

COMP3900/9900

2023 Term 2

Project 3

Eatery Management System

People love a good bargain, and it is no exception when it comes to eating out. In a push to bring people back into eateries such as cafes and restaurants, **Eatery Management System** aims to connect eateries with customers. Eateries can maintain a profile about themselves and their menu. They can decide to add a set number of **vouchers** that offer a percentage **discount** for a given **time range**, and they can also decide to create a schedule to specify when they would like discount vouchers to be available for their eateries. Customers can then look for discounts at eateries that look interesting to them, book a voucher for an eatery they are interested in, and use that voucher to get a discount on their meal.

The developed system must, at least, do the following:

- **Eateries** must be able to register and maintain a profile for themselves that is visible to all system users, and includes at least the eatery name, address, cuisines offered, and a menu.
- A subscribed eatery must be able to offer any given number of discount vouchers for any time range of a given day. A discount voucher provides a customer with a percentage discount on their bill for a specified time range at the eatery that offered the voucher.
- To save staff the trouble of adding discount vouchers separately for each day, the system must also allow eateries to specify a repeated weekly schedule, specifically when, what % discount, and how many discount vouchers will appear for each time range the eatery wants to offer discount vouchers for (e.g., this could allow staff to specify that 20 discount vouchers, each offering 15% off, are automatically added for between 1pm and 2pm for every Tuesday).

- **Customers** must be able to find discounts that are available during a specified time range based on location (postcode), cuisine, and (optionally) some keywords that match to eatery menu entries. Customers must be able to navigate to any eatery's profile from search results. Once a customer finds an available discount voucher: they must be able to book a voucher (which reduces the available voucher count for that eatery and time period by 1) and see the time range for which their booked voucher is available (each customer must not be able to book a discount voucher if there are none left and can only book 1 voucher per eatery per voucher time range).
- When a customer with a discount voucher orders their meal at the corresponding eatery within the voucher's time range, they must be able to use their voucher by showing the eatery a code that represents the discount voucher. The eatery must then be able to use this code to identify what the % discount should be, to verify that the customer had indeed booked a discount voucher, and that this same discount voucher has not been previously used.
- Customers must be able to add reviews that include some text, and a rating out of 5, for each eatery that they have a discount voucher for. Any customer must be able to read such reviews along with the average rating for any eatery they are thinking of booking a discount voucher for.
- A customer must be able to see recommendations showing all eateries that are currently offering discount vouchers, where the customer has not previously had a booking, and where the eatery is one that the customer might be interested in. You must incorporate information about the customer's past bookings, their review ratings for past bookings, reviews and ratings left by other customers, and you may also use any other variable you wish to use/introduce that can be helpful in providing such recommendations.

You need to come up with, at least, **eight (8) functionalities** including, at least, **two (2) novel functionalities** with respect to existing similar eatery management systems.

Useful Links

1. <https://eatclub.com.au/>
2. <https://www.firsttable.com.au/sydney/>