CAR DAMAGE DETECTION

CMPE 492 Senior Design Project

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INTRODUCTION

Hello Everyone! Today, We will be presenting our car damage detection system. This system is an AI-based solution that automatically detects and classifies damages on vehicles.

PROJECT OBJECTIVE

The aim of this project is to automate the car damage detection process, making it faster, more accurate, and efficient. This will greatly benefit insurance companies, repair shops, and accident investigation teams.

TECHNOLOGY USED

Our system utilizes an advanced AI model called Detectron2 Mask R-CNN, developed by Facebook. This model analyzes photos of vehicles to detect and classify damaged areas.

BENEFITS OF THE PROJECT

Fast and Accurate Assessment: Our system quickly identifies damages on vehicles, providing results much faster than manual inspections.

Reduction of Human Error: Automated detection eliminates the risk of human error and ensures more consistent results.

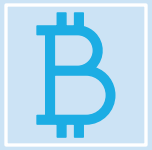
Cost Savings: Unnecessary repairs are avoided, reducing costs. The damage assessment process is faster and cheaper for insurance companies.

Efficient Use of Resources: Ensures only necessary repairs are made, optimizing the use of resources.

SOCİAL, ENVİRONMENTAL, AND ECONOMİC IMPACT

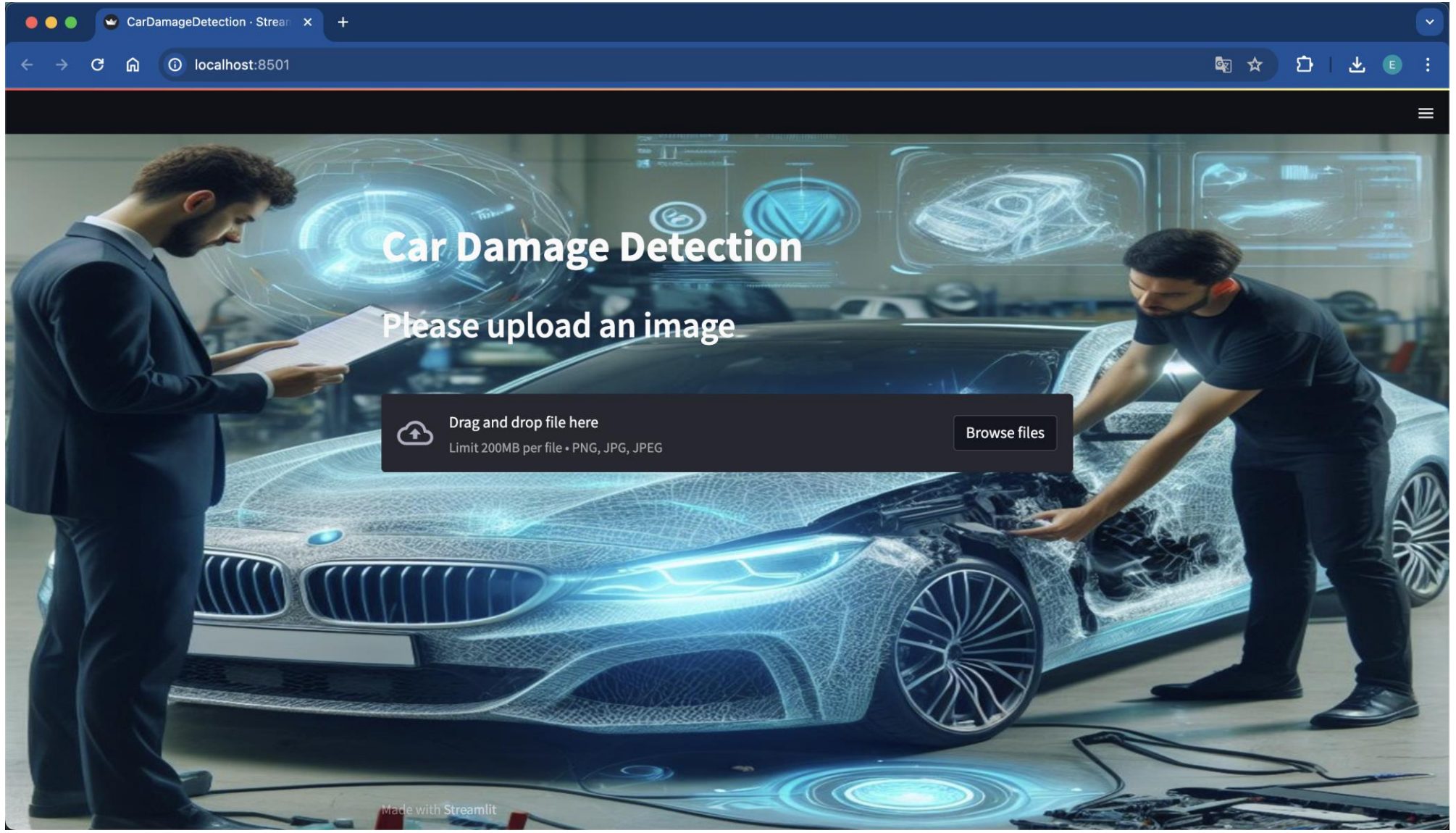
Social Impact: Accelerates the processing of insurance claims and reduces disputes. Additionally, it increases job opportunities and education in Al.

