Team 7 CSC 4350:

Software Engineering

Team Members:

1. Brandon Po
2. Brenda Matlock
3. Troy White
4. Shaheryar Ali
5. Alex Yin

Project Name: **Point of Sale**

**Project Description**

***Introduction***

Many food-service related establishments are losing vast amounts of potential revenue every day and the problem is freely passing right under management’s noses. The culprit of this issue is the use of outdated point of sale (POS) softwares, or even worse the lack of POS utilization. Using an outdated POS can potentially slow down table turnover due to an increased amount of time a server performs various tasks and human error. For instance, some fallacies may include defining which table a customer or party is sitting at, entering and tracking food/drink orders, item add-ons and substitution, sending order tickets to the kitchen and bar, and many other service-based actions via a POS system. A slow and inefficient POS can be detrimental to the restaurant’s goal to meet maximum sales standards leading to risks. Planning, implementing, creating and executing a complex, yet easy-to-navigate POS software is the main goal of this project as to reduce errors and theft, while improving service speed and organization for consumers in search of memorable experiences.

***Technologies & Advancements***

* Agile Methodology implementation to break up the project into several phases.
* Program will be coded in Java since our team is most experienced in this high level language.
* Creating a network of software-to-hardware communication to allow our POS to send and print out billing and receipt information.
* Transaction processing technology to track revenue and inventory management for profit bookkeeping in real time.
* Secure credit card and contactless processor.
* Employee credential and password authorization for staff tracking.

***Team-Bio Data***

**Brandon Po:** Senior computer science student at GSU with about 4 years of school-related programming experience.

**Brenda Matlock**: Senior level computer science major at GSU with Java, microsoft office, human computer interaction, and communication skills.

**Troy White:** Senior computer science student at GSU.

**Shaheryar:** Senior at GSU. Major is Computer Science and I have relevant knowledge of Java and JavaScript.

**Alex Yin:** is a senior CS student at Georgia State University with 3 years of school related programming experience. I have knowledge in java. I have good time management skills.

***Why did we pick this project?***

We selected this project because we identified a problem that seems to be widespread in the food industry and in high demand. Restaurants with faulty and outdated Point of Sale software can theoretically continue to function, while satisfying customers, but companies can suffer from unneeded lack of speed and human error. An inefficient POS can affect the speed at which a server performs a task, customer retention, and data. Whether it’s a GUI that is too complicated and hard to navigate, hardware slowness/failure, or the lack of a search button, there is always an aspect that can be upgraded to make the server’s job easier, faster and more efficient.