

Bash Shell Scripting Project

Using Bash Shell Scripting create a Database Management System **to store multiple databases**, The system should provide the following features for each database:

- ◆ Create Table (Here you should describe your table with its fields)
 - (Name, Datatype, Primary Key)
 - Constraints e.g. Uniqueness of the field, Default value for the field, and NOT NULL “the field is not empty”
- ◆ Alter Table (Same functionality like alter in SQL)
 - User should be able to edit the table e.g. changing table name, add a new field, delete a field, changing the datatype of a certain field, etc.
- ◆ Add Record
 - User should be able to insert new record to the table, and the inserted record should satisfies the characteristics/constraints of the table's field.
e.g. If field datatype is string, then it should accepts only string
e.g. Primary Key shouldn't be duplicated
- ◆ Edit Record[s]
 - User should be able to edit any record according to certain pattern including regex patterns.
- ◆ Delete Record[s]
 - User should be able to delete any record according to certain pattern including regex patterns.
- ◆ Select Record[s]
 - User should be able to search for record/s using any field and select any data according to certain pattern including regex patterns.
 - User should be able to print the selected records in a certain format
e.g. HTML or CSV
- ◆ Display Table
 - User should be able to display table description on the display screen
 - User should be able to display the table description in
- ◆ Sort Table
 - User should be able to sort the table according to certain field ascendingly or descendingly.
- ◆ Drop Table
 - User should be able to delete table from the database
- ◆ Exit

How should be the delivery of the project:

- The shell scripts should be delivered through a **Github public repository**.
- A **README** file should be included in the repository that describes how to use the program.
- **Repository Contributors** should write his/her **Github username**, and his/her **Full name** in the README file.
- You should send the link of Github Repository and the Group Members by email using the following subject pattern: **[iti-bash-project] DBMS**
- You should send the email to the following email address:
ahmed2hamdy+iti_bash@gmail.com

Project Deadline: Monday 12th March 2018 at 11:59 PM

Good Luck and Happy Scripting