Parametric Data Analysis

Overview
David Consulting Group is a leading tech-consulting firm that measures and assesses their client's technology performance using a Function Point Analysis. The Function Point Analysis calculations are currently being done on an Excel spreadsheet.

Objective
Our task was to allow DCG owners to conduct function point analysis more easily and efficiently by enabling DCG owners to access and justify their client's Function Point Count at any time online. Our team has designed and created a web tool for DCG owners to perform their FP analyses, and access their client's function point counts and reports whenever they want and wherever they are.

Approach
• We used the existing code provided by the previous capstone group
• Our team used the Agile Scrum Software development methodology as recommended by our sponsors
• Our project timeline was divided into 5 sprints
• To accommodate Function Point analysis calculations and reporting on the web app, we extended the existing database
• Our first step was to identify all tasks of high priority from the Product Owner to create our Backlog of tasks
• Trello was used for task management.
• We used the Java programming language to build the project.
• All code was written in the Eclipse.
• We used the Play web framework to build the website on.
• We used the MySQL database as a RDBMS backend.
• For running in production we used Amazon Web Services.
• Our sprint tasks were identified from the bi-weekly sprint planning meeting
• The team members met every day for the daily scrum meeting to discuss progress and obstacles
• At the end of each sprint, we had a sprint review meeting to demo our finished tasks and get approval from our sponsors

Outcomes
Our team designed and created a working product that DCG will be using for further Client Function Point Analyses. Our product enables DCG owners to conduct Function Point Analysis online. The web application allows users to create a survey, input client data (FP Input), view calculations and analysis (FP Count), and generate reports as CSV files.