# Logic Tier

## AccountManager

- facebookAccessToken : String
- googleAccessToken : String

+ setFacebookToken(clientID : String, apiKey : String) : boolean
+ setGoogleToken(clientID : String, apiKey : String) : boolean
+ getFacebookAccessToken() : String
+ getGoogleAccessToken() : String

## ReviewHandler

+ getPlaceReviews(venue : Venue) : List<Review>
+ getUsersReview(user : User) : List<TripLocation>
+ addReview(venue: Venue)
+ deleteReivew(venue: Venue, reviewID: UUID)

## FireBaseManager

- uuid : UUID
- email : String
- public key : String
- private token : String
- register date: Date
- firstName : String
- lastName: String

+ tryLogin(username: String, password: String) : boolean
+ registerUser(username: String, email: String, password: String) : boolean
+ getUserSet(UUID...) : Set<String>
+ getUser(userName: String) : String
+ findUserByPublicKey(key: UUID) : String
+ findUserByToken(token: String): Date
+ getters and setters()
+ toString()

## UserDataManager

+ getUserTripLogs(user : User) : List<TripLog>
+ getUserHistory(user : User) : List<TripLocation>
+ getUserPreferences(user : User) : JSONObject
+ getUserFavorites(user: User) : List<Favorite>
+ getUserReviews(user : User) : List<Review>
+ getters and setters()
+ toString()

## TripManager

- tripOrigin : String
- tripDestination : String
- tripDate : Date
- otherData : TripData

+ gatherAvailableServices(airportCode : String) : List<Service>
+ switchCities() : TripData
+ startInfoActivity(view: Controller)
+ getters and setters()
+ toString()

## DockerEngine

- LodeStarVRImagery : DockerImage
- LodeStarWeather : DockerImage
- LodeStarVenueExplorer : DockerImage
- LodeStarFlightStatus : DockerImage
- LodeStarLivingExpenses : DockerImage

+ startImage(image: DockerImage)
+ stopImage(image: DockerImage)
+ startImages()
+ stopImages()
+ getRunningInstances()

## LodeStarWeather

- units : String

+ getWeatherForecast(city : String, units: String) : List<JSONObject>

## LodeStarFlightStatus

- originAirportCode : String
- destinationAirprtCode : String
- flightNumber : String

+ getFlightDetails(originAirportCode : String, destinationAirportCode: String, flightNo : String) : JSONObject

## LodeStarVenueExplorer

- int availableVenues : int

+ getNearbyVenues(category : String, longitude : float, latitude : float) : Venue
+ getReview(venue : Venue)
+ getStreetAddress(venue : Venue) : String
+ getVenueCoordinates(venue: Venue) : Coordinate Tuple

## LodeStarVRImagery

- imageQuality : int
- direction : double
- fieldOfView : double

+ getStreetViewImage(quality : int, longitude : float, latitude : float) : Image

## LodeStarLivingExpenses

- localMeal : double
- bigMac : double
- oneLiterCoke : double
- averageHotel : double
- others : Map<String, Double>

+ getLivingExpenses(city : String)

## LodeStarTransportationInformation

- origin : Coordinate
- destination : Coordinate

+ getAvailableTransportationOptions(origin: Coordinate, destination: Coordinate)

## LodeStarCurrency

- localCurrencyCode : String
- foreignCurrencyCode : String
- localOverForeignCurrency : double
- foreignOverLocalCurrency : double

+ getCurrencyInfo(foreignCurrencyCode : String, localCurrencyCode : String) : JSONObject