Project Plan
Integrated Analyst Ratings and Notes

The Capstone Experience

Team Principal

Ziyi Huang
Ryenn McAdory
Alexana Steck
Carter Trpik
Jacob Rieck

Department of Computer Science and Engineering
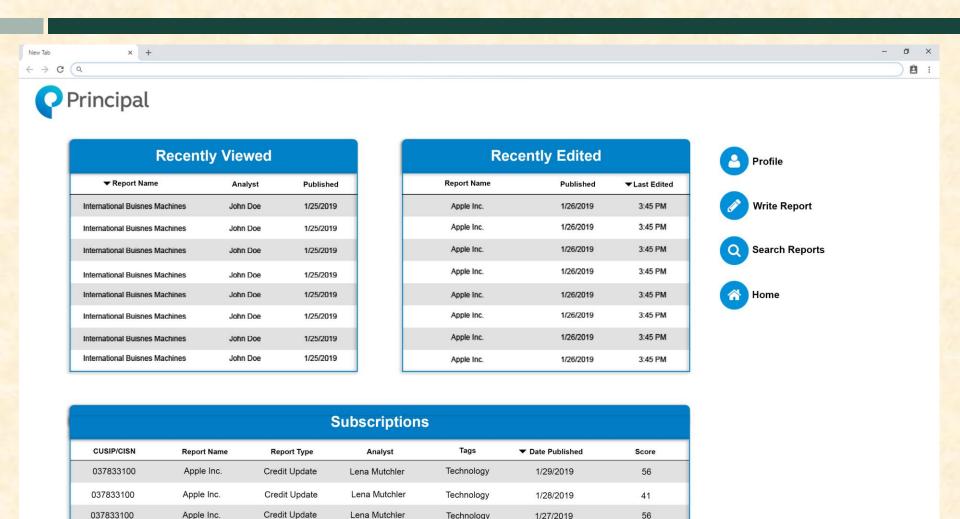Michigan State University

Spring 2019

Functional Specifications

- Create robust ratings and notes capabilities that may incorporate additional media

- Support intelligent distribution of the notes/ratings

- Maintain both current and historical notes/ratings

- Leverage cloud computing (Amazon Web Services)

Design Specifications

- Incorporate functionality of 4 systems across 3 boutiques into one comprehensive tool

