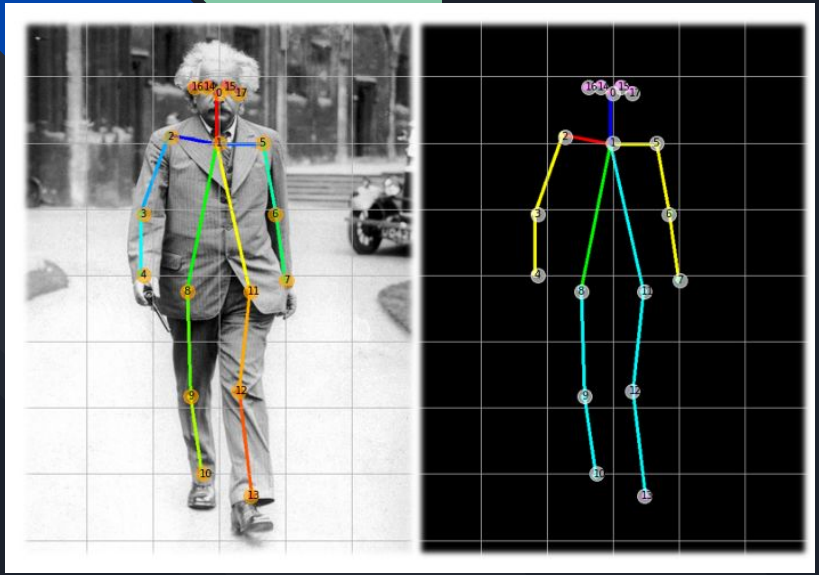
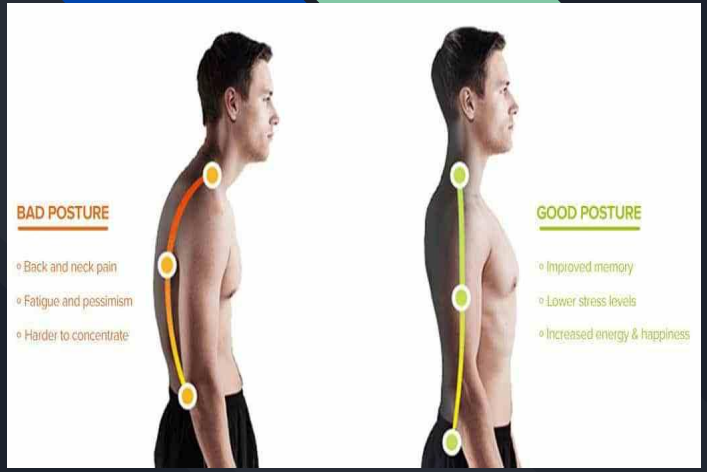
Human Computer Interaction

Alpha Pose



Team :
PES1201800378 - Jitendra . G
PES1201801136 - Manimadhav . N
PES1201801232 - Sai Rahul . T
PES1201801301 - Karthikeya . G

Problem Statement



- Now a days due to bad posture people are facing spine curvature , back pain , neck pain , headache , etc.,
- People are having lack of sleep due to this bad posture.
- It also puts stress on muscles , joints and ligaments. This can cause pain and damage to the body.
- With this point in mind we have come up with an idea of detecting postures of people and showing their posture structure so that they will come to know about their position.
- We default give the user in home page some of the common correct postures of human body.
- So that when he goes to the pose detection page he will come to know if he's in correct posture.
- Our posture detection phase will give you the posture in two colors where if the current pose is correct it will show in green color else it shows in red color.

Need Finding

Statement :

We came to know that many people who are using pc and mobiles with continuous exposure to them are getting back pain and bad spine curvature.

