```
AvokTech API Documentation
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Schemas
Account:
                                 unique for each user
  id: String,
  firstName: String,
  lastName: String,
  email: String,
                                 functions as a username (unique)
  password: String,
                                 the value is hashed for security
  phone: String,
  photo: Object,
  reservations: List {
                                 Reservation class
                                 referencing the lot id of the reservation
     lotId: String,
                                 referencing the space of the lot
     space: int,
                                 start time of reservation
     start: long,
     duration: int,
                                 duration (in hours) of reservation
  },
  paid: boolean
  billingAddress: {
                                 Address class
     street: String,
     city: String,
     state: String,
     zipcode: String,
  },
  creditCard: String,
                                 specifics TBD
  lots: Map<String, String>,
                                 maps a lot id to the corresponding role,
                                    including:
                                    owner, manager, patrol, etc.
                                 list of systems admin roles, including:
  roles: List<String>,
                                    super, analytics, onboarding, etc.
Lot:
  id: String,
                                 unique for each lot
  name: String,
  type: String,
                                 `residential` vs. `parking lot`
  address: {
                                 Address class
     street: String,
     city: String,
```

state: String,

```
zipcode: String,
  },
  location: double[], (lng, lat) pair
  photo: Object,
  rate: Map<String, double>, maps the rate type (hourly, daily, etc.) to the
                                   value of the rate
                               scale multiplier of rate (default 1.0)
  rateRatio: double,
  capacity: int,
  occupied: int,
                               if the lot is available (does not include
  available: boolean,
                                   reservable spaces)
  reservable: boolean,
  reserveMax: int,
                               the maximum number of reservable spaces
                               <u>Space c</u>lass
  spaces: List {
                             if the space is reservable
     reservable: boolean,
     photo: Object,
                             maps the time (by hour) to the associated account
     calendar:
        Map<Long, String>,
                                   id reserved at that time (null if available)
  },
                          list of account ids with access to the lot
  members: List<String>,
                               id pointing to the lot's data history
  lotHistoryId: String,
LotHistory:
  id: String,
                                unique for each lot
                                list of pairs of time and occupancy
  history:
     List<(Long, Integer)>,
RawHistory:
  accountId: String,
                                account id associated with reservation
                                lot id associated with reservation
  lotId: String,
  space: int,
                                space of lot
                                start time of reservation
  date: int,
  duration: int,
                                duration (in hours) of reservation
                                search query associated with reservation
  search: String,
  events: List<String>,
                               list of events near reservation location
```

Endpoints

Required fields are listed under the endpoint.

All `date` fields are represented in milliseconds.

GET

Account

/listAccounts return all accounts

/accountById returns account with corresponding id

accountId

/accountByEmail returns account with corresponding email

email

Lots

/listLots returns all lots

/lotById returns lot with corresponding id

id

/searchNear returns lots within 1 mile of the location

latitude longitude

LotHistory

/listLotHistory returns all lot history

/lotHistory returns lot history with corresponding id

lotHistoryId

RawHistory

/listRawHistory returns all raw history

/rawHistoryByAccount returns raw history for corresponding account

accountId

/rawHistoryByLot returns raw history for corresponding lot

lotId

/rawHistoryByDate returns raw history for corresponding date

date

POST

Account

/newAccount creates a new account

firstName lastName

email

password

/addRole adds a systems admin role to the account

accountId

role

```
Lots
/newLot
accountId
```

creates a new lot

name
type
address
latitude
longitude
capacity
reserveMax

/entered increases the occupancy of the lot by 1

lotId

/exited decreases the occupancy of the lot by 1

lotId

/changeReserveMax changes the number of reservable spots

lotId

reserveMax

/addMember adds a member to the lot

lotId email role

/setCalendar sets the reservation calendar of the lot

lotId

startTimes a list of the start times for each time block

durations a list of durations for each time block

/reserve adds a reservation for the lot

lotId

accountId
startTimes

durations

search

/clearReservations

lotId

a list of the start times for each time block

a list of durations for each time block

the search query of the reservation

clears all reservations of the lot