- Allow users to easily view the reporting history of an investment opportunity

- Provide each boutique with a user experience that feels tailored to them

- Notify users of changes in holdings to expedite the decision-making process
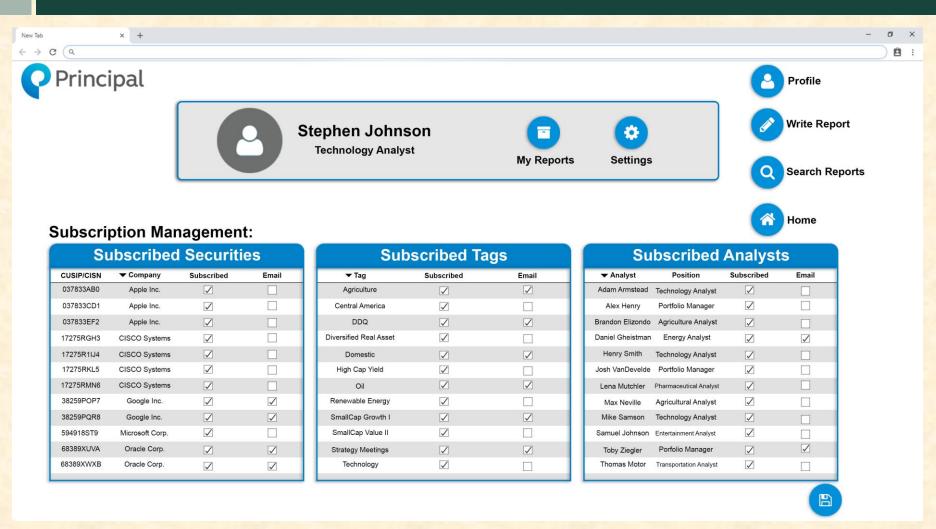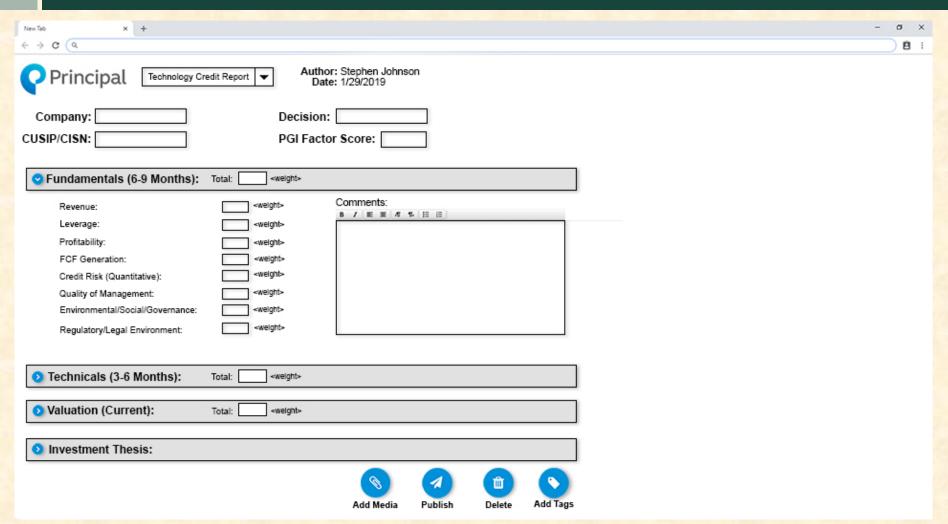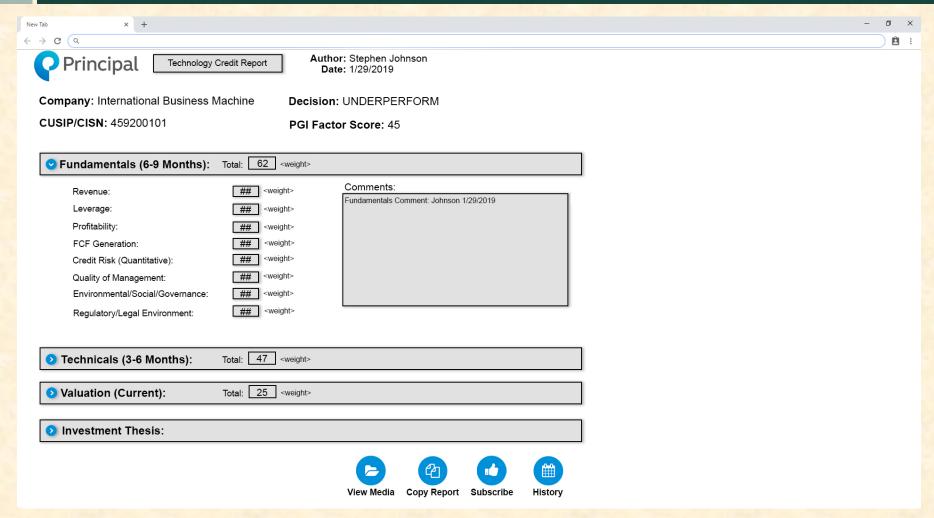
Screen Mockup: Welcome Page

