

## BATCH - 16A

**Project Title:** AI-ENHANCED CLOTHING SIZING THROUGH IMAGE ANALYSIS.

### Introduction:

In recent years, the fashion and retail industries have increasingly embraced artificial intelligence to solve a long-standing problem: ensuring accurate clothing sizing for customers. AI-enhanced clothing sizing through image analysis leverages computer vision and machine learning to provide personalized size recommendations based on customers' body measurements, extracted from images or videos. By analyzing images, AI can predict accurate size suggestions, minimizing returns due to fit issues and improving customer satisfaction. This project explores how AI-driven image analysis can enhance the accuracy of size recommendations, transforming the shopping experience and reducing the environmental impact associated with high return rates in the fashion industry.

### Installing tensorflow packages:

- npm install react react-dom
- npm install @tensorflow/tfjs
- npm install @tensorflow-models/pose-detection
- npm install lucide-react
- npm install @tensorflow-models/blazeface

**Used Code:** Using React

### App.jsx

```
import React from 'react'
import WebcamCapture from './CameraCapture'
import UseRef from './useRef'
import CheckingDistance from './CheckingDistance'
const App = () => {
  return (
    <div>
      <WebcamCapture />
      <CheckingDistance />
    </div>
  )
}
```



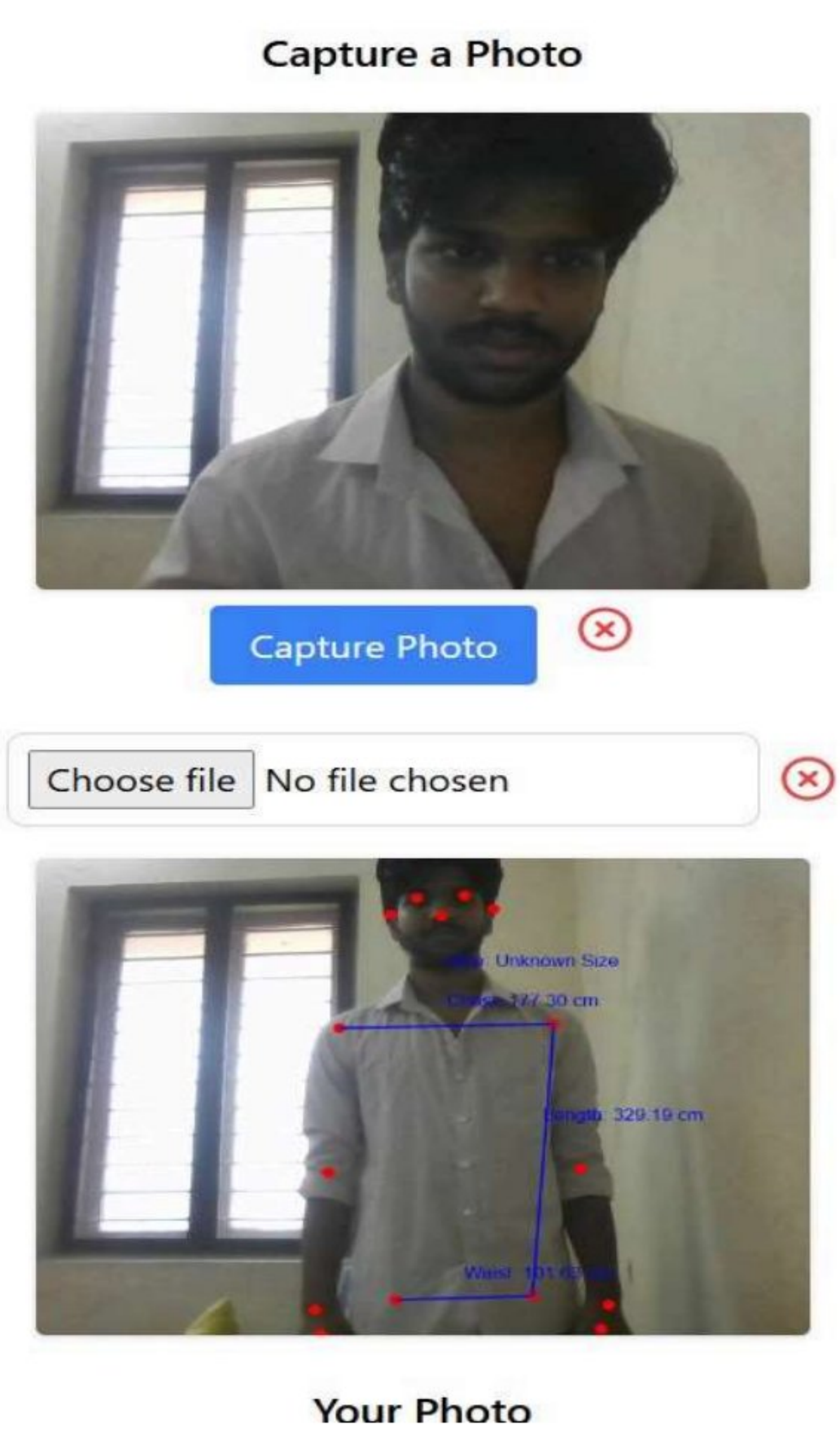
```

    style={{
      display: photo || file ? 'block' : 'none',
    }}
    className="w-full max-w-xs mx-auto mt-4 rounded shadow"
  />
  {photo && (
    <div className="text-center mt-6">
      <h3 className="text-lg font-semibold">Your Photo</h3>
      <img
        src={photo}
        alt="Captured"
        style={{ display: 'none' }}
      />
    </div>
  )}
</div>
);
};

export default WebcamCapture;

```

Output : 1





Output : 2



Body Measurements  
Shoulder Length: 40 cm  
Chest Size: 95 cm  
Waist Size: 80 cm  
Body Length: 170 cm

Adjust your distance  
Estimated Distance: 26.70 cm



Output : 3

