

HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY
FACULTY OF COMPUTER SCIENCE AND ENGINEERING



Database Systems (Lab) (CO2014)

Assignment Report

RESORT MANAGEMENT DATABASE MODEL

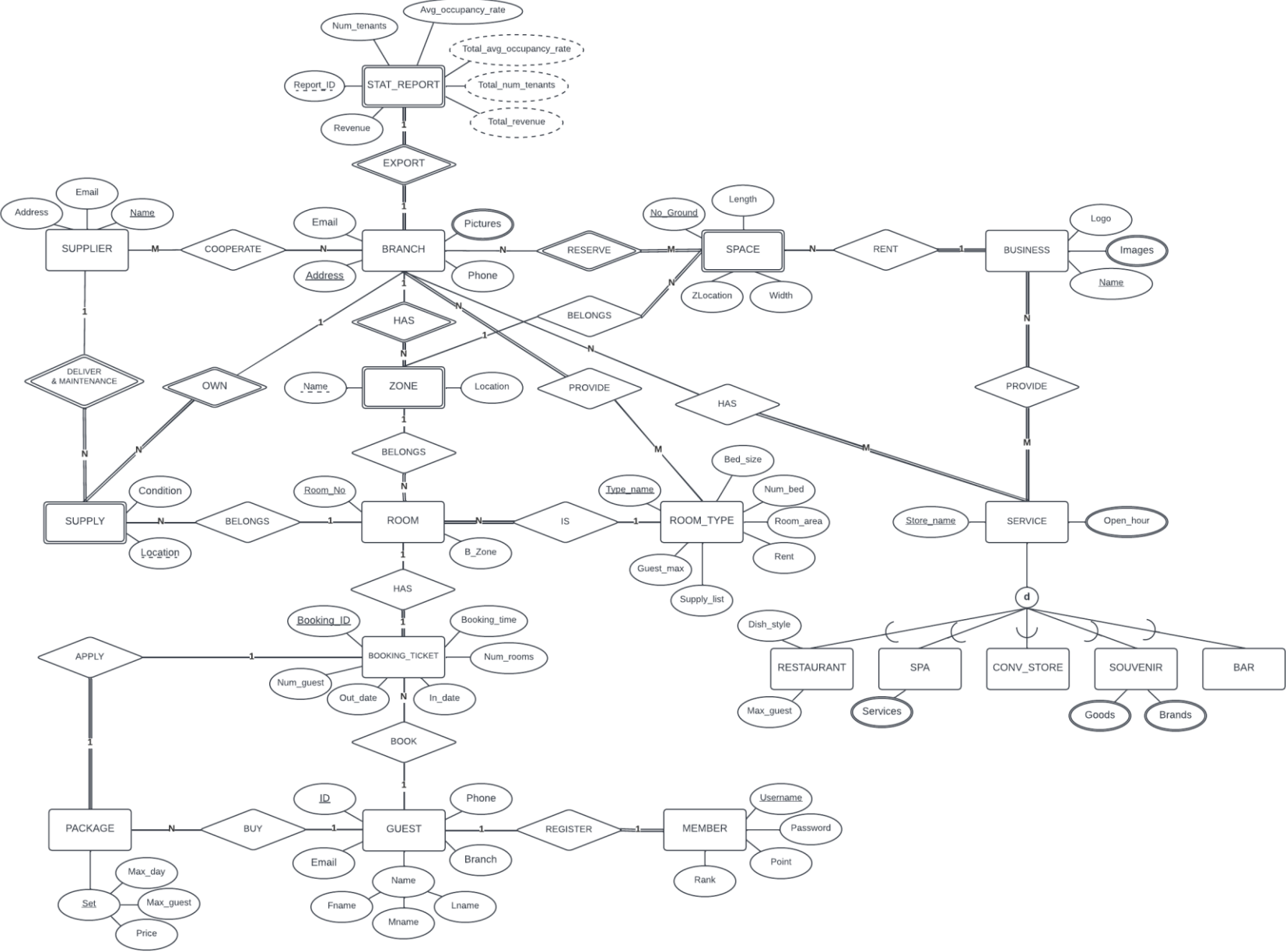
Lecturer: Nguyễn Thanh Bình

Group name: Hotel Managing 101

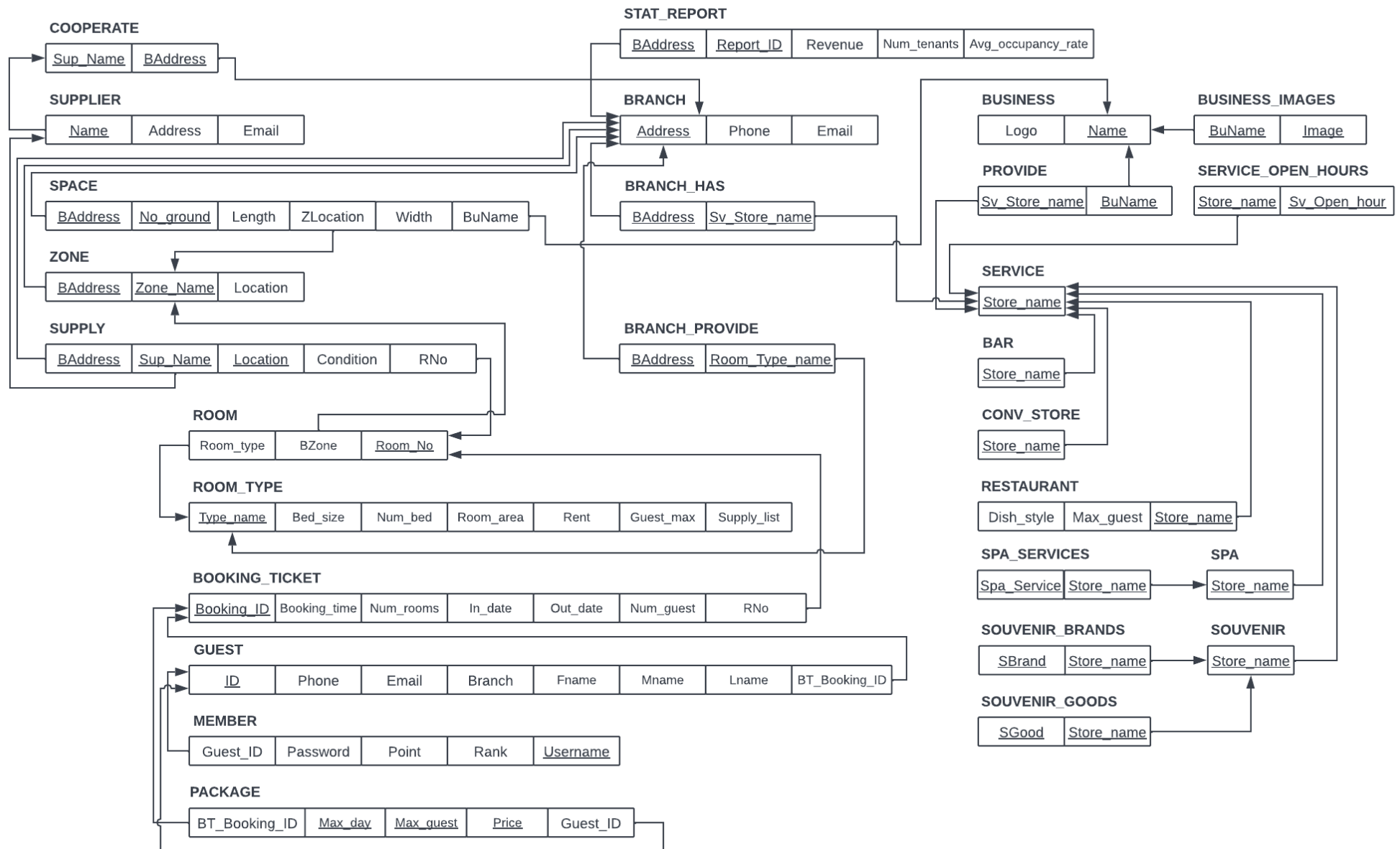
Team members: Trương Tân Hào Hiệp – 2011211

Ho Chi Minh city, 1st November, 2022

I. EER DIAGRAM



II. EER DIAGRAM TO RELATIONAL DATA SCHEMA



III. SEMANTIC CONSTRAINTS

Miscellaneous:

Each branch is allowed to choose its own supplier for each type of material; each type of material, only one supplier.

Room-related constraints:

- The number of rooms and the price of each room may vary from branch to branch.
- The information of the same room type (similar Type_Name) will be the same in all branches.
- The system can always look up the status information of each room at any time (also vacant or rented).

Payment constraints:

- Guests need to make payment at least 36 hours before check-in date.
- Reservations will be canceled if payment is not made on time.
- Guests can cancel the reservation at least 24 hours before the check-in date and receive a full refund of the paid amount.
- Failure to cancel on time or failure to show up on the date of registration will result in a charge of one day's rental and cancellation of the application.

Package-related constraints:

• Customers who buy the package, will be able to stay at any branch at any time of the year, the room type is arbitrarily selected from the list of available rooms, just within the allowed number of days.

• The system will check the registration information, the number of remaining days, the number of guests allowed is valid or not. If it is not valid (number of days exceeded, number of guests exceeded), the customer needs to re-register: one application suitable for package information, another application for out-ofpackage requirements.

Membership constraints:

Depending on accumulated points, customers are divided into: Potential customers (<50 VND ~ 50 million VND), Loyal customers (<100 million VND), VIP customers (<100 million VND ~ 1 billion VND) and SuperVIP customers (> = 1 billion VND) and get the following benefits:

- Loyal customers get 10% off when booking.
- VIP customers get 15% off when booking and 1 extra day when buying service package room rental.
- SuperVIP customers get 20% off when booking and 2 extra days when buying package room service.

Business Rent-related constraints:

- A business can lease some premises at one/many branches.
- The lessee needs to pay the rent one month in advance at the end of the lease year to be able to continue operating for the next year.
- The system will send a reminder when the rental payment is near due.