MINI PROJECT

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Computer vision for fitness technique tracking

Artifit recognizes movements of 20 primary human body joints right on your smartphone (doesn't send to a server) using the camera.
The app automatically tracks the fitness technique and fix more than 5 mistakes per exercise.
We are working hard to add new joints and improve the precision of our AI trainer.

Real-time feedback

If you make a mistake, Artifit suggests, how to perform exercises correctly, speaking with you.
At the same time, you can master yourself using a real-time AR image over your body on the smartphone screen.

Exercise

The current version of the app features bodyweight exercises for home, like squats, lunges, planks & etc.

Workouts

There is a range of workouts based on your fitness level, intensity and your targets.
Artifit can count your repetitions, automatically set a stopwatch, control your resting time between sets, and encourage you to reach your targeted repetitions.
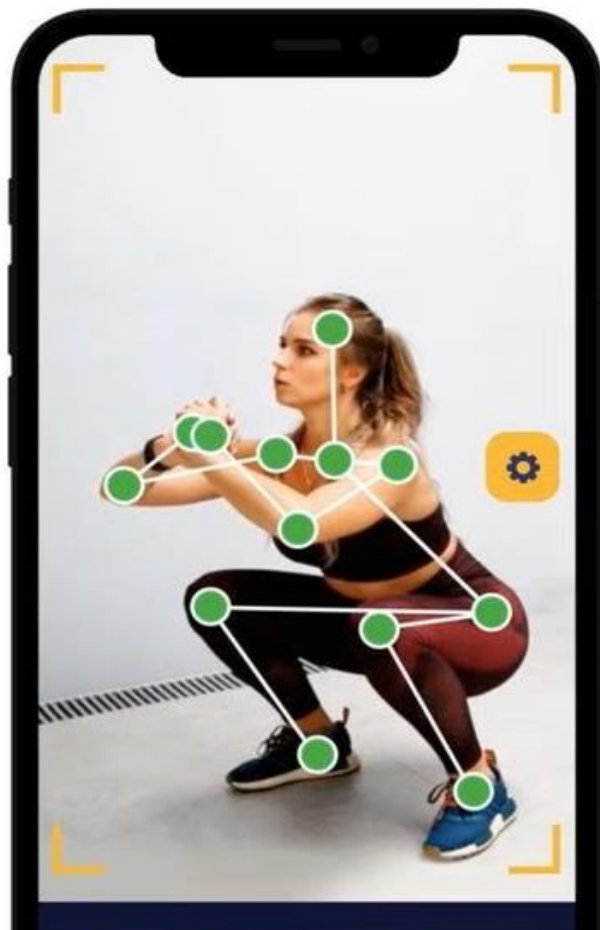
Overview:

This is a fitness revolution. Your AI-powered coach watches your form like a personal trainer, counts all of your reps with computer vision, and corrects your posture as you train in real-time. 🏋️‍♂️📱 The app scans your meals to auto-log calories, builds customized workouts based on your progress, and (ahem!) will even give you pro-consultant-quality insights—so you

"can take your gym-quality training with you wherever you go. 💪🦾 No guesswork, just results.".

Project Video Link:

GitHub Project Link:

Features

- **AI Form Analysis & Real-Time Feedback**: The app watches your movements like a coach, fixes your form in real-time, and helps you get better with each workout.

- **Nutrition & Calorie Tracking**: Add name of dishes, and the app instantly logs calories and macros. and tracks water intake.

- **Personalized Workout Programs:** Your AI trainer crafts the perfect plan for your goals—whether you want to sculpt muscle, torch fat, or boost endurance. It adapts on the fly if an exercise feels too hard (or too easy!) and shows you exactly how to nail every move with crystal-clear video guides.

- **AI Trainer Chatbot – Your 24/7 Fitness Coach:** Got a workout doubt at midnight? Our AI chatbot answers instantly—whether it's "How do I fix my deadlift?" or "Best post-workout meal?"—with expert-backed advice, form tips, and meme-worthy motivation.

  Notifications & Alerts: Get reminders to stay on top of your fitness goals and habits

Tech Stack

- **Frontend**: HTML5, CSS3, JavaScript, tailwind.
- **Backend**: Node.js, react.js.
- **Database**: superbase.
- **Frameworks/Libraries**: React, Angular, media pipe.
- **API Requests**: google API key

How to Install

To get the app up and running locally, follow these steps:

1. Clone the repository: From the GitHub repository.

2. Make sure that node.js is installed in your local machine.

3. Navigate to the backend directory and install the dependencies:

   bash
   npm install

4. To view the app, open new terminal using ctrl+`

5. Then type npm run dev, open the URL and enjoy the app.

How to Use

1. **Sign Up**: Go to the dashboard and fill all detail (name, age, weight, height and fitness goal).
2. **Learn**: View workout plans and perform exercise without any risk of injury.
3. **Track**: Keep a track on your food calories by add photos of your meals.
4. **Query**: Feel free to ask about your doubt from chatbot for your fitness journey.
5. **Grow**: Set targets and take the next step towards fitness journey.

Contributing

We welcome contributions to make **AI Fitness Trainer** even better.

To contribute:

1. Fork the repository.

2. Clone your forked repository to your local machine.

3. Create a new branch for your feature or bug fix.

4. Push your changes to your forked repository.

5. Open a pull request for review.

License

Distributed under the MIT License.

For more detailed information, please refer to the LICENSE file included in the repository.