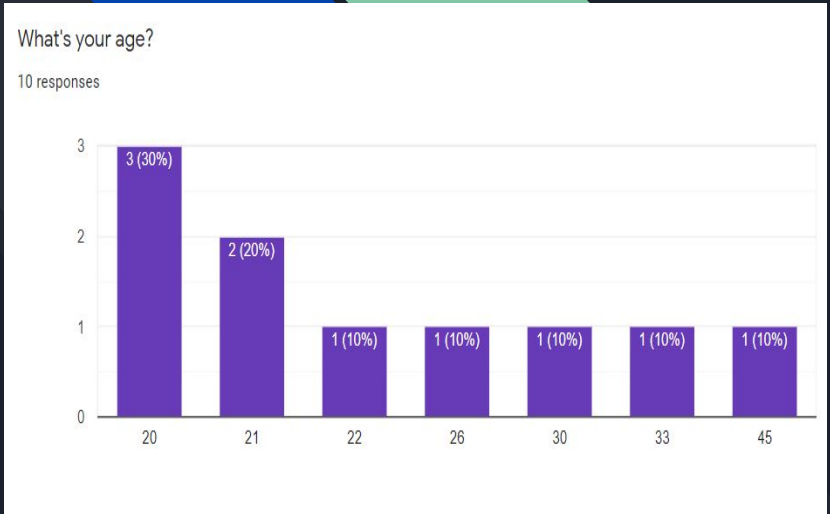
So we just conducted a small survey about when do face this problem and what aged people are facing this problem and if they had gone through any other pose estimation softwares and what solution they got for the problem.

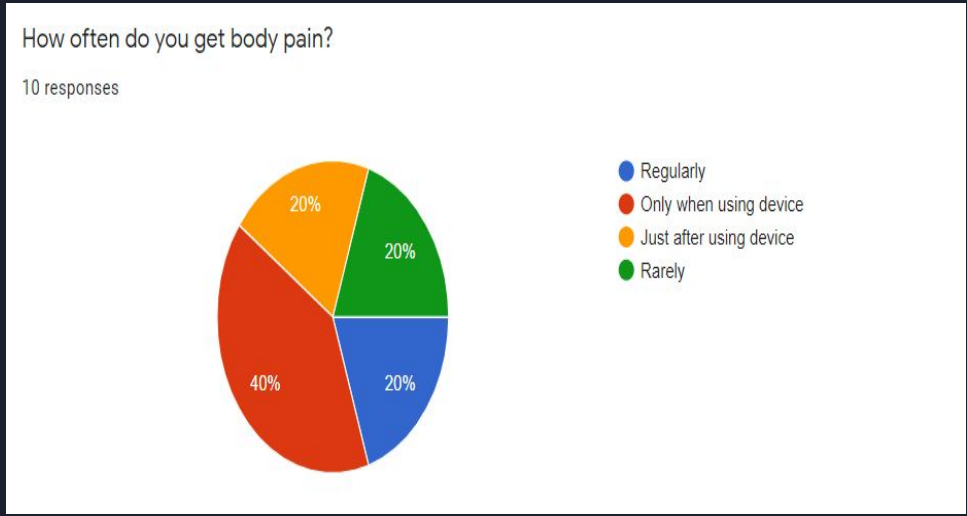
Technique Used :

