# Introduction

The aim of my project is to develop a Web Application that integrates and deliveries specific information to different levels of users. The business case used is a restaurant where it is intended to correctly forward customers' orders and bills to the right staffs. Also providing reports and wide/real-time information for the business admin.

The main idea is to use a database where all the data will be stored and treated accordingly. When a customer sends an order, it will take its details and send them to users who are responsible for prepare and pack the meal, and to the responsible for billing the order and forward it to delivery or pickup.

The scope of this project is to

* Allow customers sending orders by signing and logging in their account
* Correctly forward the customer order to the kitchen staffs, using kitchen login access
* Correctly forward the customer order to the floor staffs, using floor login access
* Feeding in real time administrator’s reports, using admin login access

I approached this project with all knowledge obtained in my software development course and some working knowledge of Data Analytics. Currently I am working using MySQL for testing and debugging 2nd level issues on front and backend.

Having used something similar on a project I have completed for my advanced programming classes, it made me realize that I would have to change some features as the database intended to use was SQLite3, which is not good for production as it runs in memory, and backs ups the data in files on disk. This is a great strategy for development, but cannot be applied in production, because the data written on it would be lost in up to 24hrs as Heroku, the cloud provider which will host the application, has an ephemeral filesystem and all contents are cleared periodically. Then I had to change the strategy for the database to PostgreSQL, which was the best alternative, in terms of cost and reliability, offered by Heroku.