

College KT Portal

Working description

Purpose

A web portal to store colleges and their KT (knowledge transfer) details, and to find them quickly: search for a college and its stored KT is displayed. Access is controlled by three kinds of login.

Roles and access

Menu	Admin	Lead	User
Search KT	Yes	Yes	Yes (view only)
Add College	Yes	Yes	-
Add KT	Yes	Yes	-
Manage Users	Yes	-	-
Settings (change own password)	Yes	Yes	Yes

The sidebar shows only the menus a role may use, and the server also refuses direct access to pages a role is not allowed to open.

Overall flow

- **Admin** signs in, creates Lead and User logins under *Manage Users*.
- **Admin or Lead** adds a college under *Add College*, then adds its KT under *Add KT* (a title and a description for each KT).
- **Anyone** signs in, opens *Search KT*, sees the list of colleges, searches or clicks a college, and reads its KT.

How the data is stored

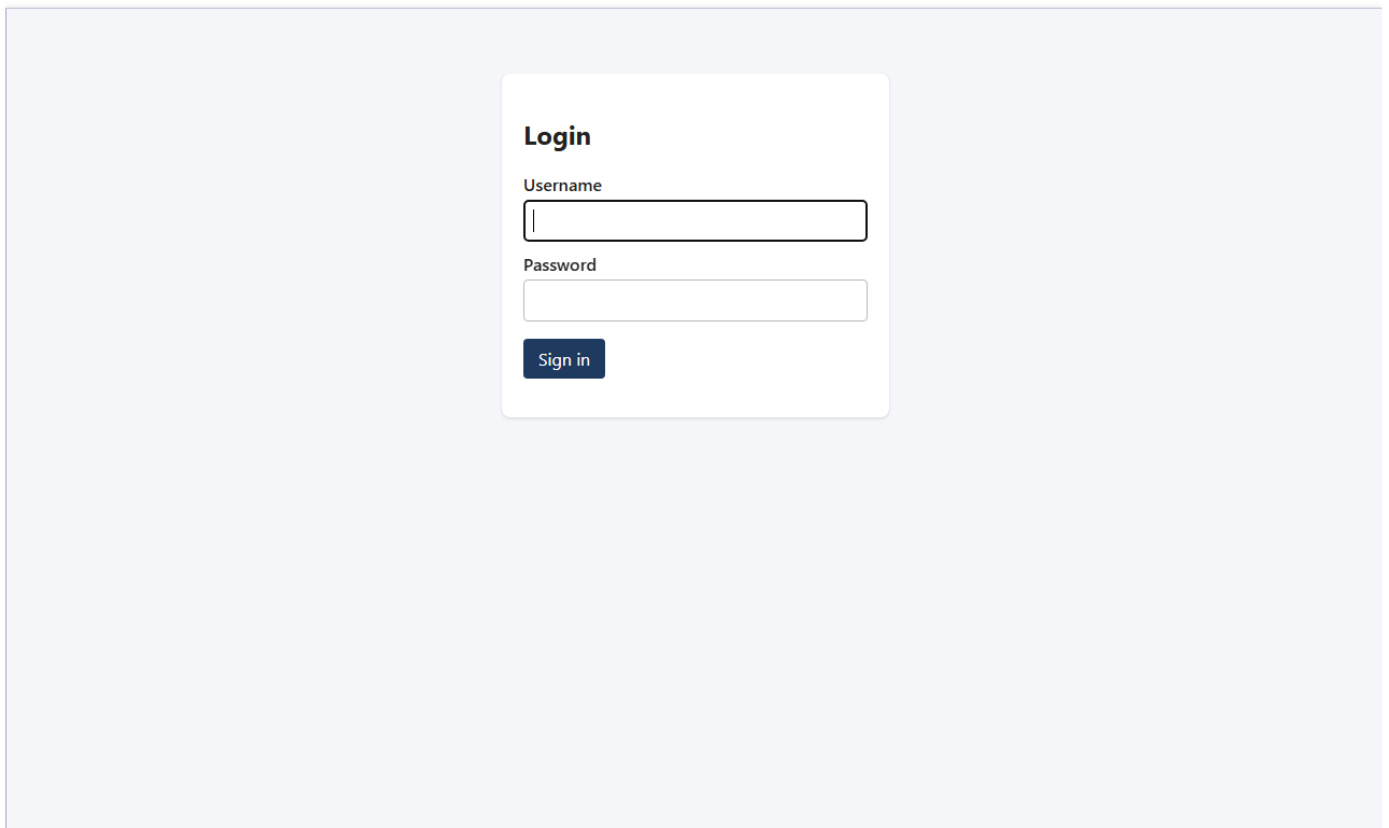
- A local SQLite file, `colleges.db`, with three tables: **colleges** (name), **kts** (college, title, description) and **users** (username, hashed password, role).
- One college can have many KT entries. Deleting a college removes its KT entries.

