
Keaton Sullivan

B00708469

COM661: Assignment plan submission

The proposed application will help organise, manage and display health inspections on restaurants in San Francisco. As San Francisco has an open data policy, a huge amount of information is available free publicly which makes it ideal for datasets; as it is all from a single system – the datasets have ID's that are compatible with other datasets (for example business_id is the same across all SanFran datasets) and can be expanded easily.

All datasets being used are within <https://data.sfgov.org/browse?limitTo=datasets>, and the two that will be initially employed are for detailed business information <https://data.sfgov.org/Economy-and-Community/Map-of-Registered-Business-Locations/ednt-jx6u> and for health inspections <https://data.sfgov.org/Health-and-Social-Services/Inspections-by-Supervisor-District/xud3-6wfw> or the map version <https://data.sfgov.org/Health-and-Social-Services/Inspections-by-Supervisor-District/xud3-6wfw>.

There will be different permission levels – and that application provides different functionality depending on who accesses it.

Unregistered users are citizens who want to view information of restaurants close to them. They will be able to view all restaurants in a given zipcode and see the hygiene score of each of them. They will be able to view a specific business in greater detail and see when the previous took place and when they will likely be reassessed.

Registered citizens will be able to do everything an unregistered citizen can as well as see the details of the last health inspection (severity and classification but not specific causes), active violations that need to be addressed, ability to flag health violations (that contribute to reassessing sooner) and leave comments on visit.

Registered business owners manage the details of their business and are kept informed of inspection information. They can add a business (which needs approved by an inspector before being publicly accessible), edit the business details (not related to inspection). They are able to see the entire inspection history in detail of their own business, are informed of all health violations they need to address and the likely date they will be reassessed. They will also be informed of if they are able to continue serving food or if an inspection needs to take place first.

Registered inspectors are those who carry-out the actual inspections and maintain their details. They can approve a newly added restaurant so that it's publicly accessible, they are able to edit restaurants to correct details. They are able to delete and make restaurants private if they fail inspections or are shut down. They are able to allocate themselves to upcoming inspections and are provided detailed information on their inspection history, location and status to make their jobs easier. They are able to record the details of inspections they've carried out to a given restaurant – with the capability to state when and if an inspection took place, update the list of violations with

justifications, if they can continue operating, they can suggest a date for reinspection. They are able to edit health inspection history if they make mistakes.

There will be system administrators who have access to everything but they will not be required in the operation of the application – mostly just for auditing.

The system could calculate reinspection dates based off the severity of violations and how many users recently flagged that it should be reassessed. It could automatically make a business private after a number of violations. It could provide login functionality and ability to request elevating a registered citizen to a business owner.