartedly:

1. [Python docs](#)
2. [Django documentation](#)

Thank You!