Environmental Impact: Promotes resource optimization by preventing unnecessary repairs.



Economic Impact: Achieves cost savings and revolutionizes the car insurance industry with faster, more accurate claims processing. Similar Al-based systems can benefit other industries as well.

HOW TO USE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Car Damage Detection
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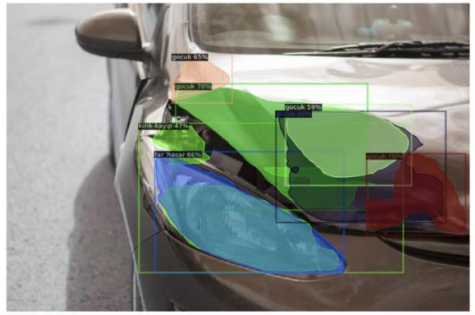
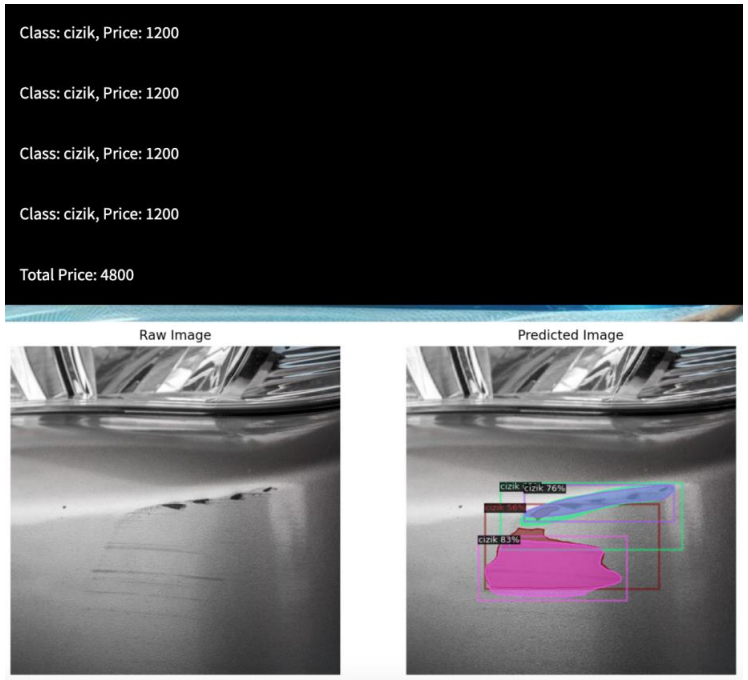
Total Price: 47500

Raw Image

Predicted Image

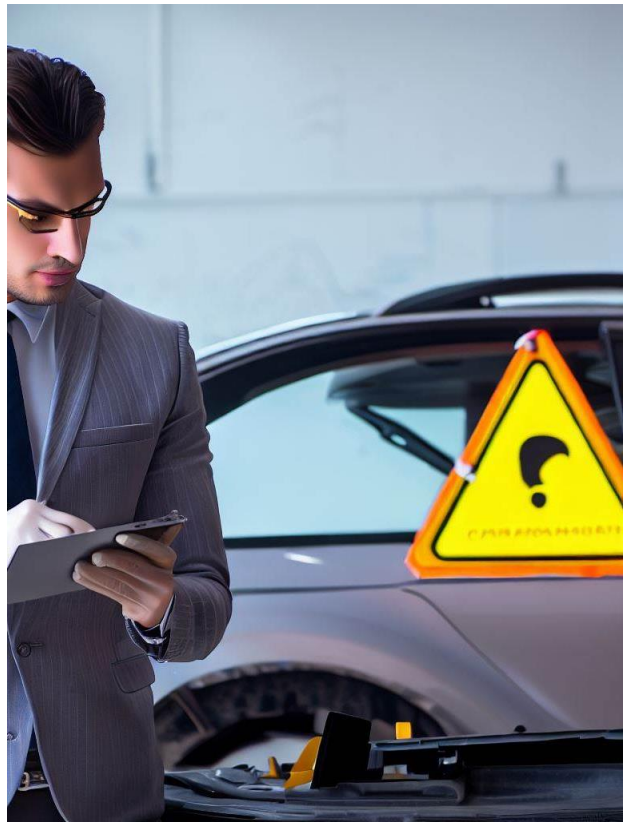




EXPERIMENTAL RESULTS

CONCLUSION

Our car damage detection system leverages AI technology to revolutionize the vehicle damage assessment process. By automating detection, we save time and resources, provide consistent and objective assessments, and eliminate the risk of human error. This has the potential to set a new industry standard and inspire further research and development, enhancing efficiency and reliability across various sectors through AI integration.



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THANK YOU