GC-380



Dine-N-Go Application

Abstract

This project aims to upgrade the DineNGo application, a software tool for restaurant management, with new features specified by the client, The Driven Software Solutions. The upgraded version includes enhancements to users' roles, such as implementing Role-Based Access Control (RBAC), and adding a payment required feature before order placement. Additionally, the new features aim to improve payment processing, reduce trips back and forth to the POS terminal, and provide a secure payment experience for customers.

Introduction

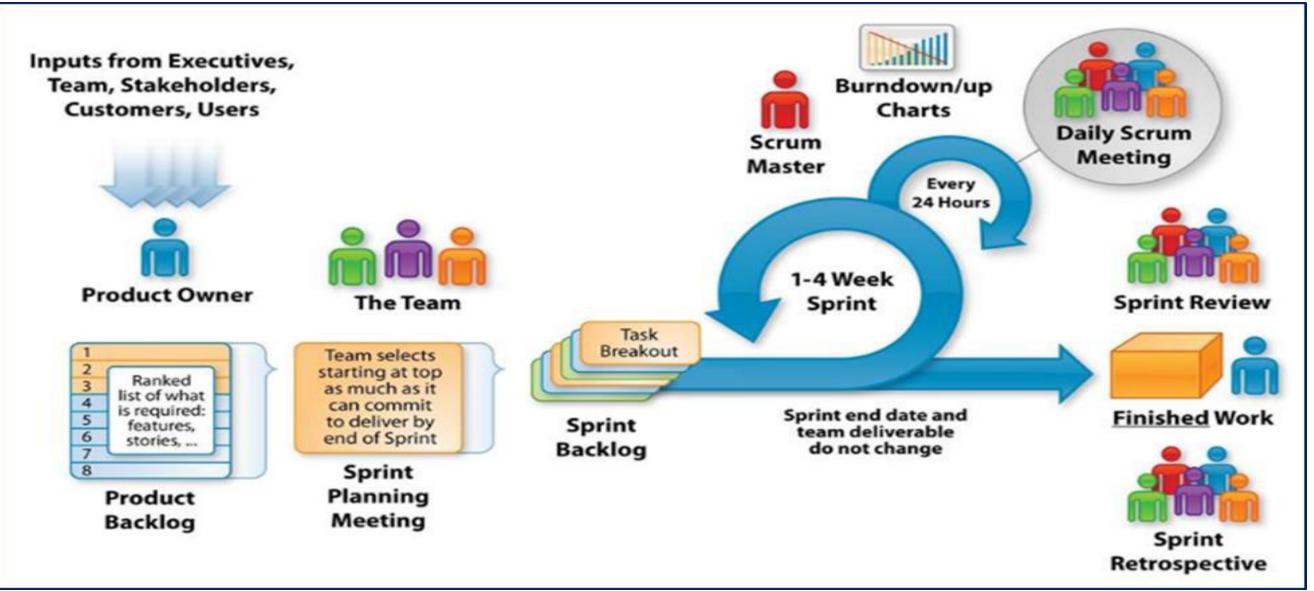
Software engineering provides solutions for various industries and businesses. Nowadays, many commerce and organizations are willing to use software solutions to improve their commercial benefits, such as saving time, efficiency, accuracy, analysis of data, etc. Thus, they can manage their finances, products, items, and services through software applications. Thus, Driven Software Solutions is developing in-house software that can provide restaurants with features helping them to manage, improve, and enhance their businesses and services process.

