



# Idealogic

My project for the Design Championship 2023

## What is Idealogic?

- Idealogic is a quote generator capable of adding new quotes to its database and filtering quotes—all the while with impeccable security features.
- This is a project made using Python, SQL Server, HTML, JavaScript, and CSS.
- I have also uploaded it to GitHub at <a href="https://github.com/nispar2009/DesignChamp2023">https://github.com/nispar2009/DesignChamp2023</a>.

#### What can it do?

Generate quotes based on the user's search query.

Add, delete, and view quotes from the admin panel.

Function with protected passwords.

### But, is it secure?

The following measures make it hard for others to read the passwords of the admin and for unauthorized users to gain admin permissions and for people to break the flow of the page.

- ✓ Randomly ciphered passwords
- ✓ No deciphered passwords being stored anywhere
- ✓ Features which only function with ciphered passwords stored as cookies.
- ✓ No passwords appearing on the page
- ✓ Parameterized queries in SQL to avoid SQL injection
- ✓ No chance of running user-entered HTML

#### How does it work?

When not logged in, users only have read access. In the questionnaire located in the bookmark at the bottom, they can choose the criteria for filtering the quotes, and after the JS script analyzes their preference, it returns certain relevant quotes inside a beautiful card with a doodle for a background.

Behind the scenes, once the admin logs in, they can see two new options on the navbar—Admin and Sign out. The admin option lets the user add new categories and quotes, or change the password. From here, the admin can see all the quotes in the database.

My app uses *flask* for integrating Python with HTML, and *pyodbc* to connect with the server.

#### What about the database?

The database has three tables—\_admin, quotes, and categs. The \_admin table contains the password for admin permissions in the ciphered form. The categs table has 2 columns which store all the categories—id and \_name. Finally, the quotes table stores all the entered quotes, and each quote's categ column is the id of the related category.

All my main SQL code for setting up the app is located in the *db* folder. To set up or purge the database, I just execute one of these files.

#### Credits

All my code and logos except for the doodle in the home page were purely created by me to use in this project. The credit for the home page doodle goes to valeriya\_dor/Adobe Stock.

# Thank you!



