

Update_kjakdb.sh

```
#!/bin/bash

DATABASE='kjakdb'
MYSQL_ROOT_USER='root'
MYSQL_ROOT_PASSWORD='kjak2kjak'
ANON_USER='anon'
ANON_PASSWORD='anonbrúkari'

# Function to check if user exists and create if not
ensure_user_exists() {
    local user=$1
    local password=$2

    echo "Checking if user $user exists..."
    if ! mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -e "SELECT 1 FROM
mysql.user WHERE user = '$user'" | grep -q 1; then
        echo "User $user does not exist, creating..."
        mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -e "CREATE USER
'$user'@'localhost' IDENTIFIED BY '$password';"
    else
        echo "User $user already exists."
    fi
}

# Grant permissions to user
grant_permissions() {
    local user=$1
    local database=$2
    local table=$3
    local privileges=$4

    echo "Granting $privileges privileges to $user on $database..."
    mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -e "GRANT $privileges
ON $database.$table TO '$user'@'localhost';"
    mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -e "FLUSH PRIVILEGES;"
}

# Function to check and add primary keys and indexes
add_primary_key_and_index() {
    local table=$1
    local primary_key=$2
    local index_columns=$3

    echo "Checking primary key for table $table..."
    if ! mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -D "$DATABASE" -
sse "SHOW KEYS FROM $table WHERE Key_name = 'PRIMARY';" | grep -q 'PRIMARY';
then
        echo "Adding primary key ($primary_key) to $table..."
    fi
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mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -D "$DATABASE" -e
"ALTER TABLE $table ADD PRIMARY KEY ($primary_key);"
else
    echo "Primary key ($primary_key) already exists in $table."
fi

if [[ -n "$index_columns" ]]; then
    for index_column in ${index_columns//,/ }; do
        echo "Checking index for column $index_column in $table..."
        if ! mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -D "$DATABASE" -
-sse "SHOW INDEX FROM $table WHERE Column_name = '$index_column';" | grep -q
"$index_column"; then
            echo "Adding index for column $index_column in $table..."
            mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -D "$DATABASE" -e
"ALTER TABLE $table ADD INDEX ($index_column);"
        else
            echo "Index for column $index_column already exists in $table."
        fi
    done
fi
}

# Function to check and add foreign keys
add_foreign_key() {
    local table=$1
    local constraint_name=$2
    local foreign_key=$3
    local references=$4

    echo "Checking foreign key $constraint_name in table $table..."
    if ! mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -D "$DATABASE" -
sse "SELECT CONSTRAINT_NAME FROM information_schema.TABLE_CONSTRAINTS WHERE
CONSTRAINT_SCHEMA = '$DATABASE' AND TABLE_NAME = '$table' AND CONSTRAINT_NAME
= '$constraint_name';" | grep -q "$constraint_name"; then
        echo "Adding foreign key $constraint_name to $table..."
        mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -D "$DATABASE" -e
"ALTER TABLE $table ADD CONSTRAINT $constraint_name FOREIGN KEY ($foreign_key)
REFERENCES $references;"
    else
        echo "Foreign key $constraint_name already exists in $table."
    fi
}

# Function to set AUTO_INCREMENT
set_auto_increment() {
    local table=$1
    local column=$2
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echo "Setting AUTO_INCREMENT for $column in $table..."
mysql -u "$MYSQL_ROOT_USER" -p"$MYSQL_ROOT_PASSWORD" -D "$DATABASE" -e
"ALTER TABLE $table MODIFY $column int(11) NOT NULL AUTO_INCREMENT;"
}

# Ensure 'anon' user exists and grant permissions
ensure_user_exists "$ANON_USER" "$ANON_PASSWORD"
grant_permissions "$ANON_USER" "$DATABASE" "*" "SELECT"
grant_permissions "$ANON_USER" "$DATABASE" "kjak_thread" "INSERT, UPDATE"
grant_permissions "$ANON_USER" "$DATABASE" "kjak_post" "INSERT, UPDATE"

# Add primary keys, indexes, and set auto-increment
add_primary_key_and_index 'kjak_post' 'post_id' 'thread_id'
add_primary_key_and_index 'kjak_table' 'forum_id'
add_primary_key_and_index 'kjak_thread' 'thread_id' 'forum_id'

set_auto_increment 'kjak_post' 'post_id'
set_auto_increment 'kjak_table' 'forum_id'
set_auto_increment 'kjak_thread' 'thread_id'

# Add foreign keys
add_foreign_key 'kjak_post' 'kjak_post_ibfk_1' 'thread_id'
'kjak_thread(thread_id)'
add_foreign_key 'kjak_thread' 'kjak_thread_ibfk_1' 'forum_id'
'kjak_table(forum_id)'
```