Project Overview

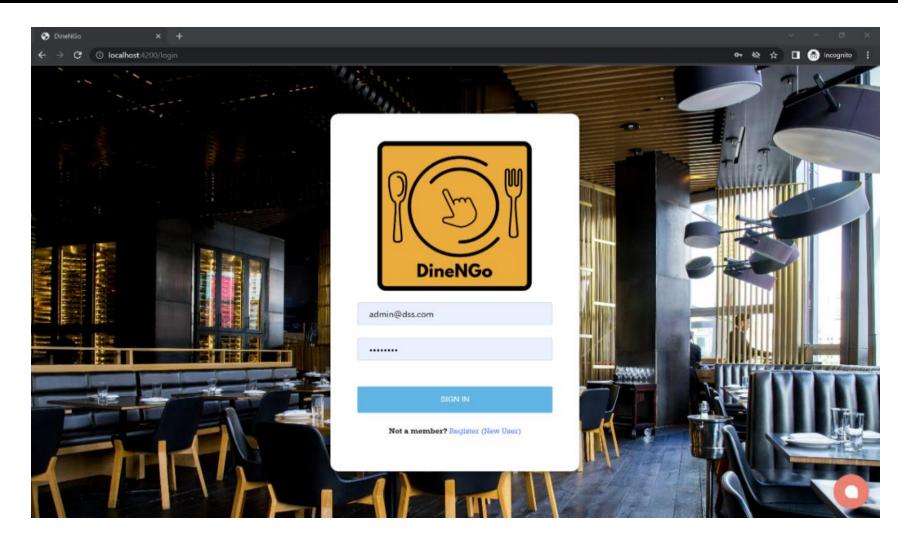
DineNGo application is a software which allows various restaurants clients to easily manage their dashboards and generate reports of daily sales. Also, this application helps clients to easily login to application via DineNGo dedicated UI, it has great functionality to log all the food orders of customers and allows administrators and employees to manage, update and keep track of orders. The application has an efficient payment system where three different types of payment modes can be activated based on demand and integration of clover with dining is an excellent feature which is very useful for clients in real time.

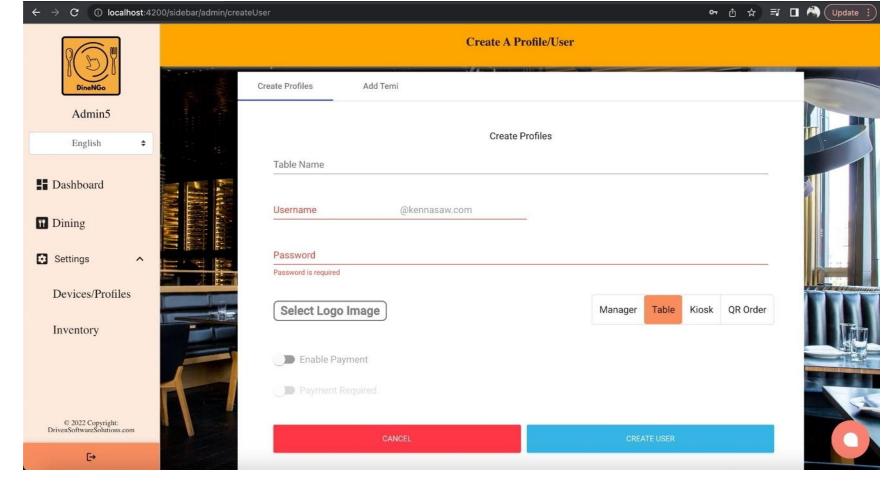
Materials and Methods

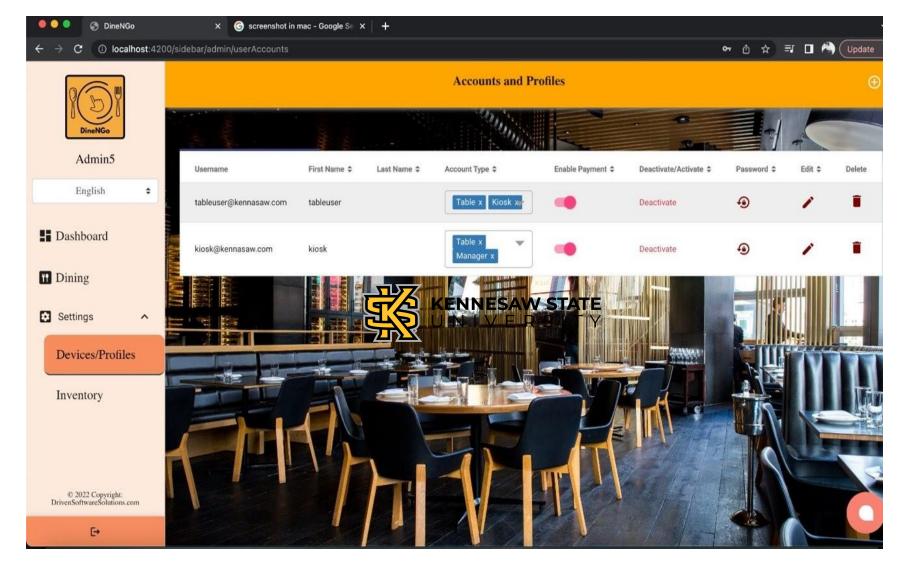
The Dine-N-Go application has partially implemented business requirements and is adding new features using existing tools and technologies. The application follows a microservices architecture consisting of front-end UI, backend API services, database, and external APIs. The front-end UI sends requests to the back-end API services to perform actions such as adding, updating, or deleting data in the database, and the API services interact with each other to complete a single action. The back-end API services make a database connection and perform CRUD operations, returning the response back to the front-end UI in a user-friendly format. All services are interacting with each other to send requests and receive responses based on user actions in the UI. The team is using agile methodology with 2-week sprints and Trello board to manage sprint cards. Development team completes and delivers cards to client. Detailed process in software life cycle model section.