Running it

- Open PowerShell, go to the project folder and run `python app.py`. Leave the window open.
- Open `http://127.0.0.1:5001` in the browser.
- The first run creates a default admin login, which should be changed at once under Settings.

1. Login

Every visitor must sign in first; nothing else in the portal opens without a login.

A screenshot of a web application's login page. The page has a light blue background. In the center, there is a white rectangular box with rounded corners. Inside this box, the word "Login" is written in bold black text at the top. Below it, the label "Username" is followed by a text input field. Underneath the username field, the label "Password" is followed by another text input field. At the bottom of the box, there is a dark blue button with the text "Sign in" in white.

- Enter the username and password given by the admin and click **Sign in**.
- A wrong username or password shows an error and nothing is opened.
- After signing in you land on **Search KT**. The first admin account is created automatically on first run and its password should be changed under **Settings**.
- Passwords are stored hashed, and every form carries a security token (CSRF).

2. Search KT: list of colleges

The home page for all three roles. By default it shows only the list of colleges, not the KT.

The screenshot displays the 'College KT' application interface. On the left is a dark blue sidebar with the title 'College KT' and a list of navigation items: 'Search KT' (highlighted), 'Add College', 'Add KT', 'Manage Users', and 'Settings'. At the bottom of the sidebar, the user is identified as 'admin Admin' with a 'Logout' button. The main content area is titled 'Search KT' and features a search input field with the placeholder text 'Start typing a college name' and a 'Search' button. Below the search bar is a table titled 'Colleges' with two columns: 'College' and 'KT'. The table lists three colleges: 'ABC College of Engineering' with 2 KT entries, 'Greenfield Arts College' with 1 KT entry, and 'XYZ University' with 1 KT entry. Each college name is a clickable link.

College	KT
ABC College of Engineering	2
Greenfield Arts College	1
XYZ University	1

- The table shows each college name and how many KT entries it has.
- The search box autocompletes: as you type, matching college names are suggested.
- Click a college name to open that college's KT.
- Available to **Admin, Lead and User**.

3. Search KT: searched college's KT

Searching (or clicking a college) displays the stored KT of that college.

The screenshot displays the 'Search KT' interface. On the left is a dark blue sidebar with the 'College KT' logo and navigation options: 'Search KT' (highlighted), 'Add College', 'Add KT', 'Manage Users', and 'Settings'. At the bottom of the sidebar, it shows the user 'admin Admin' and a 'Logout' button. The main content area is titled 'Search KT' and features a search bar with 'abc' entered. To the right of the search bar are a 'Search' button and a link to 'Show all colleges'. Below the search bar, the results for 'ABC College of Engineering' are shown. This section includes two entries: 'Admission Process' with the description 'Online application, followed by document verification and counselling round.' and 'Fee Structure' with the description 'Tuition: 85,000 per year. Hostel: 45,000 per year. Payable in two instalments.' Each entry has 'Edit' and 'Delete' buttons. At the bottom of this section is an 'Add KT' button.

- Type part of a name, or pick a suggestion, and press **Search**. Matching is not case-sensitive and works on part of the name.
- Each matching college is shown with all its KT entries: a bold **title** and the **description** below.
- **Admin and Lead** also see **Edit** and **Delete** beside each KT and an **Add KT** button. A **User** sees the KT read-only.
- If nothing matches, the page says "No matching college found". **Show all colleges** returns to the full list.

