

Improving users' experience for a suite of <a href="DataStax">DataStax</a> products

Note: I have signed a NDA for this work, therefore would not be able to share all the details



#### Role

As an UX Research Intern, conducted usability testing studies to gain insights into how users make use of DataStax (DS) products to store, manage and monitor data on the SaaS platform.

#### **Team**

I was the only UX
Intern. Collaborated
with Product
Managers, UX
Researchers,
Software Engineers,
Testing Engineering

### **Duration**

June - August, 2019

#### Skills and Tools

**Tools:** Google docs/slides/sheets, Eclipse JAVA IDE, NoSQL/SQL, Atlassian JIRA

**Skills:** Usability testing, Design thinking, Data Analysis, Building future product roadmap, Contextual Inquiry



# Objective

My role in this internship involved understanding the customer environments and their usage of the software to critically better serve the customers. Some of the questions, I answered during internship include: How do customers employ the DS clusters? Which features of DS are most used by users? To what extent do users find DS monitoring tool helpful? Are there specific features in the software that requires modification?

Target users: Software engineers/developers; Database administrators



# **Process**

- After receiving a brief, I discussed ideas with my hiring manager and team about how to understand user behavior while conducting remote usability testing
- Taking advantage of my technical background in SQL and JAVA, I got myself familiarized with the DataStax products, working on virtual machines and installing relevant libraries and drivers
- To get an early start, I was tasked with helping the team with video-coding data collected at a DataStax Accelerate Developer conference for a suite of DataStax products
- I also got myself acquainted with a suite of DataStax products: Appstax, DSE JAVA Drivers, Insights, Constellation (Cassandra as a service), and DataStax Desktop

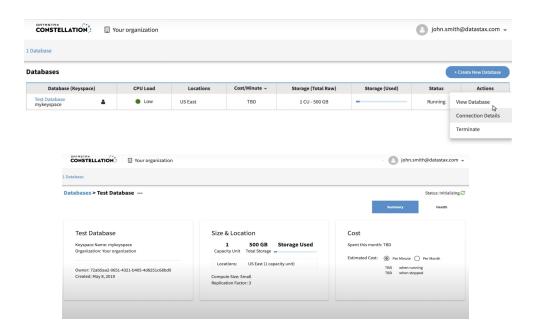


# **Process**

- Once I had created the study, I **recruited participants internally** within new hires or employees who weren't familiar with the software
- During the process I created **pre-tasks**, **task scenarios**, **post-tasks questionnaires** using design principles: collaborating with product managers, designers, and software engineers
- I conducted independently/collaborated in carrying out over 40+ usability testing studies for the DataStax products
- The results from these studies were analyzed and categorized based on low/medium/high priority issues

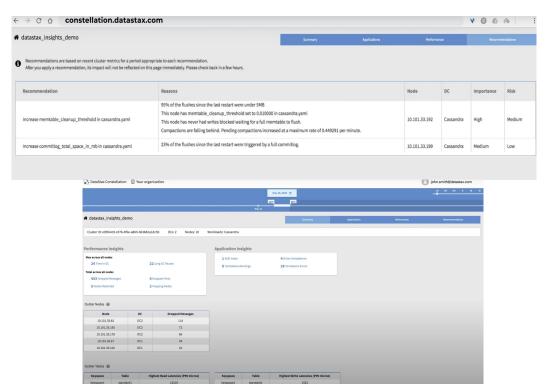


## Key tasks include: Creating a database





#### Key-tasks: Monitoring cluster health





#### **Process**

- Later on the basis of the results got from usability sessions, reported issues mentioned as tickets on JIRA
- I participated in the weekly triage meetings to resolve the issues/modifications of the product.
- After conducting the usability testing studies, I analyzed the results from the studies and wrote a detailed report which was published internally.



## **Findings**

 On the basis of the research conducted by me, the answers to the following product features were answered

For each cluster (Cluster ID, Operating System, Installation Type)

- DSE Version used
- For each datacenter

Number of nodes

Workload type: analytics, search

**Graph enabled** 

Is it running on cloud, which region, instance type

- Variability in operation size
- Read/Write/Update/Delete Ratio
- Replication Settings

No. of destinations per cluster
How many used submitting Spark jobs



## Challenges

- My internship was planned and executed well by my hiring manager, but there was a bit of a learning curve while understanding and working with DataStax products.
- Conducting, analyzing, and writing reports simultaneously was quite challenging.



#### **Outcomes**

The research provided a great deal of insight into not only how users interact with the DS products but also answered specific product features that needs work

- The key business outcomes answered in this internship include delivering better customer engagement, create targeted marketing campaigns and deliver webinars to drive early product adoptions
- Understand customer deployments and key features usage by customers



# Summary

Given the compressed timeline, I learnt to manage time efficiently and also work collaboratively in a team setting. Moreover, working with stakeholders and understanding business benefits from the UX research studies was also part of my learning process. During the final internship presentations, the usability findings were well appreciated and were incorporated in making product decisions.