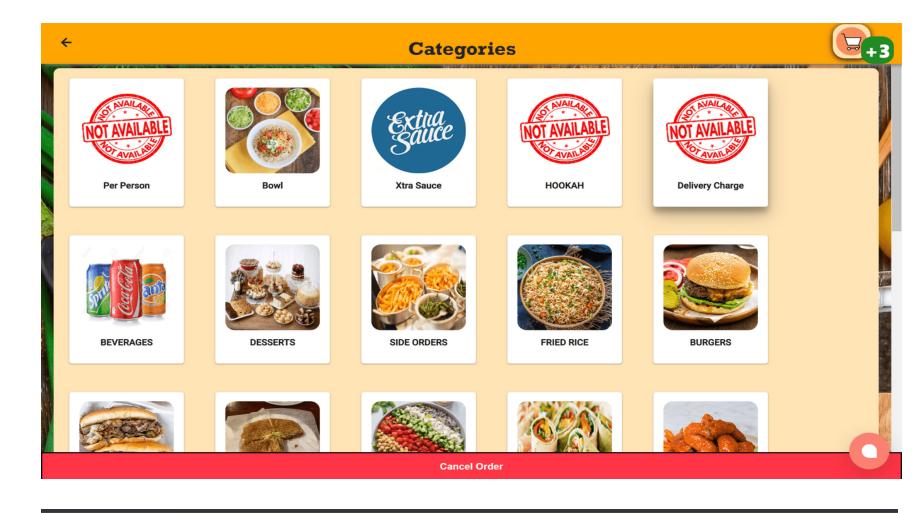


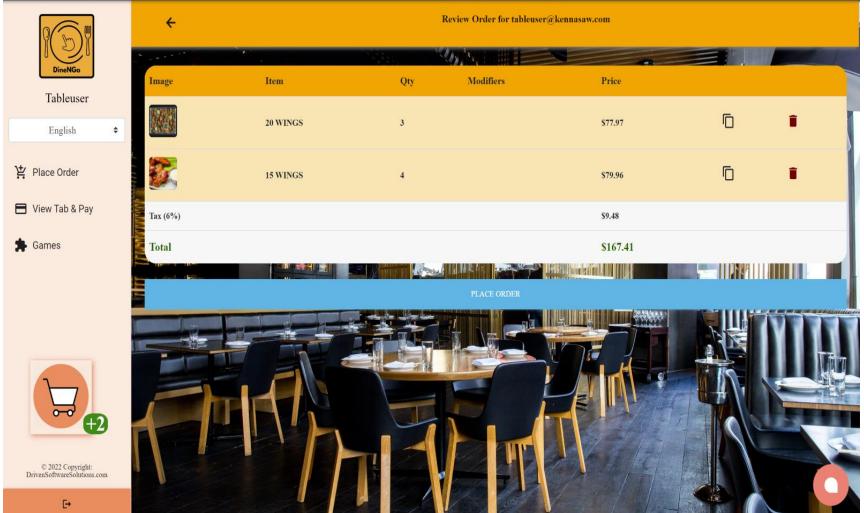
Results

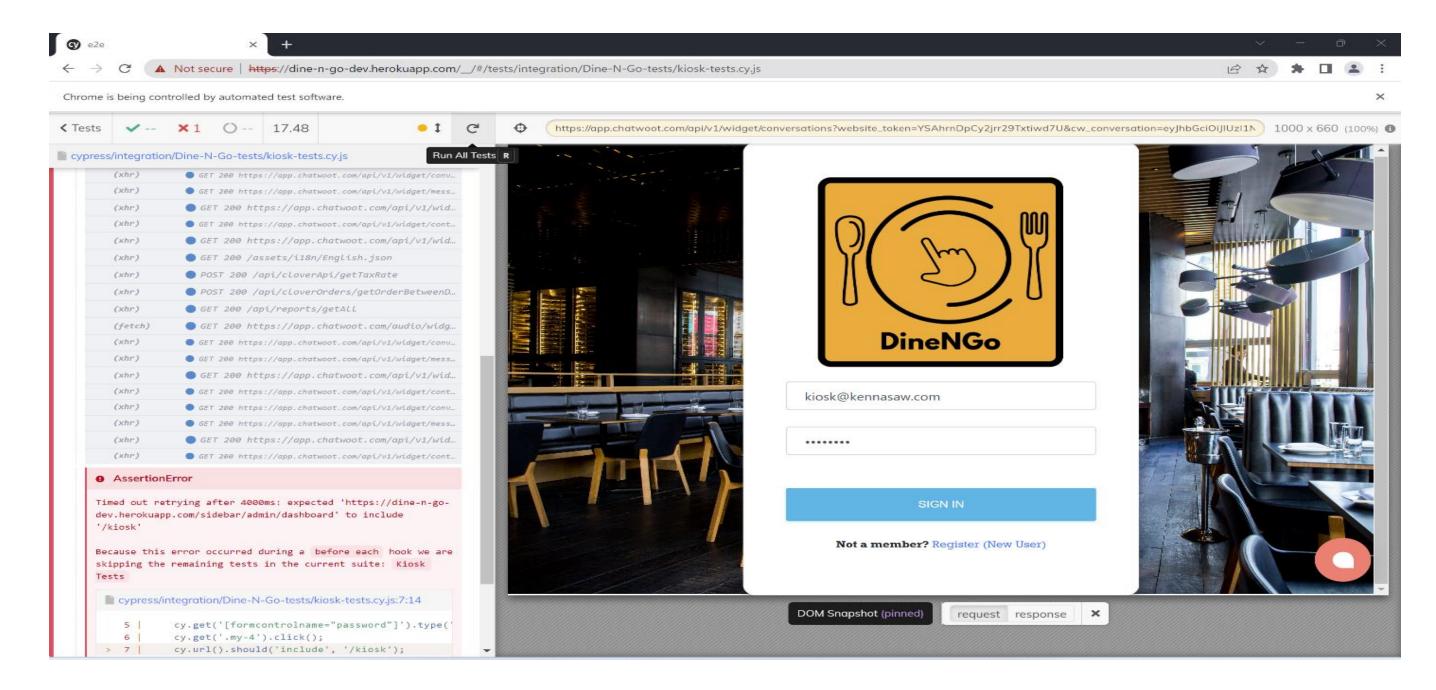












Conclusions

In conclusion, the DineNGo application is a powerful software tool that provides restaurant clients with an easy-to-use platform to manage their sales, orders and payment system. The application's user-friendly interface allows clients to easily login and access their dashboard, generate daily sales reports, and keep track of orders. The integration of Clover with dining is an excellent feature that enhances the efficiency of the application and makes it more useful for clients in real time. Overall, DineNGo is a valuable tool for restaurant owners and administrators seeking to streamline their operations and improve customer satisfaction.

Acknowledgments

We are grateful to work under the guidance of Dr. Reza Parizi and Shahzib Sarfaraz.



Contact Information

Dr. Reza Parizi - https://www.linkedin.com/in/reza-m-parizi-66675610

Subramanya Rahul Annavajhula - https://www.linkedin.com/in/rahul-sharma-7a359a197

Sahith Vardhan Reddy Vancha - https://www.linkedin.com/in/sahith-vardhanreddy-vancha-a48189137

Sai Sushanth Reddy Jonnalagadda - https://www.linkedin.com/in/sai-sushanthreddy-jonnalagadda-044534216

References

- https://docs.clover.com/docs
- https://www.apideck.com/connectors/clover
- https://www.chetu.com/payments/customized-clover-pos-integrationservices.php
- https://docs.cypress.io/guides/overview/why-cypress

