

(15 pts) From the logical model, define a relational schema in at least BCNF. Using functional dependencies, show that the schema is in at least BCNF. I'm expecting 6-10 relations for one student or 12-20 relations for two students. If in doubt of how much work a student should do, please ask the professor.

User(user_id, username, password, firstName, lastName)

- This is BCNF because username, password, firstName, and lastName FD on user_id.

UserFeedback(feedback_id, user_id, cafe_id, feedbackText, feedbackDate, rating)

- This is BCNF because user_id, cafe_id, feedbackText, feedbackDate & rating FD on feedback_id.

UserPreference(preference_id, user_id, cafePreference, minPrice, MaxPrice)

- This is BCNF because user_id, cafePreference, minPrice & MaxPrice FD on preference_id.

Lists(list_id, preference_id, listName, cost)

- This is BCNF because preference_id, listName & cost FD on list_id.

Cafe(cafe_id, list_id, photo_id, location_id, cafeName, cafeType, cafeDescription)

- This is BCNF because of list_id, photo_id, location_id, cafeName, cafeType & cafeDescription FD on cafe_id.

Photos(photo_id, photoName, url)

- This is BCNF because photoName & url FD on photo_id.

Location(location_id, country, city, neighborhood)

- This is BCNF because country, city & neighborhood FD on location_id.

Menu(menu_id, cafe_id, beverage_id, food_id, menuName, seasonal)

- This is BCNF because cafe_id, beverage_id, food_id, menuName & seasonal FD on menu_id.

FoodItem(food_id, foodName, foodPrice, foodDescription)

- This is BCNF because foodName, foodPrice & foodDescription FD on food_id.

BeverageItem(beverage_id, beverage, beveragePrice, beverageDescription)

- This is BCNF because beverage, beveragePrice & beverageDescription FD on beverage_id.

Is(coffee_id, drink_id, beverage_id)

- This is BCNF because coffee_id, drink_id, beverage_id are all connecting to Coffee, NoncaffeinatedDrinks, and BeverageItem table.

Coffee(coffee_id, beanType, typeOfCoffee, temperature)

- This is BCNF because beanType, typeOfCoffee & temperature FD on coffee_id.

NoncaffeinatedDrinks(drink_id, drinkType, temperature)

- This is BCNF because drinkType & temperature on drink_id.