

Foody - Smart Restaurant Management and Ordering System

Vindya Liyanage, Achini Ekanayake, Hiranthi Premasiri, Prabhashi Munasinghe, Samantha Thelijjagoda

Abstract— Customers play a vital role in the contemporary food industry when determining the quality of the restaurant and its food. Restaurants give considerable attention to customers' feedback about their service, since the reputation of the business depends on it. Key factors of evaluating customer satisfaction are, being able to deliver the services effectively to lessen the time of consumption, as well as maintaining a high quality of service. In most cases of selecting a prominent restaurant, customers focus on their choice of favorite food in addition to available seating and space options. Long waiting times and serving the wrong order is a common mistake that happens in every restaurant that eventually leads to customer dissatisfaction. Objectives of this online application "Foody" is to address these deficiencies and provide efficient and accurate services to the customer, by providing unique menus to each customer considering their taste. This concept is implemented as a mobile application using latest IT concepts such as Business Intelligence, Data Mining, Predictive Analysis and Artificial Intelligence. This includes graphics and 3D modeling that provide existent physical information related to food such as colors, sizes and further user can view the ingredients of the meal as well as the available tables. In addition, the app shows the real-time map to the restaurant. Current table reservation status is indicated by the color change of the table. Unique food recommendation and it's order for each customer is generated by analyzing their social media information and the system notifies the customer the wait time by calculating it. Preparation of food and allocation is done subjectively. The expected outcome of the research is to develop a fully automated restaurant management system with the mentioned features as well as to avoid confusions between orders, provide better view of food and allow the customer to choose the menu according to their taste in a minimum time.

For the published version of record document, go to:

<http://dx.doi.org/10.1109/R10-HTC.2018.8629835>

