# YOGA POSTURE CORRECTION USING MACHINE LEARNING UNDER VARYING POSES

Guide Name:- Pinky Gangwani

Group Members:- Kshitija kalbande
Shraddha Kamble
Harshika Lende
Isha Kawale

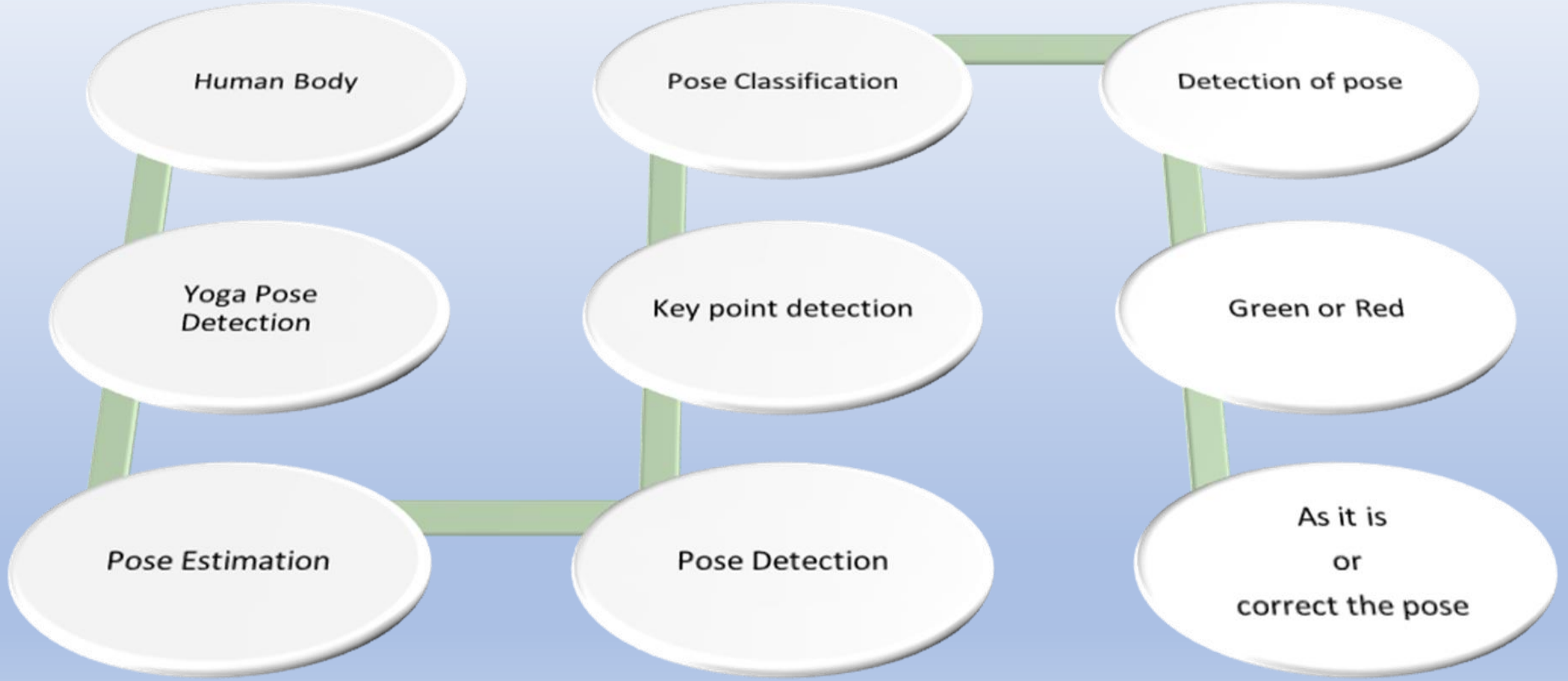
# Abstract:


- Yoga’s popularity is growing on daily basis since the covid-19 has had such a significant impact on everybody’s lives.
- The basis for this is the numerous physical, mental and spiritual benefits that yoga may provide.
- The main objective of the proposed work is to include more positions and try to give better accuracy for similar poses.
- In this project we are proposing a yoga posture correction using a deep learning model to support users and customers with the proper guidance for yoga.

# Introduction:

- The yoga application is able to capture user movements using the camera and then check their positions or guide them accordingly.
- After which the algorithm will match the data with the given data set and then tell the users if there are any improvements required in the position.
- The system consist of two main modules a pose estimation module and pose detection  module. This will help users to practice yoga in the correct way and get benefits for a healthy life.
- The application will aim to guide the user to do yoga in a safe way and achieve the best result from yoga.

# Module :


Human Body
Yoga Pose Detection
Pose Estimation
Pose Classification
Key point detection
Pose Detection
Detection of pose
Green or Red
As it is
or
correct the pose

# Technologies used:

- Key point Detection using OpenCV.
- Machine Learning.
- C++ / HTML / Python.

# References: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- **Keywords:** Yoga, Posture Correction, Machine Learning, OpenCV.


Thank you!