Recycling contamination is a global problem that is mainly caused by the public's confusion regarding the proper waste disposal practices in their area.Most of the current practices for educating the public on proper waste sorting include displaying labels on waste bins, distributing educational pamphlets, and accessing a municipality's website for information.Optional metadata (raw label, confidence score, category, and timestamp) is stored in a Supabase PostgreSQL database provided by Supabase for later analysis by recycling facility staff.The system utilizes TensorFlow.js and a pre-trained MobileNetV2 model that is trained on the TrashNet dataset to classify waste items on the user's device without uploading any images.This paper describes the Intelligent Waste Sorting and Recycling Assistant, a privacy-preserving web-based application that can immediately identify the type of waste an individual is trying to dispose of and provide them with the proper disposal instructions for that item in real time.They are mostly ignored by the public and do not provide the individual with immediate assistance regarding the proper disposal of a specific item at the time and location of disposal.

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