

## Comp 3005 Assignment 4

### Question 1

MovieTitle, Director -> Producer

MovieTitle, Director -> Movieof\_spTitle, movieOf\_Author

ActorName -> phone, address, AgentName

ActorName, SceneNo, spTitle, Author -> temp

SceneNo, SpTitle, Author -> storyLocation, FilmLocation

TakeNo, SceneNo, SpTitle, Author -> date, time

### Minimal Cover

movieTitle,director->producer,movieOf\_spTitle,movieOf\_Author

actorName->phone,address,agentName

actorName,sceneNo,spTitle,author->temp

sceneNo,spTitle,author->storyLocation,filmLocation

takeNo,sceneNo,spTitle,author->date,time

### 3NF form

[movieTitle,director | producer,movieOf\_spTitle,movieOf\_Author]

[actorName | phone,address,agentName]

[actorName,sceneNo,spTitle,author | temp]

[sceneNo,spTitle,author | storyLocation,filmLocation]

[takeNo,sceneNo,spTitle,author | date,time]

[movieTitle,director,actorName,sceneNo,spTitle,author,takeNo | ]

### Question 2

SongID -> song\_title, composer

Code-> book\_title, publisher, date

UserID -> password, name, emailAddress

Code, UserID -> pdfFileName, pageOffset

Code, SongID -> length, page

### **Minimal cover**

SongID->song\_title,composer

Code->book\_title,publisher,date

UserID->password,name,emailAddress

Code,UserID->pdfFileName,pageOffset

Code,SongID->length,page

### **3NF form**

[SongID | song\_title,composer]

[Code | book\_title,publisher,date]

[UserID | password,name,emailAddress]

[Code,UserID | pdfFileName,pageOffset]

[Code,SongID | length,page]

[SongID,Code,UserID | ]

### **Question 3**

**A student number uniquely identifies the students name, email, city, address (strNum, street, postcode)**

stdnum -> name, email, city, strnum, street, postcode, area\_code, office\_code, station\_code

area\_code, office\_code -> city

Postcode -> city

**The course section identifies the term and period and the room number and the course number**

Course\_section -> term, period, room\_num, course\_num

**Course number identifies the department name and course name**

course\_num -> department\_name, course\_name

**The combination of period, room, and term identifies a course section and course num**

period, room\_num, term -> course\_section, course\_num

room\_num -> building

stdnum, course\_section -> temp1

stdnum, course\_section, course\_num -> grade

### **Minimal cover**

stdnum->name,email,street,postcode,area\_code,office\_code,station\_code

area\_code,office\_code->city

Postcode->city

course\_section->term,period,room\_num

course\_num->department\_name,course\_name

period,room\_num,term->course\_section,course\_num

room\_num->building

stdnum,course\_section->temp1,grade

### **3NF form**

[stdnum | name,email,street,postcode,area\_code,office\_code,station\_code]

[area\_code,office\_code | city]

[Postcode | city]

[course\_num | department\_name,course\_name]

[period,room\_num,term | course\_section,course\_num]

[room\_num | building]

[stdnum,course\_section | temp1,grade]

[stdnum,Postcode,term,period,room\_num | ]

#### **Question 4**

Prod\_id -> prod\_Fname, prod\_Lname, prod\_gender

Kdrama\_id -> title, genre

D\_id -> D\_Fname, D\_Lname, D\_gender

Act\_id -> act\_Fname, act\_Lname, act\_gender

Prod\_id , Kdrama\_id -> temp1

D\_id, Kdrama\_id -> temp2

Act\_id, Kdrama\_id -> temp3

User\_id, password, Rating -> created\_comment

uploaded\_User\_id, uploaded\_password, uploaded\_Rating -> kdrama\_id

#### **Assumptions**

Producer id uniquely identifies the producers first name, last name and gender

The kdrama id uniquely identifies the title and the genre of the kdrama

The Director id uniquely identifies the directors first name, last name and gender

The actor id uniquely identifies the actors firstname, last name and gender

Producers can produce many kdramas and kdramas can have many producers producing the kdrama

Actors must appear in many kdramas, and kdramas can have many actors that appear in them. Directors can direct many kdramas and Kdramas can be directed by many Directors

The combination of a user id, password and rating can identify a created comment for a kdrama. A user can create many reviews

The combination of a user id, password and rating that has been uploaded uniquely identifies a kdrama\_id that has a review

#### **Minimal Cover**

Prod\_id->prod\_Fname,prod\_Lname,prod\_gender

Kdrama\_id->title,genre

D\_id->D\_Fname,D\_Lname,D\_gender

Act\_id->act\_Fname,act\_Lname,act\_gender

Prod\_id,Kdrama\_id->temp1

D\_id,Kdrama\_id->temp2

Act\_id,Kdrama\_id->temp3

User\_id,password,Rating->created\_comment

uploaded\_User\_id,uploaded\_password,uploaded\_Rating->kdrama\_id

### **3NF table**

[Prod\_id | prod\_Fname,prod\_Lname,prod\_gender]

[Kdrama\_id | title,genre]

[D\_id | D\_Fname,D\_Lname,D\_gender]

[Act\_id | act\_Fname,act\_Lname,act\_gender]

[Prod\_id,,Kdrama\_id | temp1]

[D\_id,Kdrama\_id | temp2]

[Act\_id,Kdrama\_id | temp3]

[User\_id,password,Rating | created\_comment]

[uploaded\_User\_id,uploaded\_password,uploaded\_Rating | kdrama\_id]

[Prod\_id,Kdrama\_id,D\_id,Act\_id,,User\_id,password,Rating,uploaded\_User\_id,uploaded\_password,uploaded\_Rating | ]