Project Proposal

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Ecopredict

Empowering the Circular Economic ideas through AI

About Us

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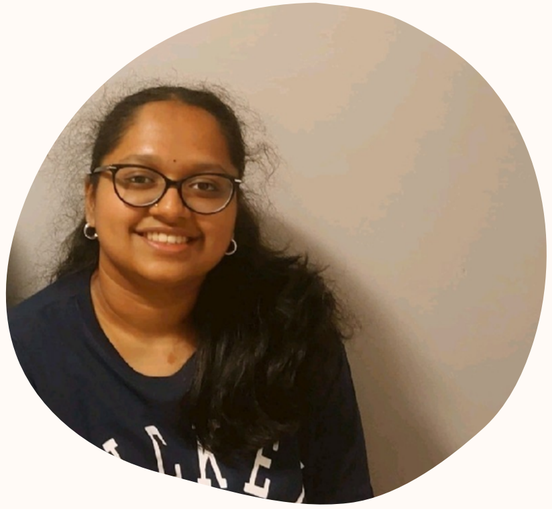

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problem statement

The Circular Economic Conundrum: From Data to Decisions

Despite an influx of sustainable business ideas, distinguishing viable circular economy innovations remains a hurdle.

Solution

EcoPredict addresses this by evaluating and surfacing the most promising solutions, aiding in the transition to a sustainable, circular economy.It harnesses the power of AI to analyze and assess sustainability initiatives. Built on a BERT-based machine learning framework, it effectively processes environmental text data, categorizing solutions and estimating their potential impact. EcoPredict is a valuable asset for decision-makers in the circular economy, offering data-driven insights to prioritize and quickly identify promising ideas.

Technical Architecture

The core of EcoPredict is based on BERT, a deep learning neural network model that excels in understanding the context and nuances of natural language.

This code fine-tunes a pre-trained BERT model for text classification using a labeled dataset. It covers data preparation, including reading, combining, and encoding labels. Text data is tokenized using the BERT tokenizer, ensuring proper preprocessing.The model is trained over a specified number of epochs, and its performance is evaluated on the test dataset. This process enables accurate text classification .

At the end,a CSV file is produced. This file contains the text data and their corresponding labels, making it convenient for further analysis and sharing of the model's predictions. This feature enhances the code's utility by providing an easily accessible labeled dataset for future reference and reporting.

Future Development

The next chapter for EcoPredict is to offer a comprehensive analysis of sustainable ideas, providing detailed scores in economic feasibility, resource efficiency, and sustainability.Our enhanced algorithm will also deliver specific feedback for each idea, pinpointing specific areas for enhancement in these key categories.To augment this experience, we plan to introduce an intuitive chatbot, making the exploration and refinement of sustainable ideas more user-friendly and interactive.

Thank you