

Project Report  
**Databse Management System**

**Group\_7**

April 21, 2015

# Relations and their Functional Dependencies

**Functional Dependencies for all the relations:**

1- **Guest**(guest\_id , entity\_time)

**FD-**  $\text{guest\_id} \rightarrow \text{entity\_time}$

2- **Company**(guest\_id, cname, location)

**FD-**  $\text{guest\_id} \rightarrow \text{cname}$

$\text{guest\_id} \rightarrow \text{location}$

3- **Company\_Members**(guest\_id, name, age, designation )

**FD-**  $\text{guest\_id} , \text{name} \rightarrow \text{age}$

$\text{guest\_id}, \text{name} \rightarrow \text{designation}$

4- **Family**(guest\_id , Head\_Ssn , Address, Mobile\_no. , Adults , Children )

**FD-**  $\text{guest\_id} \rightarrow \text{Head\_Ssn}$

$\text{guest\_id} \rightarrow \text{Mobile\_no.}$

$\text{guest\_id} \rightarrow \text{Adults}$

$\text{guest\_id} \rightarrow \text{Children}$

5- **Family\_Members** (guest\_id , name , age)

**FD-**  $\text{guest\_id} , \text{name} \rightarrow \text{age}$

6- **Allot**(guest\_id , room\_id , Check\_in\_date , Check\_out\_date , Amount )

**FD-**  $\text{guest\_id} , \text{room\_id} \rightarrow \text{Check\_in\_date} , \text{Check\_out\_date} , \text{Amount}$

7- **Room** (room\_no , type, rate, status\_occupied)

**FD-**  $\text{room\_no} \rightarrow \text{type}, \text{rate}, \text{status\_occupied}$

8- **Facility** (facility\_id , no\_of\_hours , rate , type)

**FD-**  $\text{facility\_id} \rightarrow \text{no\_of\_hours} , \text{rate} , \text{type}$

9- **Food**(product\_id , rate , type , name)

**FD-**  $\text{product\_id} \rightarrow \text{rate} , \text{type} , \text{name}$

10- **Uses**(guest\_id, facility\_id , quantity\_used)

**FD-**  $\text{guest\_id} , \text{facility\_id} \rightarrow \text{quantity\_used}$

11- **Orders**((guest\_id , product\_id , date\_of\_time , time ) , quantity)

**FD-**  $\text{guest\_id} , \text{product\_id} , \text{date\_of\_time} \rightarrow \text{quantity}$

12- **Bill**(guest\_id , amount, paying\_method, paying\_date )

**FD-**  $\text{guest\_id} \rightarrow \text{amount}, \text{paying\_method}, \text{paying\_date}$