Digital Survey

Need Finding

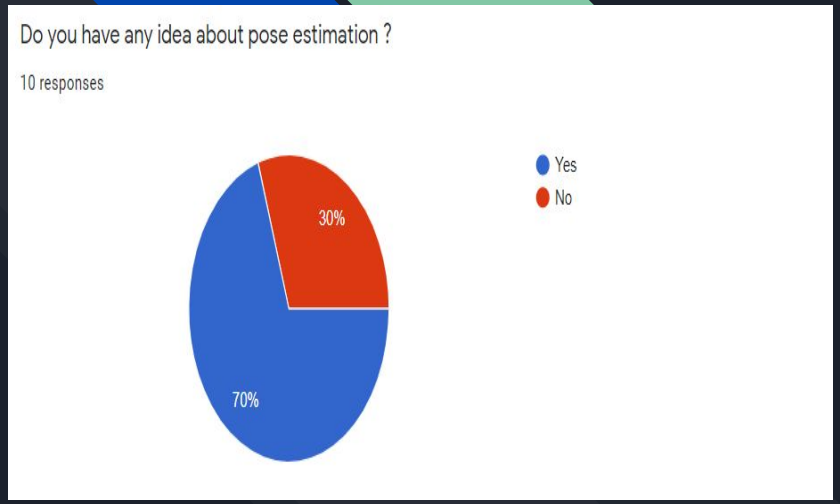
Survey Responses

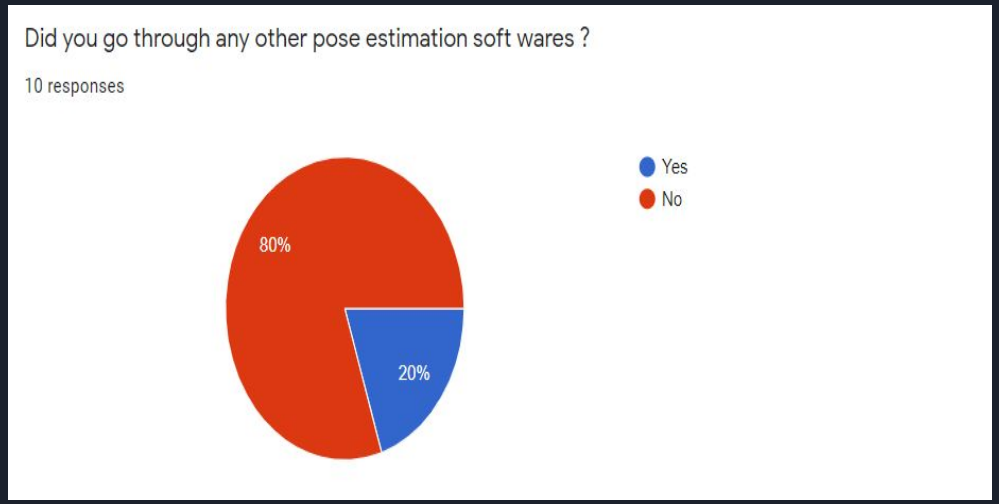




Need Finding

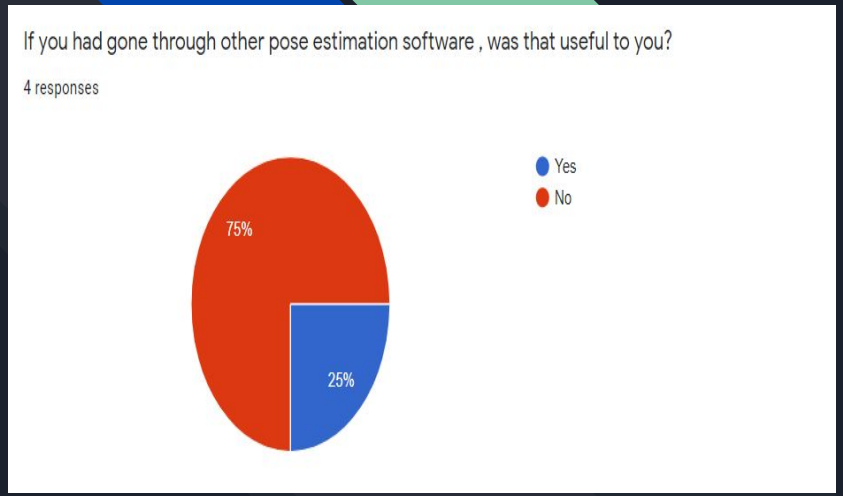
Survey Responses

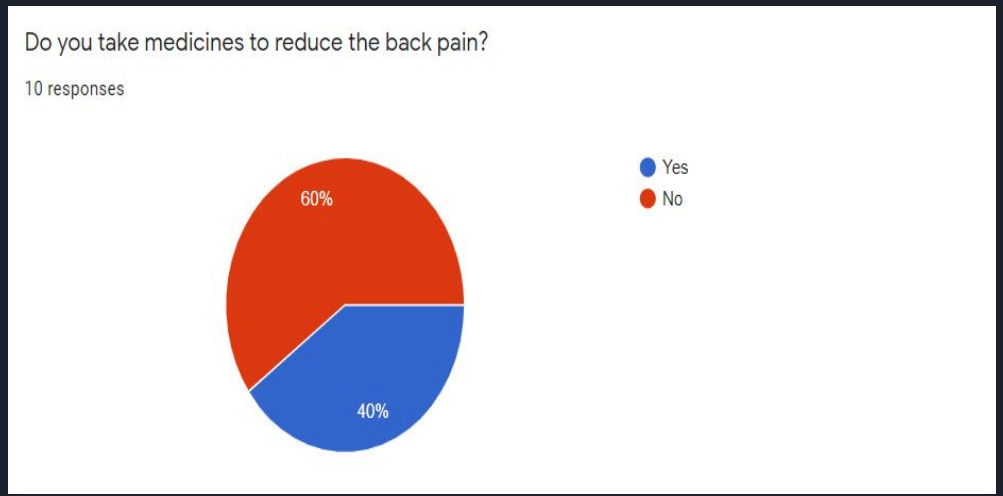




Need Finding

Survey Responses



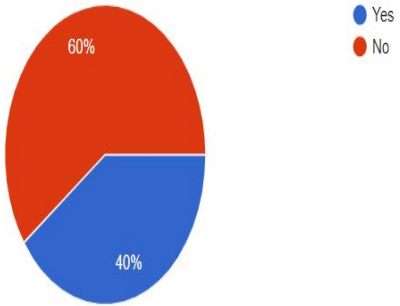


