CS480 – Course project

Summer 2021

Database: hunger_statistics

Description:

A group of people's data in a state suffering from hunger are submitted to that state. And then the total resources collected from all the states is distributed according to which state is facing more hunger problems. So basically creating a system where it keeps track of people that are suffering from starvation in-state and then allocating resources according to that i.e more the number more resources go their way. Each of the states has a unique State abbreviation, State Name, Population, Area, Total people starving, Types of resources collected. Total amount of resources collected by each state. Every person has a unique SSN, Name, Address, Telephone number, Age, Income, type of job/work. Each of the resources has a unique Name, Amount, Population, State. State abbreviation to know which state collected those resources.

Part 2 – CRUD (Create, read, update, and delete)

Deadline: July 10, 2021

List of strong entities:

1. people_starving
2. state
3. resources_collected

List of weak entities:

4. birthday
5. name
6. state
7. total_population
8. total_starving
9. resources
10. necessities
11. food
12. water
13. ID
14. financial_condition

15. income
16. own_house
17. job

We will implement the following functionality using Java and SQL with necessary GUI interfaces.

1. Insert/delete/update/read a **starving population**. The total people starving should be generated by the system automatically using MYSQL autoincrement.
2. Insert/delete/update/read a **state related to starving population.** The population should be generated by the system automatically using MYSQL autoincrement. Use GUI to showcase the states on a US map using green and red dots to see visually which states are doing good in helping starved people and which are not.
3. Insert/delete/update/read **resources_collected by countries.** The total amount of resources collected should be generated by the system automatically using MYSQL autoincrement.

Part 3 – Queries

Deadline: July 10, 2021

Based on the Demo, we will implement the following functionality using Java and SQL with necessary GUI interfaces.

Trivial Queries:

1. List all starving population(area, region, country etc)
2. List all states related to starving population
3. List all resources_collected by countries.

Non-trivial Queries:

1. List of people who are considered in the starvation population.
2. List of countries which can then be grouped down to regions that are considered in the starving population.
3. List of resources that have been allocated to the people in need.
4. List of a person's financial records, job, house etc.
5. List of necessities a person needs such as someone might just need food and water whereas others need more than that such as a place to stay, food, water, toiletries etc.