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CSEp 510
Assignment 1

restaurant2.0 Project Proposal

Although restaurants currently make use of software systems and services for some common tasks, there are many areas of operating a restaurant where software has not been considered to improve the dining experience and efficiency of restaurant operations. The *restaurant2.0* project will explore the ways that modern technology can be used to improve and revolutionize the common restaurant dining experience.

Restaurants commonly use services, such as OpenTable and UrbanSpoon, to handle making reservations over the Internet instead of the traditional taking reservations by telephone. Restaurants also use software systems, such as DinerWare, for point-of-sale operations and placing orders. These are typically touch screen systems that only a restaurant staff member interacts with. Even though these types of systems are commonly in use today, diners still commonly encounter poor service in restaurants on a regular basis.

When a diner experiences poor service, they are unlikely to return to the restaurant even if the food is good. Restaurants thrive on repeat customers to sustain their businesses so any threat to that is a direct threat to the success of the business. The following are a few common examples of poor service often experienced in restaurants today: 1) Diners have to wait an extraordinary amount to receive or between service 2) Diners have to wait more than a reasonable time to receive ordered items and 3) diners have to wait a long time to pay for their food.

The goal of the restaurant2.0 project seeks to improve the common dining experience by freeing up waiters from the traditional role of taking orders to more of a hostess-style role where they can manage the dining experience without having to be concerned about the logistics of taking orders and processing payment transactions. The system will also provide features to restaurant owners such as the removal of paper menus, which will save costs and allow features such as ease of updates to menus as they change.

Consider the following scenario that *restaurant2.0* will enable:

Diners walk into a restaurant and are greeted by a member of the front of house staff. The staff member checks on her iPad on the *restaurant2.0* management application for the list of open tables for the targeted party size. The staff member either escorts the diners to their table or enters their name in the application to the queue of waiting customers.

Waiting customers can open the *restaurant2.0* application on their smartphone or tablet to view the estimated wait time and other interesting information such as the

evening's specials, the full menu, the wine list and other pertinent information such as information about the restaurant's suppliers and the head chef's twitter feed while they wait.

Once diners are seated, they by the restaurant staff member to welcome them and provide additional service such as water. The diners either use the tablet computer that is on the table or their personal smartphone to view the restaurant menu and place their orders. *restaurant2.0* provides the feature of requesting service in the event that diners have questions or special requests. Diners can check the status of the food orders to know how long of a wait there is for them to get their food via the application.

Once diners finish their meal, they simply swipe their credit card on the mobile payment device that is attached to the tablet computer that exists on their table. *restaurant2.0* gives diners the option to split their bill however they chose and run multiple transactions to pay the meal. Diners also have the option to bill their *restaurant2.0* account, which then handles the transaction directly with the restaurant on behalf of the diner.

The *restaurant2.0* application integrates with the most popular social networking services such as Facebook, Twitter, and Google+ so that diners can share their experience easily with family and friends. The *restaurant2.0* system also allows diners to track their restaurant history and get event notifications from restaurants they have eaten at or subscribed to.

The *restaurant2.0* system must be simple, clear and easy to use for diners. If the system is not intuitive, diners will get annoyed with having to use a new computer system rather than seeing the major problems that *restaurant2.0* solves.

Some may argue against the idea of automating restaurant service because they like the human interaction that is typical in restaurant service today. The *restaurant2.0* system actually provides the opportunity for higher-quality human interaction because the system frees the staff member from logistical duties and allows them to spend more time and energy focused on the diner rather than worrying logistics.

The *restaurant2.0* system not only provides an improved dining experience but also saves restaurant owners money since they will not need as many front-of-house staff and the focus of the dining experience is the food and not the service. This will increase the likelihood of attracting repeat customers. Diners will directly realize the improvement in efficiency and service that the software enables.