Name of Project: Business Metrics Web App Development

Abstract:
Students on this team will create an intuitive website application that allows banking and insurance agents in our customer service center to track their personal on-call performance. In our call center, every action that a customer service representative takes is measured. Metrics include: average speed of answer, number of calls taken, talk time, documents worked, items paid, and an overall quality score.

This project consists of three parts: first create a web application where this information can be housed and shared. Second, design and deliver visually stunning and intuitive scorecards, visualizations and leaderboards, and finally, create the ability for customer service representatives to challenge one another to meet quality and efficiency goals. These peer-to-peer challenges could include

1. Call Center to Call Center Challenge,
2. All Call Center Challenge,
3. Manager to Team Challenge, and;
4. Representative-to-Representative Challenge.

This will be Ally’s 3rd MDP project since 2017. The Insurance division has been extremely pleased with the deep interaction and results from previous student teams. This 2019 project will build upon that historical success to deliver for another critical division of Ally: the financial services bank.

Ally Financial Inc. is an American financial holding company headquartered in Detroit and Charlotte. The company provides a range of financial services including auto financing, corporate financing, insurance products, and online banking. Ally is one of the top auto lenders in the U.S. by volume.

Impact:
Today we have many metrics that are monitored on a daily basis to indicate the productivity of a call center, and of our agents, but we do not have visually stunning, automatically created visuals and reports. Also, we do not measure ourselves consistently between lines of business (bank, auto, insurance). This project will allow us to do this, as well as us save time: no longer creating reports manually. We anticipate that the challenge aspect of the website will excite agents to increase quality and efficiency across our call centers, resulting in better service to our customers. Once successful, this new application may be leveraged across all of Ally.

Scope:
Include a Deliverable (Phase I) and Details Here: BASELINE GOAL
- Creation of the Website, leveraging Ally’s Brand (look and feel)
- Call Center, Team Level, and Agent Level Dashboards and Score Cards
- Ability to Initiate a simple “Challenge” within the website (peer to peer)

Include a Deliverable (Intermediate – Phase II) and Details Here: SUCCESS
- User Roles and Views for: Call Center, Manager, Agent, and Back-end
- Develop live KPIs (Key Performance Indicators) for managers to monitor their employees
- Ability to Create More Robust “Challenges” (Call Center, Team)
- Tracking Mechanism for “Challenges” (display progress and time remaining)

Include Stretch Goals and Details here: HIGH SUCCESS
- Drill-Down Functionality of Dashboards and Score Cards
- Thorough Documentation and Playbooks of backend coding and reports for Sustain
• Website Maintenance by an administrator
• Ability to Configure and Modify existing Dashboards and Reports
• Personalized objectives based on historical performance, displayed visually

Student Skills:
Our technology and programming information is provided below. We don’t expect students to be familiar with all of these items, but strong candidates will have familiarity or experience with some of them and a positive attitude to learn what is necessary as the project gets underway.

Please highlight your experience with any of the items on this list in your personal statement on the application.

- Platform: Windows 10 and Mac OS
- Language: Java, HTML, CSS, PL/SQL
- Tools: Eclipse IDE, Amazon Web Services, Spring Boot, Sketch, Jira, Bitbucket, IBM Cognos, Power BI

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<thead>
<tr>
<th>Project Roles</th>
<th>Key Skills and/or Knowledge</th>
<th>Likely Majors</th>
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<tr>
<td>General Programming (3 Students)</td>
<td>General interest and skills in programming. Key skills: JavaScript, CSS, HTML</td>
<td>CSE/CS-LSA</td>
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<tr>
<td>User Interface Design (1 student)</td>
<td>UI/UX Design, usability studies, graphic design experience/interest desirable</td>
<td>Information (SI), A&amp;D</td>
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<tr>
<td>Business Analyst (1-2 students)</td>
<td>Skills in analytics, basic reporting, and data handling or career interest. Must have some knowledge of coding and be willing to learn basic programming development skills.</td>
<td>Statistics/Data Science, BBA/CS double major or minor.</td>
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Additional Desired Skills/Knowledge/Experience

Any of the following Skills, Knowledge or Experience would be valuable to the 2019 team. We don’t expect students to be familiar all or even most of these items, but strong candidates will have familiarity or experience with some of them and a positive attitude to learn what is necessary as the project gets underway. Please highlight your experience with any of the items on this list in your personal statement on the application.

A positive attitude and excitement to learn in a fast paced and innovative environment.

Location:
Project work will take place on campus during the WN19 and FA19 semesters. All key presentations will take place: Ally Detroit Center (Formerly One Detroit Center)
Students will also be asked to come to our Insurance Call Center in Itasca, IL to see the call center in action. This will be an overnight trip, coordinated within the Students’ class schedules. Ally will cover any expenses not covered by the stipend.

(MDP will provide necessary transportation)

**Sponsor Mentors:**

**Kirsten Ellsworth: Director of Data Management and Analytics**

Kirsten Ellsworth is the Director of Data Management & Analytics for the Insurance Division of Ally Financial. She started her career as an actuarial intern, trading in math books for a love of data. With a BS in Applied Technology from Eastern Michigan University, Kirsten has been able to apply the rigor of her mathematics and data management background, with a practical, logical approach to solve various problems across the organization. Ms. Elsworth's team would tell you that she is the self-proclaimed, 'World's Greatest Analyst', as she thoroughly enjoys the moments when she gets to dig-in and help solve a tough problem. She has designed and implemented multiple reporting and data warehouse solutions, including a $12M Global Data Warehouse. Kirsten particularly enjoys large complicated projects. In her current role, Kirsten acts as the Insurance Business Lead for Data Governance, while continuing to grow an analytics team that collaborates across all areas of the organization.

**Pete Lapczynski: Master of Data**
Also supporting the student team:
Elizabeth Shook: Master of Coordination

And Alan Longworth: Master of Analytics

Faculty Mentor
Are there any specific members of the faculty whom you would like us to approach for your project? All projects receive a faculty mentor for each student team.

Legal Requirements:
Citizenship Requirements
- This project is open to all students regardless of citizenship status

Intellectual Property Agreements / Non-Disclosure Agreement Requirements
- Students will sign an IP/NDA document that is unique to my organization (must be approved by UM Legal Team)

Internship Information
• Summer Internships in the field of Data Management and Analytics are automatically offered for all qualified* students who join our project team. Ally Summer Internships are intended to discover talent, to be hired upon graduation.

*Qualifications include: 1) Students must have completed 2 years (or more) of University education, have a 3.0 minimum GPA, and have the ability to work in the US without sponsorship.

**Company Information:**
Ally Financial Inc. is a financial holding company and a bank holding company. The Company’s banking subsidiary, Ally Bank, is a franchise in the Internet, telephone, mobile and mail banking market. The Company operates through three primary segments: Automotive Finance operations, Insurance operations and Mortgage operations. Its Automotive Finance operations segment provides automotive financing services to consumers and automotive dealers. Its Insurance operations segment offers both consumer financial and insurance products sold through the automotive dealer channel, and commercial insurance products sold to dealers. Its Mortgage operations segment includes the management of its held-for-investment mortgage loan portfolio and the execution of bulk purchases of jumbo and low-to-moderate income (LMI) mortgage loans originated by third parties. Its main lines of business are Dealer Financial Services, which includes its Automotive Finance and Insurance operations, and Mortgage.