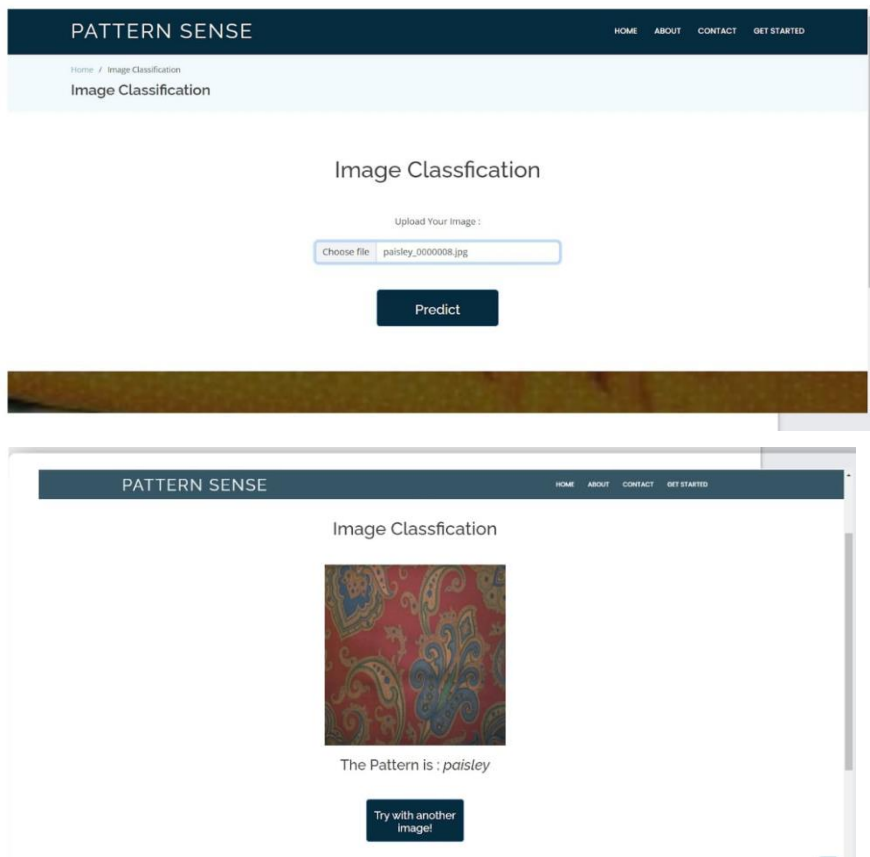


Project Report Format

1. **INTRODUCTION**
 - 1.1 Project Overview
 - 1.2 Purpose
2. **IDEATION PHASE**
 - 2.1 Problem Statement
 - 2.2 Empathy Map Canvas
 - 2.3 Brainstorming
3. **REQUIREMENT ANALYSIS**
 - 3.1 Customer Journey map
 - 3.2 Solution Requirement
 - 3.3 Data Flow Diagram
 - 3.4 Technology Stack
4. **PROJECT DESIGN**
 - 4.1 Problem Solution Fit
 - 4.2 Proposed Solution
 - 4.3 Solution Architecture
5. **PROJECT PLANNING & SCHEDULING**
 - 5.1 Project Planning
6. **FUNCTIONAL AND PERFORMANCE TESTING**
 - 6.1 Performance Testing
7. **RESULTS**
 - 7.1 Output Screenshots



8. ADVANTAGES & DISADVANTAGES

Advantages:

- a. Speed and Efficiency
- b. Reliability and Consistency
- c. Scalability and Flexibility
- d. Practical Benefits

Disadvantages:

- a. Data and Infrastructure Requirements
- b. Technical Complexity
- c. Robustness & Reliability Issues
- d. Cost & Maintenance

9. CONCLUSION:

Fabric pattern classification using deep learning especially CNNs like ResNet has proven highly effective, achieving strong accuracy and robustness in both visible and near-infrared imaging for quality control and sustainable textile recycling. It's is mostly useful for industries like textile, fashion and interior design.

10. FUTURE SCOPE:

Future progress lies in leveraging self-/unsupervised learning, multimodal sensing and optimized edge-AI deployments to build compact, real-time, data-efficient systems - paving the way for scalable, eco-friendly textile inspection and classification solutions.

11. APPENDIX

Dataset Link:

<https://www.kaggle.com/data-sets/nguyngiaboi/dress-pattern-dataset>

GitHub Link: <https://github.com/AbdulAzeem18/Pattern-Sense-Classifying-Fabric-Patterns-using-Deep-Learning>

Project Demo Link:

https://drive.google.com/file/d/1eoVo2lh-7tiRmC1yTQWYWmRfYlIOYhYZ/view?usp=drive_link