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Lecture Group : L1

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Introduction to Case Study:

As the condominium has become a better choice for many people, the condominium management system is more and more essential for a management team to run a condominium. However, in real world, most of the condominiums do not have a complete system for service that they provided. We have selected the Flora Green condominium in Bandar Sungai Long, Kajang for our case study. Flora Green condominium is a condominium that has 3 blocks that consists of 160 units. Flora Green condominium provides a lot of facilities to their residents, for example, Barbecue area, covered parking lot, gymnasium, cafeteria, club house, swimming pool, sauna and etc. To manage so many facilities, they are required to have a complete system to record the usage, maintenance, financial expenses of condominium. After we done our research, we found that Flora Green do has some problems for their management system. The management of Flora Green told us that they have only account system but do not has administration system.

Purpose of the system:

* To create a system that can fulfil requirement of condominium management.
* To make sure the management system will be more efficient.
* To create a safe and conformable environment for the residents.
* To reduce the workload of administration staff of the condominium management.

Objective of the system:

The database system is created to fulfil the requirements of Green Flora Management. The database system is created for the administration staff of the condominium since they already have a system for the accounting department. The database system should be able to record the information of owners and residents, vehicle that permitted to enter condominium, parking allocated, the details of the visitors, the worker details and the status of the facilities. The database system will make the management system run more efficiently on the management of the condominium and thus create a safe, comfortable and nice environment for the residents. The database system will reduce the workload of the administration staff, those staff will not going to record all those information and data using file system anymore with the database system.

User Requirement

1. The system shall record the details of vehicles from each unit(s).
   1. The system shall record the number plate of vehicles.
   2. The system shall record the series number of car stickers.
   3. The system shall record the assigned parking lot number of vehicles.
2. The system shall record status of each unit(s).

3.1 The system shall record whether the unit is vacant or occupied.

1. The system shall record the details of owner for each unit.

3.1 The system should record the name, telephone number and IC number of the owner.

1. The system shall record the details of visitors.
   1. The system shall records the number plate of visitors’ vehicles.
   2. The system shall record the name and IC number of visitors.
   3. The system shall record the time in and time out of visitation.
   4. The system shall record the name of visitor that exceed the fixed visitation time (8.00a.m. – 3.00a.m.).
2. The system shall store the details of the staffs.
   1. The system should record the position of staffs.
   2. The system should record the nationality of staffs.
   3. The system should record the duty schedule of the staffs.
   4. The system should record the working experience of the staffs.
3. The system shall record the unauthorised activities did by resident.
   1. The system shall record the name and unit number of resident who used the facilities (swimming pool, gym room, hall) without registration.
   2. The system shall record the unit number that owns a pet.
4. The system shall record the feedback from resident.
   1. The system shall record the complaints from resident.
5. The system shall record the condition of facilities.
   1. The system shall record the amount of broken facilities.

Assumptions

1. Assume that there is no illegal parking within condominium.
2. Assume that the security guard is always on duties.
3. Assume that there is no visitation after specific time.
4. Assume the only resident will use the facilities inside the condominium.
5. Assume that owner also will stay in their own units.
6. Assume that owner pay for only once in a month.
7. Assume that the duty shift for security guards are constant.

|  |  |
| --- | --- |
| **Physical Entities** | **Conceptual Entities** |
| 1. Vehicles | Details |
| 1. Resident | Role |
| 1. Staff | Schedule |
| 1. Visitor | Registration |
| 1. Facilities | Condition |
| 1. Units | Status |
| 1. Feedback letter | Response |
| 1. Payment | Details |

Physical and Conceptual Entities

Descriptions of attributes

|  |  |  |
| --- | --- | --- |
| Physical Entity Name | Description | Attribute |
| Staff | General term describing all staffs employed by Flora Green Condominium. | staff\_id  staff\_name  position  nationality  year\_employed |
| Visitor | General term describing all visitors visited Flora Green Condominium. | visitor\_ic  visitor\_name  visit\_date  unit\_no  vehicle\_no |
| resident | General term describing all residents of Flora Green Condominium. | resident\_ic  unit\_no  resident\_name  phone\_no |
| unit | General term describing all units of Flora Green Condominium. | unit\_no  status |
| Feedback letter | General term describing all feedback letters from residents of Flora Green Condominium. | ref\_code  resident\_ic  letter\_desc  letter\_date  unit\_no |
| vehicle | General term describing all vehicles within Flora Green Condominium. | sticker\_number  number\_plate  parking\_lot\_id |
| facilities | General term describing all facilities within Flora Green Condominium. | faci\_id  faci\_desc  faci\_conditions |
| payment | General term describing all paymeny withing Flora Green condominium. | payment\_id  payment\_type  payment\_amount  payment\_details[1..\*] |

ER DIAGRAM

