

Team O Tree: Reng Zheng, Ivan Lam, Julia Nelson, Michelle Lo  
 SoftDev  
 P00 -- Move Slowly and Fix Things/Design Document  
 2021-10-27  
 Time spent: 3.5 hours

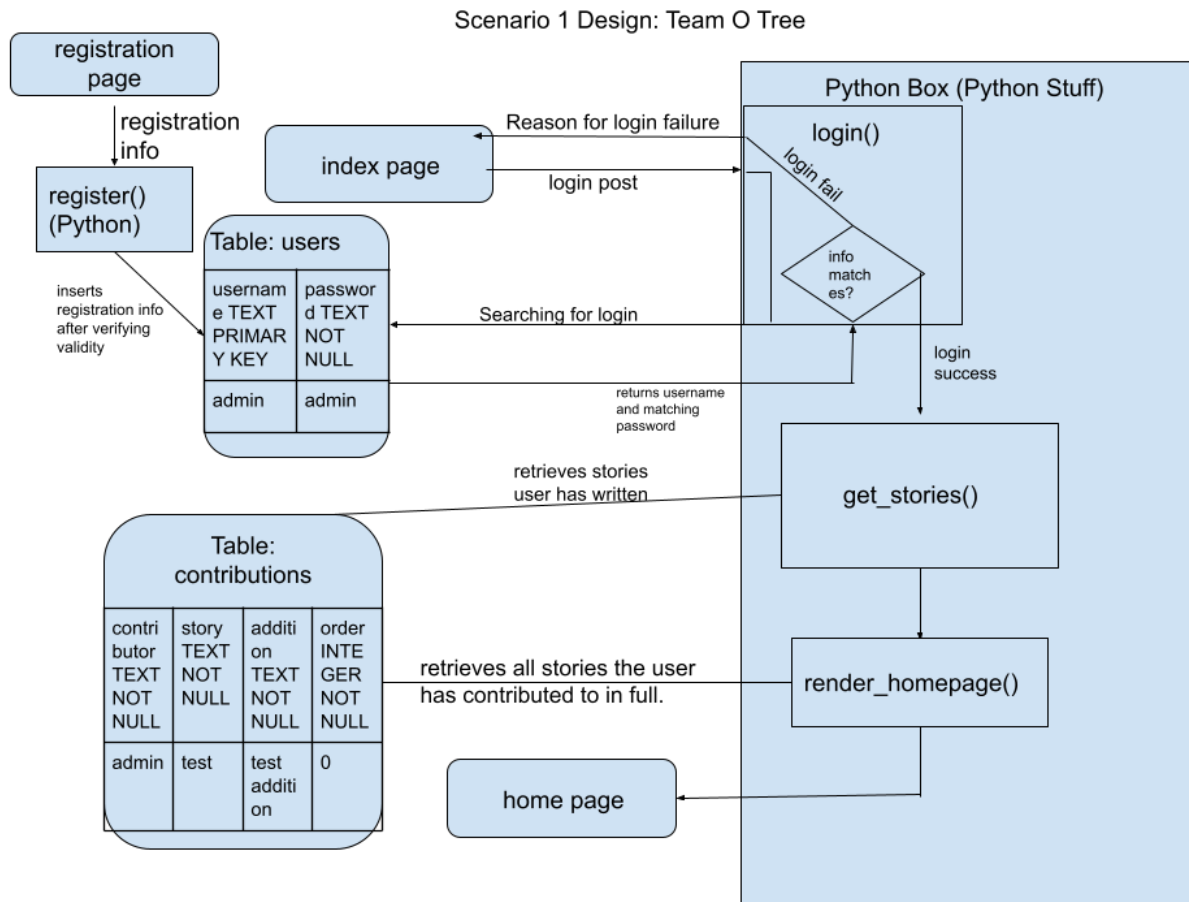
### **Program Components and Role:**

SQL Database -- Store user information + stories

Homepage -- login/register capability + display stories users have contributed to + button (leads to search page for existing stories) + button (creates new story)

Flask application -- host web server

### **Component Map**



### **SQL Database Organization:**

- Login Table

-

username TEXT PRIMARY KEY	password TEXT NOT NULL
admin	admin

- Table for all contributions to all stories, in the order they appear in in the story.
  - This ensures there is no need for dynamic tables of stories, which are unsafe as table names can't be parameterized
  - Also keeps contributor info all together

contributor TEXT NOT NULL	story TEXT NOT NULL	addition TEXT NOT NULL	order INTEGER NOT NULL
admin	test	test addition	0

