SCRUM Database Design

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# SCRUM database introduction

**Problem explanation:** This database is designed to implement the SCRUM framework to business work. Scrum itself is a simple framework for effective team collaboration on complex products and has multiple different forms but is commonly in a line progression format with columns. SCRUMs layout is as follows; the first column is where the task of the main project live. Then the next column is the "ice box" where the sub tasks are listed for each of those main tasks that were in the previous column. Then next there is the "emergency" column comes where very important sub tasks are put that weren't taken into account beforehand and need to be completed before everything else. After that the "in progress" column is where the tasks from the "ice box" are when someone takes them and starts work. Then the "testing" column is where you put sub tasks that have been completed and are ready for integration approval. Then finally there is the "completed" column where all the completed tasks are.

There will be one main account for the business and then the business will issue separate accounts to all their users. There will be options for users to have administrator access and then normal accounts where they can mark completion of a task, along with time, and move it from different categories. This will have a similar multiuser system like GitHub has where you can work together to finish a project.

**Check Constraint’s:** When any account is created; whether that be business, worker, administrator there needs to be ID’s, names, and the required IDs for the table. When a task is created, there must be a task ID, task name, description, creation date, department ID, and current status.

**Business Rules:**

|  |  |  |
| --- | --- | --- |
| **Entity** | **Business Rule** | **Description** |
| Business Account ID | Business matching | This will be an assigned ID to all business accounts. It is used to identify which tasks are for which business and what workers and departments belong to that business. |
| Department Account ID | Department matching | This will be an assigned ID to all Departments inside a certain business account. It is used to identify which tasks belong to which departments. |
| Worker Account ID | Worker matching | This will be an assigned ID to all worker accounts inside a certain business account. It is used to signify which task is for which worker. |
| Task ID | Task identification | This will be an assigned ID to a single task. It will be used as the main identifier for said task. |

**Data Dictionary:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Table column name** | **Description** | **Key type** | **Value type** |
| Business Account ID | This will be an assigned ID to all business accounts. | Primary | Int |
| Worker Account ID | This will be an assigned ID to all worker accounts inside a certain business account. | Primary | Int |
| Administrator Account ID | This will be an assigned ID to all workers with an administrator account. | Primary | Int |
| Task ID | This will be an assigned ID to a single task. | Primary | Int |
| Task Name | This will be a name created by the person that created the task. | Primary | Varchar |
| Department Account ID | This will be an assigned ID to all Departments inside a certain business account. | Primary | Int |
| Status | This will be a selectable list of the different tables that hold tasks. Ice box, Emergency, In progress, Testing, Completed. | Primary | Varchar |
| Completion Date | This is the date that is assigned to the task when it is put into the completed table and the status is changed to completed. | Primary | Date |
| Company Name | This will be the name of the business that has that certain Business ID | Foreign | Varchar |
| Street | This is the street name of the Business with that certain Business ID | Foreign | Varchar |
| City | This will be the City of the Business with that certain Business ID | Foreign | Varchar |
| Post Code | This will be the Post code of the Business with that certain Business ID | Foreign | Int |
| Phone number | This is the phone number of the Business, worker, or administrator in the database. | Foreign | Phone number |
| Creation Date | This is the date that is assigned when a administrator creates a task. | Foreign | Date |
| Role | This is simply the role of the worker in the business. | Foreign | Varchar |
| Email | This is the email for that business, worker, or administrator. | Foreign | Email |
| Description | This is the description of the task, or the instructions that are given. | Foreign | Varchar |
| Task count | This is the count of all the tasks that a given employee has using the business ID, department ID, worker ID, and worker completion ID. | Foreign | Int |
| Department Name | This is simply the name of the department. | Foreign | Varchar |
| Claimed Status | This is the yes or no status of the task that will be located in the Ice box or Emergency tables. | Foreign | Yes/No |
| Deleted By | This is the worker ID that deleted the task from the table. | Foreign | Varchar |
| Deleted Date | This is the date that a worker deletes a task from the task list table. | Foreign | Date |
| Created By | This is the worker ID that created the task and inserted it into the task list table. | Foreign | Varchar |

# SCRUM database ERD

