# Introduction

This document offers a high-level overview and explains the proposed architecture for “Grill Fresh Online”, a pizza online ordering system for Grill Fresh Inc.

# Context

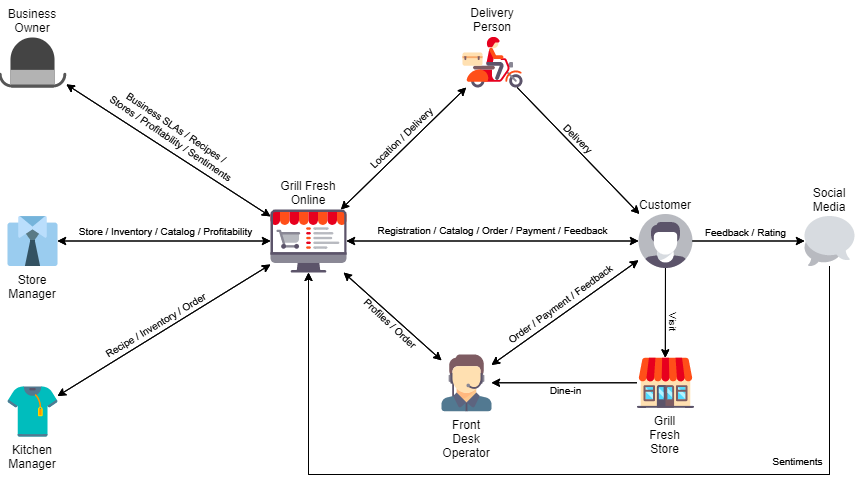
Grill Fresh Inc wants to grow its business across the country in a gradual manner, in terms of customer base, volume of business and number of stores. It wants to achieve this goal through the following accelerators of business:

* A customer places orders for pizzas through online with any nearby store – instant and ease, in comparison to dine-in at the same store
* A customer receives orders delivered through additional delivery modes like Take away and Home delivery apart from dine-in option
* The business owner prefers to gather a holistic view of profitability at business level or individual store level – expectation is to locate interests and expansion opportunities
* A store owner prefers to gather a holistic view of profitability at store level – expectation is to understand business health and to act
* The business owner and store owners prefer to understand the sentiments of customers about business – to collate and correlate feedbacks (in near real-time, if possible)

Grill Fresh Inc is convinced that the potential enabler for this plan is to use the online platform opportunities.

## Grill Fresh Online

Grill Fresh Online system aims to offer a unified platform for all stakeholders of business – customers, business owner, store manager, front desk operator, kitchen manager and delivery person – catering to their varied interests. The system is accessible through devices – desktops, laptops, tablets, smart phones and Point-of-Sale devices.



* Customer:
  + Register and manage profile – contact details and preferences
  + Browse through catalog of available items – pizzas, toppings, sides, desserts, beverages
  + Place orders for take away and home delivery
  + Pay for orders using varied secure payment options
  + Track status updates for orders placed
  + Provide sentiments about a store, item or overall business by direct feedback or over social media
* Store Front Desk Operator:
  + View profile and preferences of a customer
  + Browse through catalog of available items – pizzas, toppings, sides, desserts, beverages
  + Place orders for dine-in, take away and home delivery
  + Approve and move orders into queue for Kitchen Manager
  + Handle payments using varied secure payment options
  + Track status updates for orders placed in store
  + Capture feedback from a customer about order, store or business
* Kitchen Manager:
  + Browse through recipes and ingredients for preparing items
  + Check inventory of ingredients and notify purchase needs
  + View and receive notification about incoming orders in queue
  + Process and notify status updates for orders
* Delivery Person:
  + View order and delivery information for customer
  + Confirm after delivering orders
* Store Manager:
  + To manage store – address, serving radius, front desk operators, kitchen managers and delivery persons
  + To manage catalog of items serving in store
  + Manage out-for-delivery orders
  + Manage inventory and purchases for ingredients
  + Find profitability of store
  + Find sentiments from customers about store
* For Business Owner:
  + Set business SLAs – order fulfillment time, max inventory levels, delivery charges, etc.
  + Manage stores – stores and store managers
  + Manage catalog of items serving in store and prices
  + Manage recipes and ingredients for preparing items
  + Find profitability of stores
  + Find sentiments from customers about business and stores
* Store Front Desk Operator:
  + To view serviceability to a customer location from this store for home delivery
  + To locate a store able to serve a customer at a given location for dine-in, take away or home delivery
  + To view recent “n” orders of a customer from this and any other store
  + To receive alerts about all orders or orders placed by self in the store – order-going-into-delay, order-delayed
  + To view rich details about all orders placed by self during the day, week, month or year
* Kitchen Manager:
  + To start processing an order – to notify the status of order as in-preparation
  + To fulfill processing an order – to notify the status of order as ready
  + To view list of items possible to serve in the store for the day and next “n” days
  + To view predicted maximum order quantities for individual items
  + To view recipes for preparing various items including ingredients
  + To check availability of inventory levels for ingredients in comparison to max inventory levels required to fulfill the predicted maximum order quantities
  + To trigger purchase orders for required ingredients for approval by Store Manager
* Delivery Person:
  + To view the order number, customer name, customer address
  + To continuously report current location
  + To pick-up orders in ready state and to confirm about orders that are delivered
* For Store Manager:
  + To set list of items possible to serve in the store for the day and next “n” days
  + To set predicted maximum order quantities for individual items (for next “n” days)
  + To set alert quantity levels for individual items
  + To check availability of inventory levels for ingredients in comparison to max inventory levels required to fulfill the predicted maximum order quantities
  + To approve and raise purchase orders for required ingredients
  + To assign an order that is ready to pick-up to a delivery person available
  + To manage store – update address, update serving radius, create/read/update/delete store front desk operators and kitchen managers
* For Business Owner:
  + To set order fulfillment SLA time
  + To set list of items possible to serve through the business and prices
  + To set the recipes for preparing various items including ingredients
  + To manage stores – create/read/delete store, create/read/update/delete store manager
* Order Placing Module
  + To not allow store front desk operator and direct customers to place order for “Sold Out” items in the store
* Order Fulfillment Module
  + To raise alerts about orders-going-into-delay, order-delayed based on order fulfillment SLA time
  + To raise alerts to order placing module about “Sold Out” items in a store
* Catalog Management Module

– order-placed, order-confirmed, in-preparation, ready, out-for-delivery, delivered