Need Finding

Survey Responses

Are those medicines effective?

5 responses



Any suggestions to current pose estimation soft wares to increase their effectiveness?

5 responses

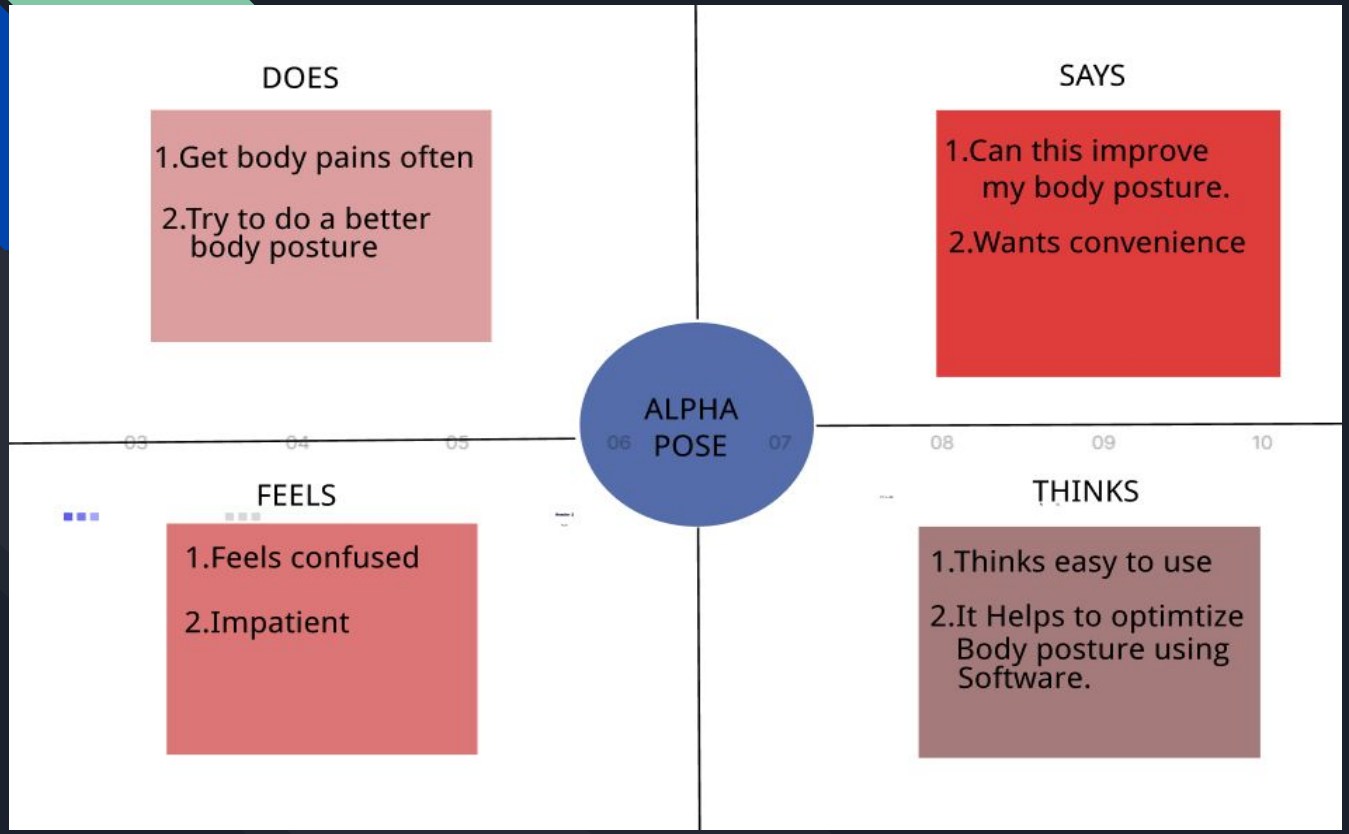
- Make it so optimal
- Model should be with more accuracy
- Nothing
- Increase the pose structure
- Train the model well

