Team 6 CSC 4350:

Software Engineering

Dr. Rao Casturi

Team Members:

1. Alexandra Gentile
2. Ha Tran
3. Derrick Mason Jr.
4. Shivam Patel
5. C. Drew Wensel

Project Name: **Identifying Trends in Regional Wine Sales**

**Project Description**

**Introduction**

As wine remains one of the most popular choices for diners and one of the greatest assets for restaurants to boost sales, identifying what is popular is important for restaurateurs and distributors as well. Today in the restaurant industry, wine menus are often curated by sommeliers and beverage program supervisors. These professionals often have well developed palates and hyper-specific preferences which are often transferred to diners who may not have the same taste.

Our proposed software will interact with data sets aggregated from local restaurants to identify trends in wine sales specific to individual neighborhoods in a given city. In identifying these trends, restaurateurs and distributors will be able to design their menu with maximum efficiency. We aim to do this by typifying wines based on grape varietals and country of origin, and using this information to sort these wines based on color, weight, basic flavor profile (fruity, earthy, acidic, etc.), and price. Our software will then identify what sells the most based on specific styles and what sells the most overall.

In creating a software that relies solely on data as opposed to one individual’s preferences, we aim to eliminate the inherent bias that typically goes into beverage menu design.

**Technologies**

For this project we plan on creating a desktop application using Java. This java program will connect to an Oracle Database using the jdbc plugin. Then using Java’s Swing class we will be able to construct a front-end application that will display all information to the user. The user will also have the ability to input their own data into the database so results within the database can become more accurate overtime. This java program will also have a number of SQL commands stored to allow for easy analysis of the data in the database. These SQL commands will allow easy acquiring of the data.

**Team-Bio Data**

**Alexandra Gentile:** is a senior computer science student at Georgia State University and has roughly two years of programming experience, especially in Java and slight experience in Python, C, and Javascript. She has worked with teams to build websites and 2D games. She is planning to graduate in December with her B.S. in Computer science. Her strengths include being detail-oriented, communication, and time management.

**Ha Tran:** is a senior computer science student at GSU with nearly 2 years of school related programming experience. She has knowledge of Java and is also familiar with HTML, CSS, Javascript, MySQL, and PHP. She has done a full-stack project in her web programming class. Also, she learned data analytics and machine learning in her Data Science course. Ha is interested in building responsive and interactive web applications. She is good at managing time, collaborating, and communicating with team members.

**Derrick Mason Jr:** is a senior computer science student at GSU and has roughly 1-2 years of intermittent experience with programming. Derrick throughout the semesters, has experienced programming in Java, HTML, python, and very slight knowledge in C. He is working toward his B.S. in Computer Science and he’s interested in learning more about CS. His strength is communication, listening, and attaining information.

**Shivam Patel:** is a senior computer science student at GSU and has 4 years of experience with programming. Through college and internships, Shivam has experienced programming in Java, C++, Python, and slight knowledge in HTML. He is completing his Computer Science degree and is working as an intern at TK Elevator. Shivam’s strengths are in communication, programming and adaptability. He has also obtained the AWS Certification in Machine Learning.

**Drew Wensel:** is a senior Computer Science student at Georgia State University. Drew has roughly three years’ worth of experience in programming languages like Java, C++, and Python. He is a restaurant professional who has worked at one of Atlanta’s premier steakhouses for the past seven years and will graduate in December with his B.S. in CompSci and a certificate in cybersecurity.

**Why did we pick this project?**

We chose this project because it would provide us with experience in using software development techniques to provide real world experience in an industry other than technology. We aim to finish this project with a deliverable tool that can work with a provided data set as well as the experience of working on a team as we anticipate doing in our respective careers.