Screen Mockup: User Profile Page

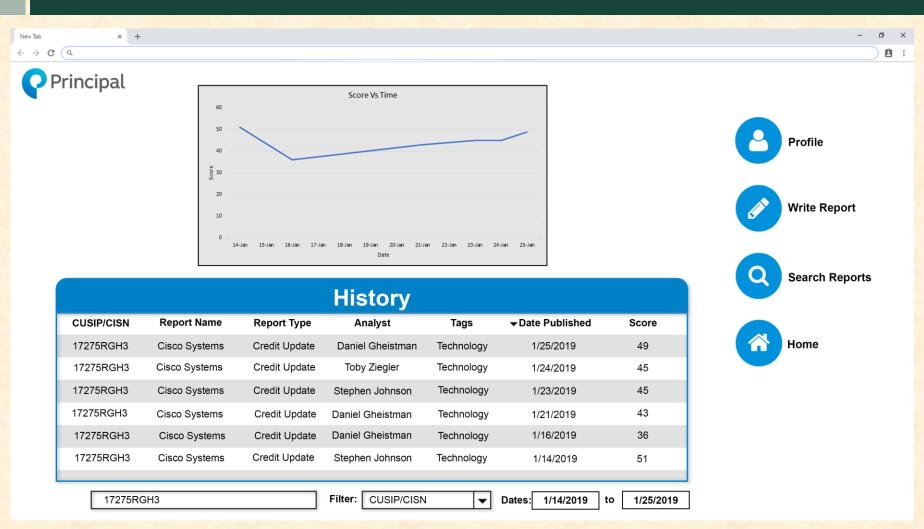# Screen Mockup: Make PPFI Ratings

Screen Mockup: View PPFI Ratings

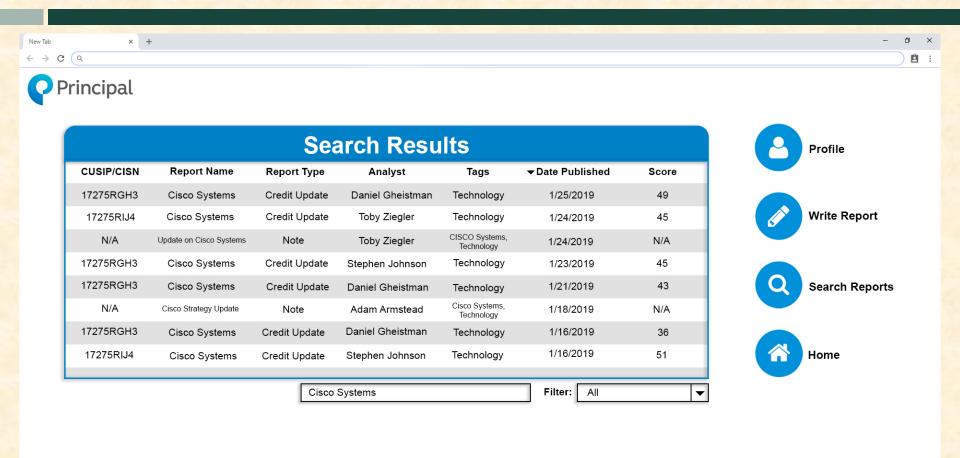# Screen Mockup: Report History
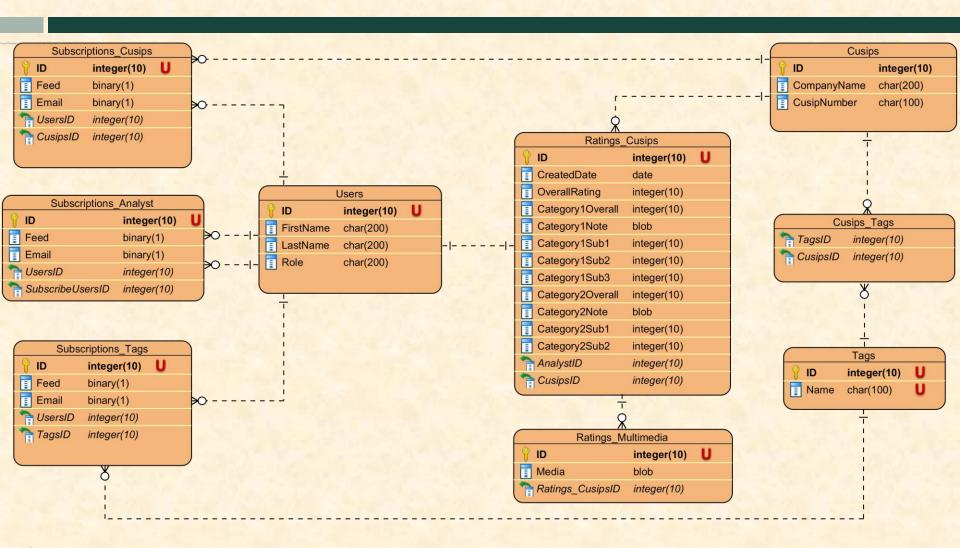
Screen Mockup: Search Results

Technical Specifications

- Use Amazon Web Services' SDK for user authentication and role information

- The PostgreSQL database will store data for
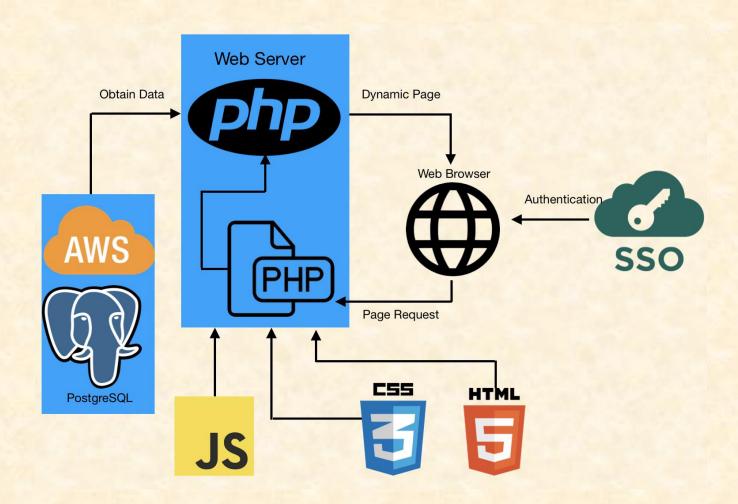
  - Investments
  - Ratings

  - User Subscriptions
  - Tags

- Security between boutiques will be maintained by creating multiple instances of the application

Technical Specifications

System Architecture

System Components

- Hardware Platforms
  - Amazon Web Services – Amazon Elastic Compute Cloud (EC2)
- Software Platforms / Technologies
  - PostgreSQL
  - PHP
  - JavaScript
  - HTML
  - CSS

Risks

- Integrate web app into client's SSO
  - Application must integrate with current SSO through AWS
  - Work with client to understand current solution
- Verify system will comply with government regulations
  - Financial regulations set in place by the federal government that application must follow
  - Work with Principal to ensure the system meets all requirements
- Accommodate the functionality of 4 different systems that are currently in use
  - Application needs to merge the systems currently used by the different boutiques without losing functionality
  - Iterate through mockups with the client and analysts before implementing the front-end

Questions?