Need Finding

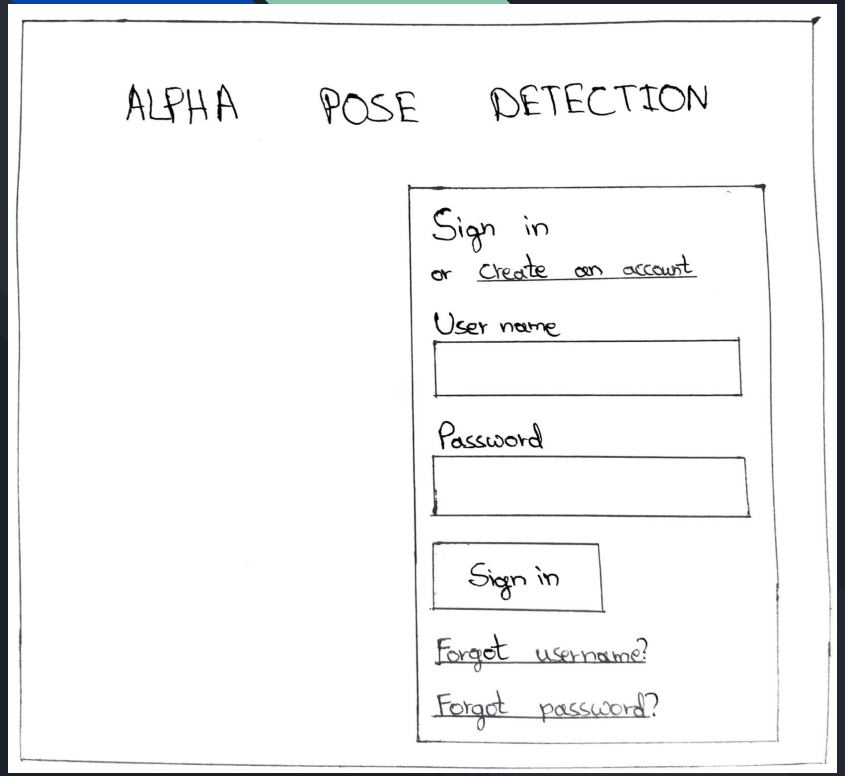
Summary :

