

Executive Dashboard for Exchange Client Activity

Client

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Background

Nasdaq is one of the premier stock exchange companies in the world, and a household name synonymous with Wall Street in the United States. Operating 6 exchanges in the USA today (3 equity exchanges and 3 option exchanges), with a 7th exchange launching later in 2015, the amount of activity done across Nasdaq operated venues is tremendous. The Nasdaq Data Warehouse loads an average of 5.5 billion rows of data every day. Making sense of 5.5 billion rows of data is a challenge in itself, and Nasdaq senior management is looking for a webapp dashboard that enables them to understand activity on Nasdaq exchanges at a glance, with a good, clean UI/UX design, and quick UI performance.

Project Goals and Requirements

Working with Nasdaq Software Engineers, and working off requirements provided by Nasdaq Project Managers, a team of 3 Mines students will help build out a webapp dashboard codenamed Metis (the greek titan of wisdom). This dashboard will enable managers to quickly understand basic metrics around our exchange activity, looking at top clients by trading volume, breakdowns of their activity, etc. Metis is using modern web technologies, including the Flask framework (<http://flask.pocoo.org>), and the D3.js library (<http://d3js.org>). For querying the underlying data, Metis uses Amazon Redshift (<http://aws.amazon.com/redshift>).

Location

We would prefer that most of the work be done onsite:

143 Union Blvd, Suite 900
Lakewood, CO 80228

After field session

A limited number of paid summer internships may be available upon course completion