- Table for stories
  - Keeps track of all stories

stories TEXT Primary Key
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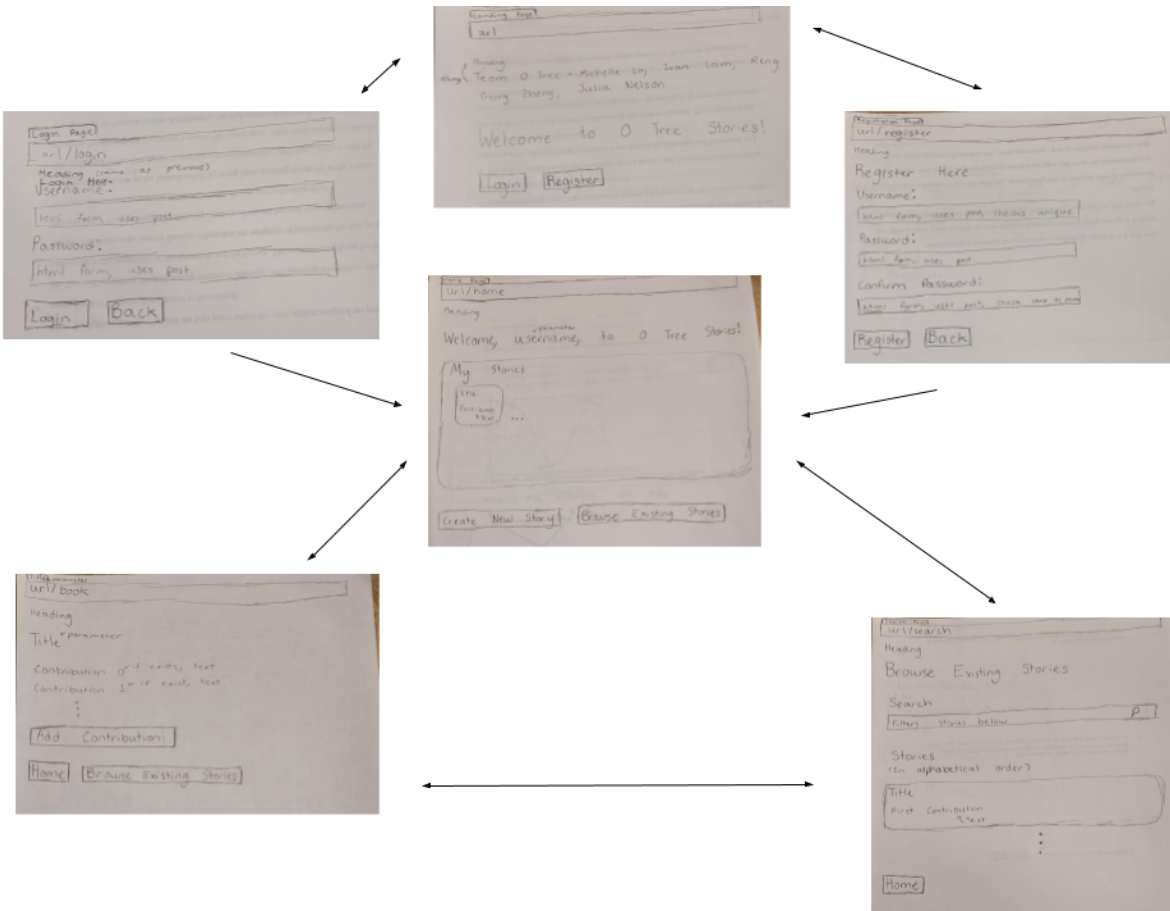
### Homepage Specifics:

- Login button -- brings to to the login page
  - invokes login function
- Register button -- brings you to the registration page
  - invokes registration function
- Stories display on homepage
  - invokes story display function
  - Shows a section with a list of stories they can contribute to and then a section of stories they have contributed to.

### Flask application Specifics:

- login()
  - handles the login functionality, checks the database and password hash
- register()
  - handles the registration, makes sure they are not trying to do an SQL injection.
- get\_stories()
  - gets the stories of a user.
- get\_latest\_contribution(story)
  - gets the latest contribution of a given story

## Site Map



### Tasks and Assignments:

1. Users functions -- Michelle
  - a. Create a table with usernames and passwords.
  - b. Login function: Users will stay logged in until they choose to log out.
  - c. Logout function: Users can log out and end their sessions.
  - d. Register account function: Users can create accounts and add to the database.
2. Creating Pages -- Ivan
  - a. Create a homepage.
    - i. Displays stories edited on the homepage.
    - ii. Login and Logout buttons.
    - iii. Register button.
  - b. Search stories page.

3. Story Management -- Reng
  - a. Creates a table with username and the titles of the stories that they have created/contributed.
  - b. Creates a table for each story created with user contributor, additions, and order of additions based on when it was added.
  - c. Creates a table containing the list of stories.
4. Hosting -- Julia
  - a. Making sure everything works.
  - b. Managing subcomponent interconnections.
  - c. Filling in gaps if needed.