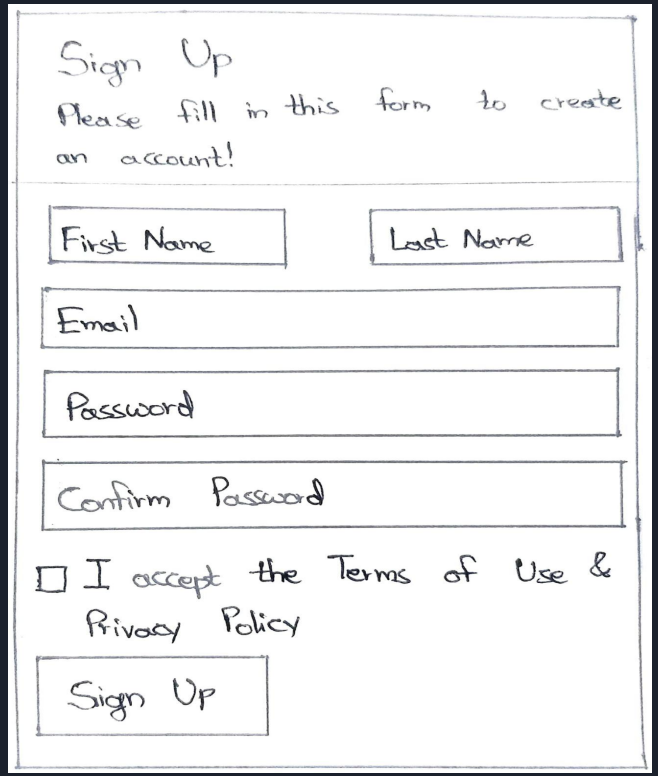
- After observing the survey responses we came to know that many of the people who are using pc or mobile tend to have body pains either during using device or just after using device.
- And many of the people already know about the pose estimation and respected softwares.
- But through our survey many of our responses say that they didn’t feel efficient after going through their softwares.
- So with this problem in mind we came to develop a simple pose estimation software that detects people’s pose and structure and signals if any wrong pose is observed from the user.

Empathy Map


DOES
1.Get body pains often
2.Try to do a better body posture
SAYS
1.Can this improve my body posture.
2.Wants convenience
ALPHA POSE
FEELS
1.Feels confused
2.Impatient
THINKS
1.Thinks easy to use
2.It Helps to optimtize Body posture using Software.

