Artificial Recognition of Cannabis

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Project Summary

Our project aims to solve the issue of incorrect product information in the cannabis industry. As cannabis is a living product, the THC and CBD values change from batch to batch. This means it is difficult for companies to keep their menus up to date with the correct values for each batch. To solve this problem, we teamed up with BudSense, a Regina tech company that specializes in cannabis store menu boards. With our solution, cannabis store employees will be able to simply snap a picture of a package, and the menu boards will be updated instantly, saving time and money for the store.

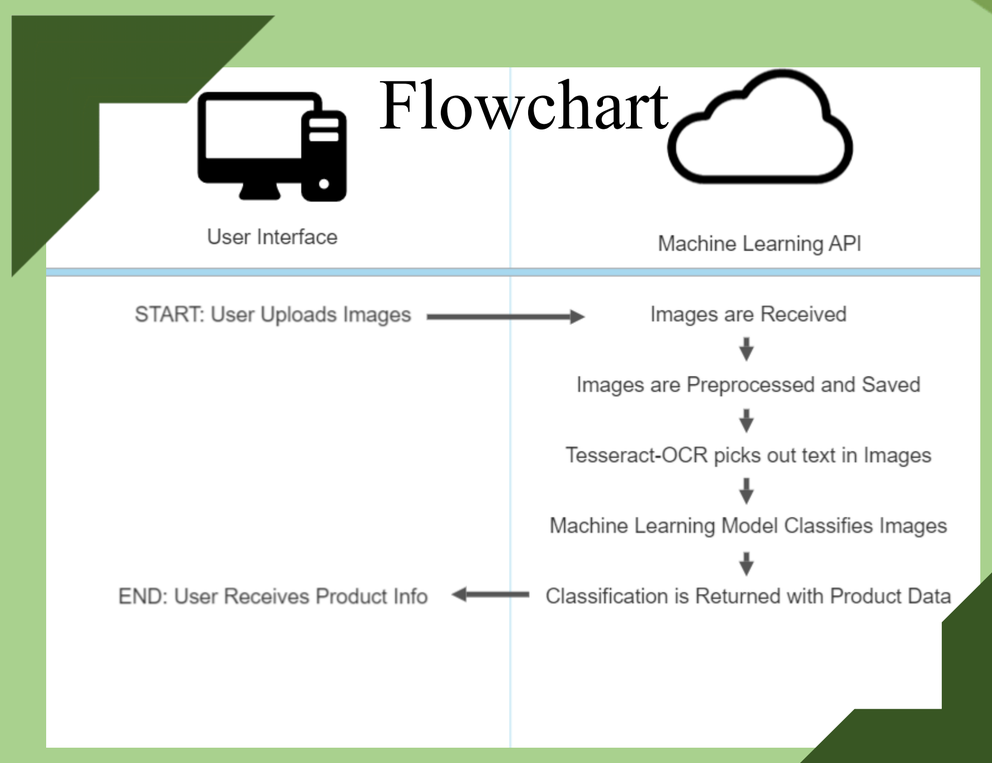
Check out Our Repository

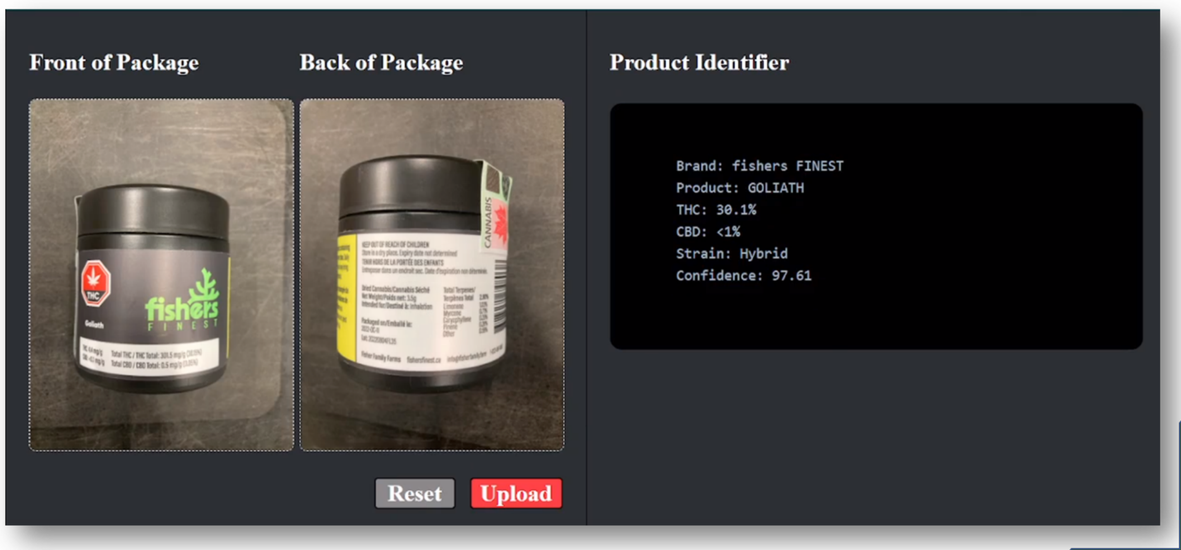
Our Approach

Our first step was collect images to train our model. As there is no pre-existing dataset, we manually collected over 7,000 images from Farmer Jane Cannabis.

Next, we trained our machine learning model to recognize and classify our images. We used our custom AI model in combination with Tesseract-OCR to get the text from the images. By using both approaches, we can get the correct brand and information from one picture.

Finally, with the help of BudSense, together we built a clean user interface that can easily be integrated into their systems using Angular.





Future Work

By using our custom dataset, our project is able to predict each package with 95% accuracy. Upcoming work for this project includes building it into the BudSense dashboard for store employees, as well as adding a mobile app and expanding our product database. Together with BudSense, we have set an a timeline of having this tool rolled out to all of their stores in 8-12 months.

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