README FILE

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Project Title: Deep Fake Face Detection Using Machine Learning

This document provides step-by-step instructions to set up and run the project.

1. Hardware Requirements

- A computer with at least **8GB RAM** (Recommended **16GB RAM** for smooth execution).
- A processor with **AVX** support (For running deep learning models efficiently).
- **GPU (Optional)** – If using deep learning models for faster execution.

2. Software Requirements

- **Operating System**: Windows, macOS, or Linux.
- **Anaconda**: Download from here.
- **Python 3.9.2**: Installed via Anaconda environment.

3. Setting Up the Environment

1. Open **Anaconda Navigator**.
2. Click on **Environments** (left panel).
3. Click on **Create New Environment**.
4. Name the environment **home-project**.
5. Select **Python 3.9.2** (This version is important).
6. Click **Create**.

4. Installing Required Libraries

Open the terminal (cmd for Windows, Terminal for macOS/Linux) and execute:

```
conda activate home-project
conda install -c conda-forge notebook
pip install tensorflow
conda install -c conda-forge keras
conda install -c anaconda scikit-learn
conda install -c conda-forge opencv
conda install -c anaconda scikit-image
```

```
conda install -c anaconda flask
pip install pandas
pip install werkzeug==2.3.7
pip install cmake
conda install -c conda-forge dlib
pip install torch==2.0.1
pip install torchvision==0.15.2
pip install numpy==1.24.2
pip install matplotlib==3.6.2
pip install face-recognition
```

5. Running the Project

1. Navigate to the project folder in the terminal:

```
cd path\to\your\folder
```

(Replace `path\to\your\folder` with the actual folder path.)

2. Run the application:

```
python app.py
```

3. The Flask app will start and display a link like:

```
http://127.0.0.1:5000
```

Open this link in your browser.