Low Fidelity Prototype



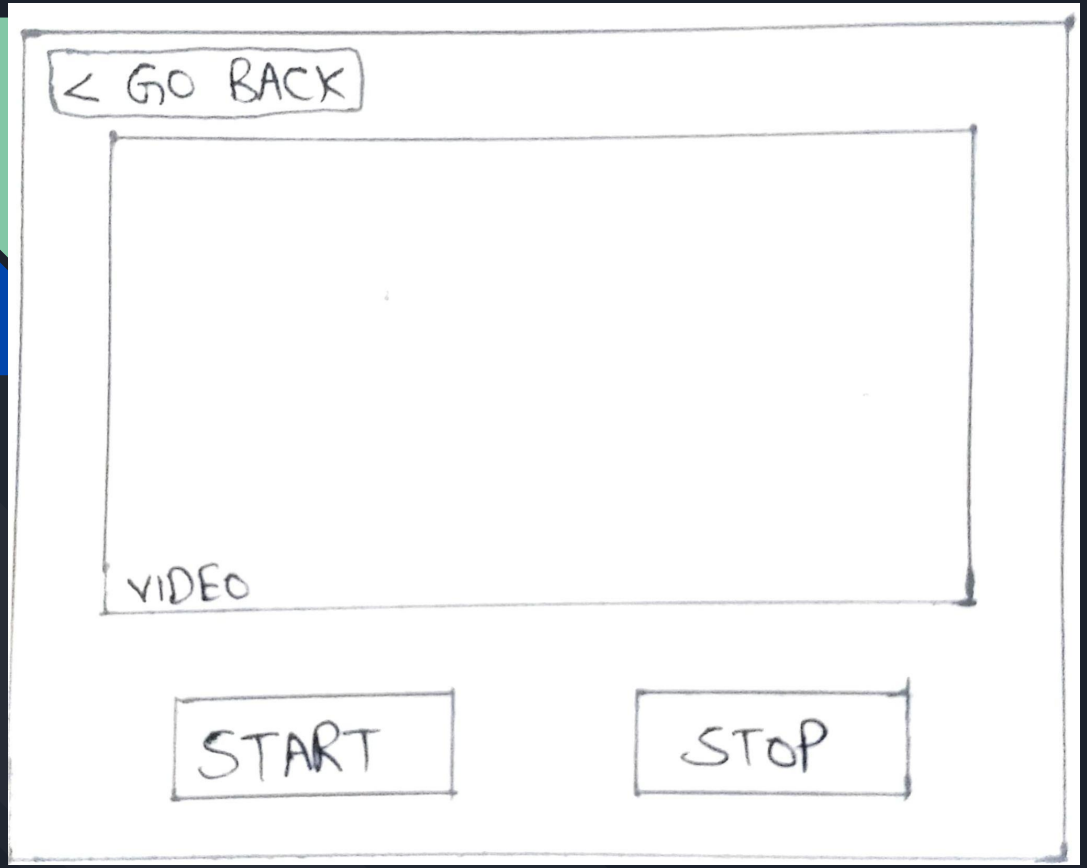


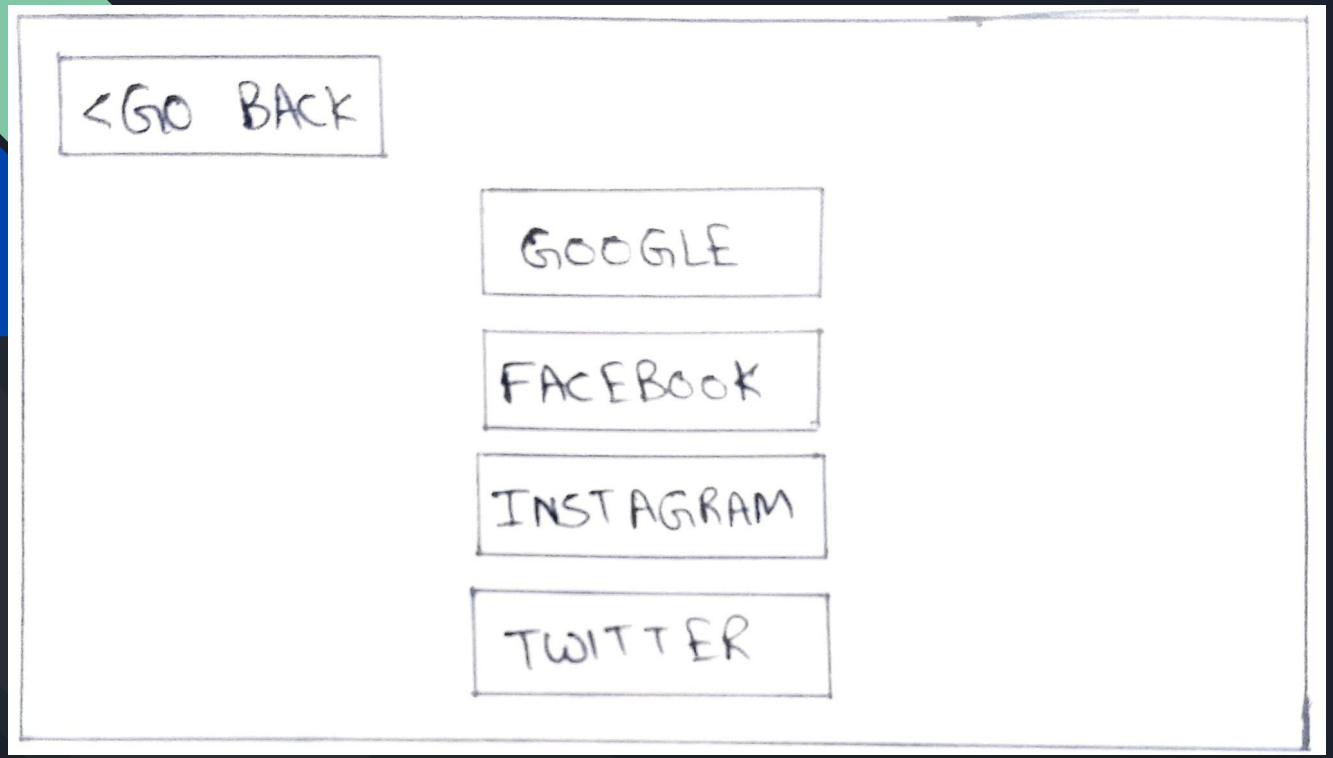
CONTACT US

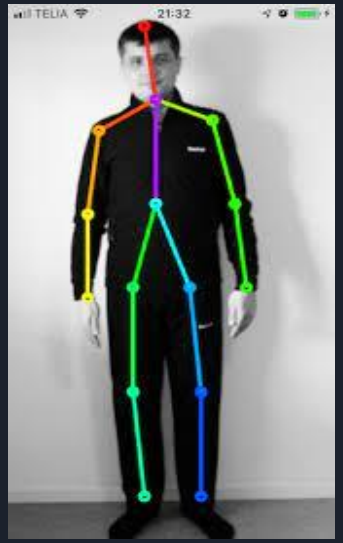
ALPHA POSE

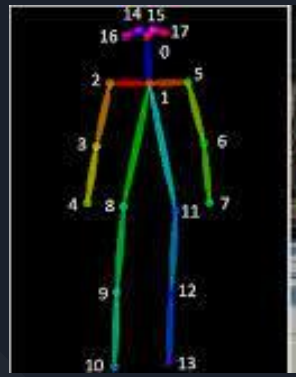
GET STARTED

HOW IT WORKS!


< GO BACK
VIDEO
START
STOP


<GO BACK
GOOGLE
FACEBOOK
INSTAGRAM
TWITTER


TELIA
21:32


14 15
16
17
0
2
5
1
3
6
4
8
11
7
9
12
10
13

Heuristic Evaluation

Strive For Consistency

Consistent sequences of actions should be required in similar situations; identical terminology should be used in prompts, menus, and help screens; and consistent commands should be employed throughout.

- Go Back Option takes back user to home page wherever you are.
- Identical terms are used in the website.

Enable frequent users to use shortcuts

As the frequency of use increases, so do the user's desires to reduce the number of interactions and to increase the pace of interaction. Abbreviations, function keys, hidden commands, and macro facilities are very helpful to an expert user.

- Users can contact us through google, facebook, instagram etc.

Offer informative feedback

For every operator action, there should be some system feedback. For frequent and minor actions, the response can be modest, while for infrequent and major actions, the response should be more substantial.

- If the login username or password given wrong the user will be shown which one gone wrong so the user can correct it and login easily.
- If the video recording was not good the system replies with message to record properly so the user understands it easily.

Design dialog to yield closure

Sequences of actions should be organized into groups with a beginning, middle, and end. The informative feedback at the completion of a group of actions gives the operators the satisfaction of accomplishment, a sense of relief, the signal to drop contingency plans and options from their minds, and an indication that the way is clear to prepare for the next group of actions.

- Sign up is successful after signing up.
- Login is successful after logging in.

Offer simple error handling

As much as possible, design the system so the user cannot make a serious error. If an error is made, the system should be able to detect the error and offer simple, comprehensible mechanisms for handling the error.

- If the username or password is given wrong error will be shown to provide correct ones.
- If the video is not recorded properly error will be shown to shoot it properly.

Permit easy reversal of actions

This feature relieves anxiety, since the user knows that errors can be undone; it thus encourages exploration of unfamiliar options. The units of reversibility may be a single action, a data entry, or a complete group of actions.

- Users can enter their credentials correctly again to login if they give them incorrectly.
- Users can record the video again if they don’t shoot it properly before.

Support internal locus of control

Experienced operators strongly desire the sense that they are in charge of the system and that the system responds to their actions. Design the system to make users the initiators of actions rather than the responders.

- Users here record the video taking the action to get their output.

Reduce short-term memory load

The limitation of human information processing in short-term memory requires that displays be kept simple, multiple page displays be consolidated, window-motion frequency be reduced, and sufficient training time be allotted for codes, mnemonics, and sequences of actions.

- WebPages are kept very simple here.
- They also can record the video very easily with start and stop.

Thank You