**Task 2 :** In the Word document, Write a **point-form summary** to describe the major justifications, assumptions and limitations related to your database design. For example: Assumption/justifications for optionality, connectivities, constraints data type and data domain; and Special cases or data integrity issues that cannot be handled.

**BUSINESS RULE, ASSUMPTIONS**

**Work-Place**

* There is only one HEADQUARTER in Kallang which has BRANCHES located in several places. All the BRANCHES are connected to HEADQUARTER.
* There are many STAFFS working in each BRANCH and there can be STAFF who have works in several BRANCHES. Therefore, many-to-many relationship is created a s history about staff, STAFF\_HISTORY. Head manager is one of the STAFF who manages the BRANCH so we can say STAFF manages BRANCH.
* The HEADQUARTER employs many ADMIN and TRAINING STAFF who are PERMANENT STAFF and all PERMANENT are employed by one HEADQUARTER.
* The BRANCH employs CASUAL WORKERS who are TEMPORARY STAFF and CASUAL WORKERS in each BRANCH are employed by only that BRANCH.
* PERMANENT STAFFS and TEMPORARY STAFFS are STAFFS.
* ADMIN STAFFS are PERMANENT STAFFS while TRAINING QUALIFICATIONS are requirements for TRAINING STAFFS. A TRAINING STAFF have one or more TRAINING QUALIFICATIONS and A TRAINING QUALIFICATION is achieved by one or more TRAINING STAFF.
* All the STAFFS requires ACCESS CARD and a STAFF may have one or more ACCESS CARD due to damage and replace policy and an ASSCESS CARD may be owned one or more STAFFS due to return when leave policy. Therefore, HISTORY OF ACCESS CARD is formed.
* ACCESS CARD will have at least one HISTORY OF ACCESS CARD and HISTORY OF ACCESS CARD will have to be associated with ACCESS CARD.
* A STAFF will have at least one HISTORY OF ACCESS CARD but HISTORY OF ACCESS CARD must be connected with A STAFF.
* PARMENANT STAFFS may use an ACCESS DEVICE or more due to repair and replace policy. The ACCESS DEVICE may be used by one or more STAFFS due to return when leave policy. Therefore, HISTORY OF ACCESS DEVICE is created.
* ACCESS DEVICE may or may not have a HISTORY OF ACCESS DEVICE but HISTORY OF ACCESS DEVICE must be associated with ACCESS DEVICE.
* A PARMENANT STAFF may or may not have a HISTORY OF ACCESS DEVICE but HISTORY OF ACCESS DEVICE will have to be connected with PARMENANT STAFF.
* Both ACCESS DEVICE and ACCESS CARD are ACCESS EQUIPMENTS.

**TRAINING-GROUND**

* Many CHILDREN might participate in a TRAINING SECTION which is taught by a TRAINER or TRAINERS. There may be incident such as where none of the CHILDREN is able to come to the TRAINING SECTION or the trainer misses the TRAINING SECTION.
* When TRAINING SECTION is being held, there may or may not be a usage of a GEAR or more which is related to the training but the GEAR will only be used in one training section.

**Business**

* Each BRANCH may be visited by many customers and there can be BRANCH where there is no CUSTOMER.
* A CUSTOMER detail will be noted only in one BRANCH.
* To be a customer, having at least one child is required. A child will be associated by a customer.
* CUSTOMER INVOICE is an INVOICE. STAFF\_INVOICE is an INVOICE.
* There will be several INVOICES for a TRAINING SECTION and GEAR cost due to having several CUSTOMERS. The INOVICE will only target a TRAINING SECTION and cost of GEAR or GEARS which are related to it.
* There may or may not be a discount on the TRAINING SECTION and GEAR cost. Therefore, the DISCOUNT may or may not appear in the INVOICE but there can be one or several INVOICES if there is a DISCOUNT for the customers or staffs.

**JUSTIFICATIONS**

* As a worker working in a branch, he or she will have a hire date. But he or she may or may not leave or get fired so the HIRE START DATE is NULL.
* While applying for the job, the staffs will have to give the detail of themselves but some of them may not be essential such as MIDDLE NAME, HEIGHT, WEIGHT and etc. Therefore, such details are noted as NULL.
* In HISTORY OF ACCESS CARD, there will be some cards which are not return due to current working staffs or cards which have no report for being lost or damaged. There will be no data for collecting new card. Therefore, such attributes are listed as NULL.
* Exercises take place in TRAINING SECTIONS and the brand of GEARS in TRAINING GEAR are not needed to be recorded exact when it is actually needed. Therefore, such details are regarded as NULL.
* When you are one of the current customers of ActiveKids, it is sure that the customer is associated with a child or more. Therefore, the relation between CUSTOMER and CHILDREN tables is strong.
* Creating child tables from INVOICES as CUSTOMER INVOICES and STAFF INVOICES is to inform whether the customer is a new customer, a regular customer or a staff. The customers are distinguished by the number of visits.
* Some details in CUSTOMER AND CHILDERN such as MIDDLE NAME are some of the attributes that is not required. Therefore, such attributes are NULL.

**LIMITATIONS**

* The number of children who are allowed to participate in each training section is up to 15.
* The number of trainers in each training section is at most 3.