4. Add College (Admin, Lead)

Creates the colleges that KT will later be attached to. Only the college name is entered here.

The screenshot shows the 'Add College' page in the College KT system. On the left is a dark blue sidebar with the following elements: a 'College KT' header with a graduation cap icon, a 'Search KT' option with a magnifying glass icon, a highlighted 'Add College' button with a plus icon, and three other menu items: 'Add KT' (document icon), 'Manage Users' (people icon), and 'Settings' (gear icon). At the bottom of the sidebar is a user profile for 'admin Admin' with a blue circular avatar containing the letter 'A' and a 'Logout' button. The main content area is light blue and titled 'Add College'. It contains a white form with a 'College name' label and a text input field. Below the input field is a dark blue 'Add college' button. Underneath the form is a section titled 'Existing colleges' which displays a table of three colleges: 'ABC College of Engineering', 'Greenfield Arts College', and 'XYZ University'. Each row in the table has three buttons: 'Add KT' (dark blue), 'Rename' (dark blue), and 'Delete' (red).

Existing colleges		
ABC College of Engineering	Add KT	Rename Delete
Greenfield Arts College	Add KT	Rename Delete
XYZ University	Add KT	Rename Delete

- Type the name and click **Add college**. Duplicate names (in any capitalisation) are refused.
- The **Existing colleges** list below has **Add KT** (jumps to the Add KT page with that college selected), **Rename** and **Delete**.
- Deleting a college also deletes all of its KT; a confirmation is asked first.

5. Add KT (Admin, Lead)

Adds one or more KT entries to a chosen college.

The screenshot shows the 'Add KT' interface. On the left is a dark blue sidebar with the following menu items: 'College KT' (with a graduation cap icon), 'Search KT' (with a magnifying glass icon), 'Add College' (with a building icon), 'Add KT' (highlighted in light blue with a plus icon), 'Manage Users' (with a group of people icon), and 'Settings' (with a gear icon). At the bottom of the sidebar, it shows the user 'admin Admin' with a blue circular profile icon and a 'Logout' button. The main content area is titled 'Add KT' and contains a form. The form has a 'College' dropdown menu with 'ABC College of Engineering' selected. Below this is a section labeled 'KT 1' which contains a 'KT Title' text input field and a 'KT Description' text area. At the bottom of the form are three buttons: a green '+ Add' button, a dark blue 'Save' button, and a blue 'Cancel' link.

- Choose the **College** from the dropdown.
- Each KT is a fieldset with a **KT Title** and a **KT Description**.
- Click **+ Add** to open another fieldset and enter several KTs in one go; extra fieldsets have a **Remove** button.
- Click **Save** to store them all. Blank fieldsets are ignored; a fieldset with only a title or only a description is rejected.
- After saving you are taken to that college's KT on the Search KT page.

6. Manage Users (Admin only)

The admin creates and maintains the Lead and User logins.

College KT

Search KT

Add College

Add KT

Manage Users

Settings

admin Admin

Logout

Add Lead / User

Username Password (6+ chars) lead **Create**

Users

Username	Role / new password
admin	admin New password (optional) Update
lead1	lead New password (optional) Update Delete
user1	user New password (optional) Update Delete

- **Add Lead / User:** enter a username, a password (6+ characters) and the role, Lead or User, then click **Create**. Admin accounts cannot be created here.
- In the **Users** table the admin can switch a login between Lead and User, set a new password (**Update**) or **Delete** the login.
- The existing admin account is shown as "admin": its role cannot be changed and it cannot be deleted; only its password can be reset.

7. Settings (everyone)

Each person maintains their own account here.

College KT

- Search KT
- Add College
- Add KT
- Manage Users
- Settings**

admin
Admin
Logout

Settings

Change password

Current password

New password (6+ chars)

Change

- Enter the current password and a new password (6+ characters) and click **Change**.
- The **Logout** button at the bottom of the sidebar ends the session.