2.1 – Project details

2.1.1 Project Description

Organizes and stores mission critical data for the debased system. This implementation enables users to own tables, manage roles, maintain an account balance, and access information pertinent to their current positions. In addition, this implementation enables the debased system to charge users for services, pay nodes for their work, and protect access to accounts and data. The database engine, debased, will function similarly to a traditional relational database like PostgreSQL. Following that, the debased database will be accessed through an exact copy of SQL.

2.1.2 Database Engine

2.1.2.1 Debased

2.1.3 Potential Users

2.1.3.1 Debased account holders

2.1.3.2 Debased system nodes

2.1.4 Data description, generally what type of data will be stored

The database will store:

2.1.4.1 The Accounts of every debased user

2.1.4.2 Balance of each account

2.1.4.3 Roles of each account

2.1.4.4 Tables associated with the roles

2.1.4.5 Attributes associated with each table

2.1.5 User Accessible Data

2.1.5.1 Current balance of their account

2.1.5.2 Roles assigned to their account

2.1.5.3 Attributes of tables (as allowed by the user's accounts' assigned roles)

2.1.5.4 Data in tables (as allowed by the user's accounts' assigned roles)

2.1.5.5 List of all tables the user has access to

2.1.5.6 Complete transaction history of a table (as allowed by the user's accounts' assigned roles)

2.1.5.7 Complete transaction history of their account

2.2 Database Schema

2.2.1 Models
  2.2.1.1 general_info
    2.2.1.1.1 ID (String)
    2.2.1.1.2 Created_at (DateTime)
    2.2.1.1.3 Deleted_at (DateTime)
    2.2.1.1.4 Modified_at (DateTime)
2.2.2 Entities
  2.2.2.1 Accounts
    2.2.2.1.1 General_info
    2.2.2.1.2 Account_number (String)
    2.2.2.1.3 Balance* (BalanceID)
    2.2.2.1.4 Permissions (Relation)
  2.2.2.2 Balance
    2.2.2.2.1 General_info
    2.2.2.2.2 Account_number* (AccountsID)
    2.2.2.2.3 Corruption (String)
  2.2.2.3 Roles
    2.2.2.3.1 General_info
    2.2.2.3.2 Permissions (Relation)
    2.2.2.3.3 Role (String)
    2.2.2.3.4 Table (TableID)
  2.2.2.4 Tables
    2.2.2.4.1 General_info
    2.2.2.4.2 Table_Id (String)
    2.2.2.4.3 Row_count (Int)
    2.2.2.4.4 Table_attribute (Relation)

2.2.2.5 Attributes
    2.2.2.5.1 General_info
    2.2.2.5.2 Attribute (String)
    2.2.2.5.3 Table_attribute (Relation)
2.2.3 Relations
  2.2.3.1 Permissions
    2.2.3.1.1 Account_key* (AccountID)
    2.2.3.1.1 Role_key* (RoleID)
  2.2.3.2 Table_attributes
    2.2.3.2.1 Role_key* (RoleID)
    2.2.3.2.2 Table_key* (TableID)

2.3 – ERD