

# Environment set up

## Install the following library

### React native

```
npx expo install expo-camera
```

```
npx expo install expo-media-library
```

```
npx expo install react-native-screens react-native-safe-area-context
```

```
npx expo install react-native-gesture-handler
```

### Node js

```
npm install express multer
```

### Python ( I am using 3.12.7 but 3.10 + should be ok?)

```
pip install torch torchvision torchaudio opencv-python numpy Pillow
```

## To test the Identification

Get ur assigned IPv4 address ,change in "[SmartPlant\src\pages\identify.js](#)"

```

export default function IdentifyPage() {
  const identifyImage = async () => {
    let formData = new FormData();
    formData.append("image", {
      uri: images[0], // single mode
      type: "image/jpeg",
      name: "photo.jpg",
    });

    try {
      setLoading(true);
      const response = await fetch("http://10.69.215.149:3000/predict", {
        method: "POST",
        headers: { "Content-Type": "multipart/form-data" },
        body: formData,
      });

      const data = await response.json();
      setLoading(false);
    }
  };
}

```

and "SmartPlant\src\pages\identify\_output.js"

```

export default function ResultScreen() {
  const constructHeatmap = async () => {
    name: "photo.jpg",
  });

  try {
    setLoading(true);

    const response = await fetch("http://10.69.215.149:3000/heatmap", {
      method: "POST",
      headers: { "Content-Type": "multipart/form-data" },
      body: formData,
    });

    const data = await response.json();
    setLoading(false);
  }
}

```