# Thesaurus

Create an app, that lists words in groups of synonyms/antonyms, along with the word’s definition. The system will take the user’s name and user’s email to create an account. All user accounts and account data will be stored in csv format in the server end.

The application will store previously searched word history. Searched words are stored on the phone and online. Recent search history can be sorted according to requested parameters (alphabetical order sort, historical sort). Search suggestion (auto correct) should be implemented in the app in case if user made a typo in the word or suggest related words. The users should be able to share searched words/synonyms with other users through provided tools by the platform.

A user should be able to search synonyms, of the target word. After synonymous has been chosen (clicked on) it becomes a new target word and search request can be continued with the new target word. Also, users should be able to filter results according to word categories, such as verbs, nouns, adjectives.

### Future Implementations

* Real-time text replacements with synonyms when user is writing on any app.
* Community. Help with learning languages from other users.
* Grammatical structures. A list of commonly used grammar structure with examples linked to searched words.
* Users will be automatically notified daily with a word of the day. App will show the most trending (searched) words in a list on the main window.

# TopHill Suites Management Tool

We would like to create an application that monitors all activities in an hotel, e.g. the Hilton Ottawa Hotel. It should keep track of users as they sign in the application till the moment they sign out.

The system should keep track of guests as they check in the hotel till the moment they leave.

Each hotel has its own set of features that hotel would want to enable or disable. Enable certain feature increases cost of maintenance of the app for the hotel.

System links with online hotel booking systems and get reservations timeframes, room status, number of guest per room, guest information (passport number, credit card).

Every guest has a food plan, and recreation plan (fitness, pool and spa) assigned to him which should be tracked by the hotel and charged accordingly.

The system keeps track of all personnel working at the hotel: security personnel, chefs, waiters, room service, concierge, housekeeping, receptionists, valets, porters (luggage handlers).

Separate login for staff and guests. Guests and staff has different authorization level. System have to be able to recognize client through card, QR code, or a phone with TopHill Suites App. Stuff will have an access to restricted areas of hotel.

System keeps track of all events that occur in the hotel. Events are categorized as normal (e.g. guests check-in/out), special (e.g. birthday parties, weddings, New Year or other holiday celebrations), emergency (e.g. fire, crime, lack of staff, last-minute cancellations, hotel booked over its capacity).

Hotel parking space is paramount, so we would like to monitor parking space as an event of high importance thus the parking occupancy level will be tracked. We will use an intelligent parking solution known as entry control system which would place automatic ticket vending or called cashier machines for entry and exit with car park entry/exit barriers as well as cameras monitored by security personnel. Any illegal espace or accident sends an alarm to security. From there, if required, manual interventions can be made at any time.

### Future Implementations

* Bus service, system assign shuttles to pick up Guests from airports.
* Book a tour. Guest can book listed tours arround the city or in the museum.
* Tip your staff. If customer satisfied with service, customer can live money to appreciate the effort.