

AI-Ecoreform-Turning the Non-Recyclables into the Remarkable

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Abstract: *This project proposes the development of an AI-powered mobile application designed to promote sustainable living through creative up-cycling and efficient recycling. The app empowers users to transform everyday waste and unused items into functional or artistic creations by leveraging artificial intelligence for idea generation, material recognition, and step-by-step guidance. Users can scan objects using their phone camera, and the app identifies the material and suggests personalized DIY projects based on skill level, available tools, and environmental impact. It also connects users to local recycling information and sustainability tips. By merging environmental consciousness with AI technology, the app fosters a culture of reuse, reduces landfill waste, and encourages community-driven innovation in sustainable design. This AI-powered mobile application is designed to make eco-friendly living easy and accessible in everyday life. By simply taking a photo of an item—like an old T-shirt, a glass jar, or leftover packaging—the app instantly identifies the material and suggests creative up cycling or recycling ideas tailored to the user's lifestyle, skill level, and available tools. Whether it's turning a plastic bottle into a plant holder or finding the nearest recycling point, the app offers quick, practical, and sustainable solutions for daily use. With built-in tutorials, material tips, and local recycling info, the app becomes a personal eco-assistant—helping users make greener choices effortlessly, one item at a time*

Keywords: AI-Powered Mobile Application, Sustainable Waste Management, DIY Upcycling, Computer Vision, Material Recognition, Environmental Sustainability, Circular Economy, Community Engagement

