

Project Intro: Customer Loyalty Program Web Crawler



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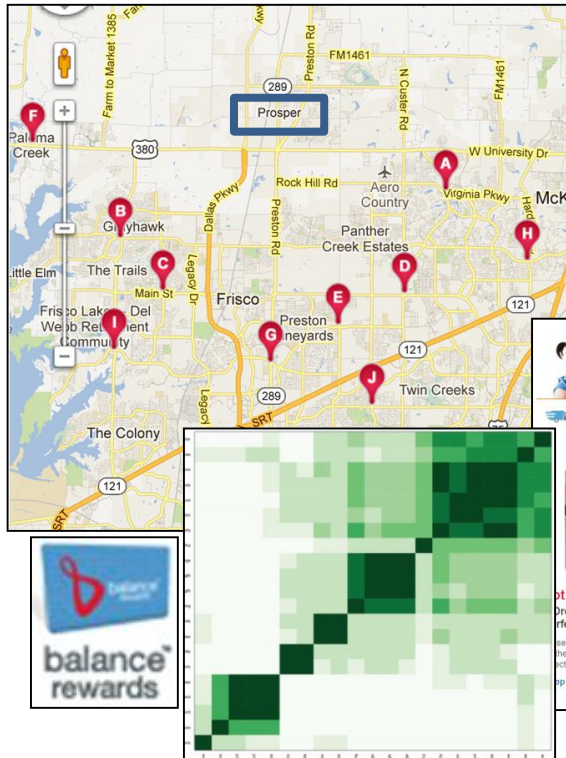
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What does Alliance Data do?

Walgreens Example



- Customers get more of what they want
- Retailer performs better

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The job supported: Strategic Insights

Some of the duties of this Job

1. Enhance understanding of how the markets in which Alliance Data's businesses operate as well as how our competitors, clients, and partners all impact our business performance
2. Produce Alliance Data "Monthly Fact Book" & "Quarterly Peer Review" reports, showing what's going on in the areas mentioned above
3. Provide education for business leaders on specific topics, by request

Our (internal) customers are:

- business executives who make decisions
- Strategy, Finance, and HR business partners who support those business leaders
- other research collaborators (sometimes, we reuse or we build on others' findings)

Project: Customer Loyalty Program Web Crawler

Definition of the Project

- One of the areas of business research we perform is to track **customer loyalty programs around the world**. There are different types of programs: single-brand discount-based, single-brand currency-based, multi-brand coalition loyalty, currency exchanges, and many different hybrids of those that we lump into partnerships.
- This software will be an aid to such efforts by **scouring the world wide web for targeted concepts**.
- The **web crawler** needs to search web pages according to a set of search parameters and to collect the findings back into an easy-to-use summary with links back to detailed content pages or documents.
- **One user interface** is needed to direct the web crawling activity, and **another user interface** is needed to view and to organize the results that it finds.

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Purpose of the Project

- We store the facts we find in files on our Windows computers. Each iteration of the research, we then have a great starting point, and we set out to expand it in the most valuable direction(s).
- Currently, we mostly use manual searches based on prior knowledge to locate the information about customer loyalty programs around the world.
- We need to make this research task **more efficient** so that we can perform it more quickly and therefore more often.
- We need to **expand the scope** of customer loyalty programs that we track, in order for our model of the global markets to be as complete and as accurate as possible.

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Software Constraints

- The deliverable is a SaaS (preferable) or desktop (if necessary) software that will help us organize our thinking about the facts and beliefs that we know about.
- There is just one user per installed instance on a desktop or laptop PC.
- We use Windows 10 Enterprise, and some executives use Apple iPads.
- I will accept delivery of the completed software, then start the process to install in production after the conclusion of the semester – installing it in our office is out of scope for the project.