Logic Tier FireBaseManager UserDataManager **AccountManager** + getUserTripLogs(user : User) : List<TripLog> - uuid : UUID + getUserHistory(user : User) : List<TripLocation> email: String facebookAccessToken: String + getUserPreferences(user : User) : JSONObject googleAccessToken: String public key: String + getUserFavorites(user: User) : List<Favorite> private token: String + setFacebookToken(clientID: String, apiKey: String): boolean + getUserReviews(user : User) : List<Review> - register date: Date + setGoogleToken(clientID : String, apiKey : String) : boolean + getters and setters() - firstName : String + getFacebookAccessToken(): String + toString() - lastName: String + getGoogleAccessToken(): String + tryLogin(username: String, password: String): boolean + registerUser(username: String, email: String, password: String): boolean + getUserSet(UUID...) : Set<String> **ReviewHandler** + getUser(userName: String) : String + getPlaceReviews(venue : Venue) : List<Review> + findUserByPublicKey(key: UUID) : String + getUsersReview(user : User) : List<TripLocation> + findUserByToken(token: String): Date + addRevivew(venue: Venue) + getters and setters() + deleteReivew(venue: Venue, reviewID: UUID) + toString() **TripManager** - tripOrigin : String - tripDestination : String - tripDate : Date - otherData : TripData + aatherAvailableServices(airportCode: String): List<Service> + switchCities(): TripData +startInfoActivity(view: Controller) + getters and setters() + toString() **DockerEngine** LodeStarWeather - LodeStarVRImagery : DockerImage - LodeStarWeather : DockerImage units: String - LodeStarVenueExplorer : Dockerlmage LodeStarVenueExplorer + getWeatherForecast(city : String, units: String) : List<JSONObject> - LodeStarFlightStatus : DockerImage - int availableVenues : int - LodeStarLivingExpenses : DockerImage + getNearbyVenues(category: String, longitude: float, latitude: float): Venue LodeStarFlightStatus + startImage(image: DockerImage) + getReview(venue : Venue) + stoplmage(image: Dockerlmage) originAirportCode: String + getStreetAddress(venue : Venue) : String + startlmages() destinationAirprtCode: String + getVenueCoordinates(venue: Venue) : Coordinate Tuple + stoplmages() - flightNumber : String + getRunningInstances() + getFlightDetails(originAirportCode : String, destinationAirportCode : String, flightNo: String): JSONObject LodeStarVRImagery - imageQuality : int - direction : double - fieldOfView : double LodeStarTransportationInformation LodeStarLivingExpenses + getStreetViewImage(quality: int, longitude: float, latitude: float): Image origin: Coordinate · localMeal : double destination: Coordinate - bigMac : double - oneLiterCoke : double LodeStarCurrency + getAvailableTransportationOptions(origin: - averageHotel : double Coordinate, destination: Coordinate) - localCurrencyCode : String -others : Map<String, Double> - foreignCurrencyCode : String + getLivingExpenses(city: String) - localOverForeignCurrency : double - foreignOverLocalCurrency : double + getCurrencyInfo(foreignCurrencyCode : String, localCurrencyCode : String): JSONObject

Data Management Subsystem LodeStarWeather Review date : Date - uuid : UUID city: String - content : String - stars : int - date : Date LodeStarFlightStatus - originAirportCode : String User destinationAirprtCode: String - uuid : UUID - flightNumber : String **TripLog** - username : String - email : String - uuid : UUID - registrationDate : Date - content : String - firstName : String LodeStarTransportationInformation date : Date - lastName : String origin : Coordinate - destination : Coordinate **Preferences** LodeStarLivingExpenses context : Preference - localMeal : double - bigMac : double - oneLiterCoke : double - averageHotel : double Trip -others : Map<String, Double> **Favorite** + id : UUID + tripOrigin : String - uuid : UUID + tripDestination : String - content : String LodeStarVRImagery + tripDate : Date - date : Date + otherData : TripData - imageQuality : int - direction : double fieldOfView: double Context LodeStarCurrency - context : JSONObject - localCurrencyCode : String - foreignCurrencyCode: String - localOverForeignCurrency: double foreignOverLocalCurrency : double



