nTeam O Tree: Reng Zheng, Ivan Lam, Julia Nelson, Michelle Lo
SoftDev
P00 -- Move Slowly and Fix Things/Design Document
2021-10-27
Time spent: 4 hours
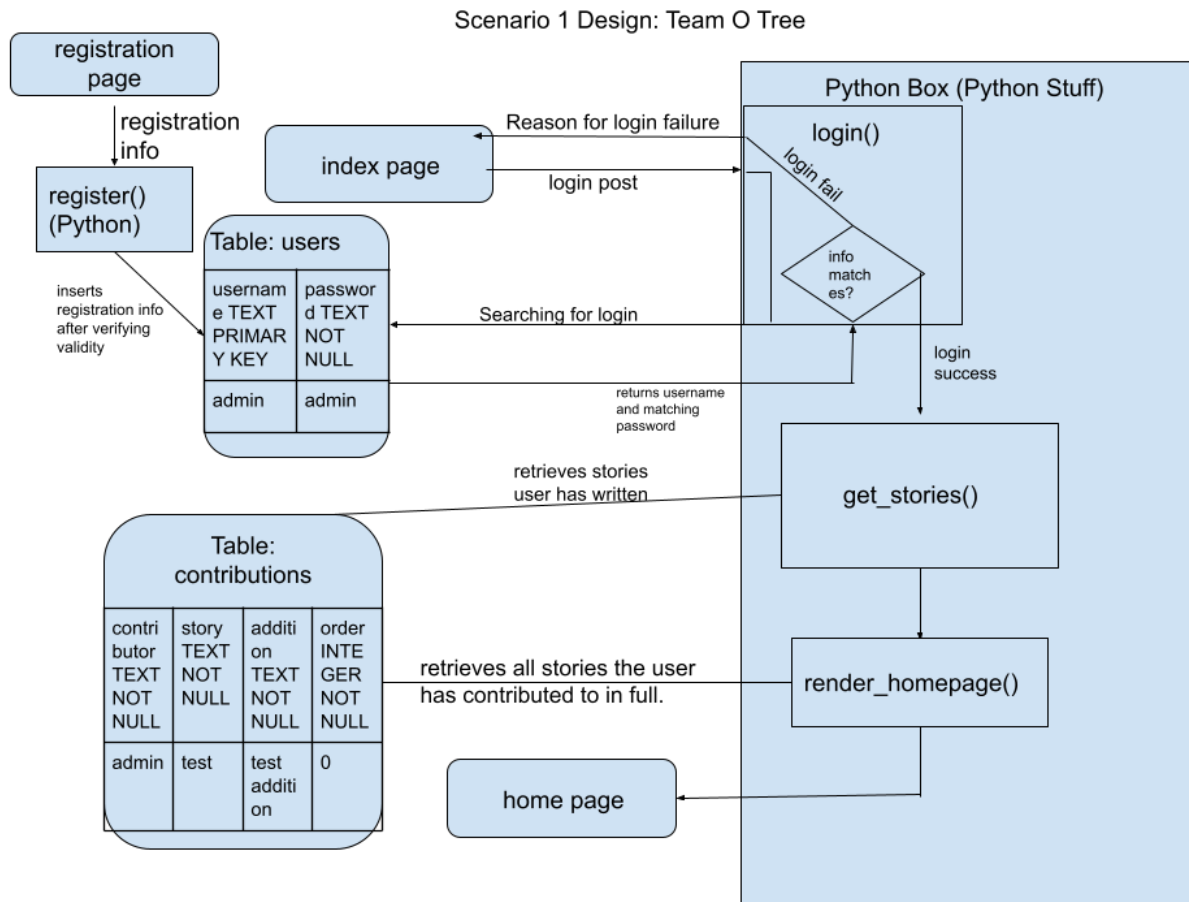
Program Components and Role:

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

Scenario 1 Design: Team O Tree

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

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

Landing

Login

registration

Home page

viewing a story

searching for a book
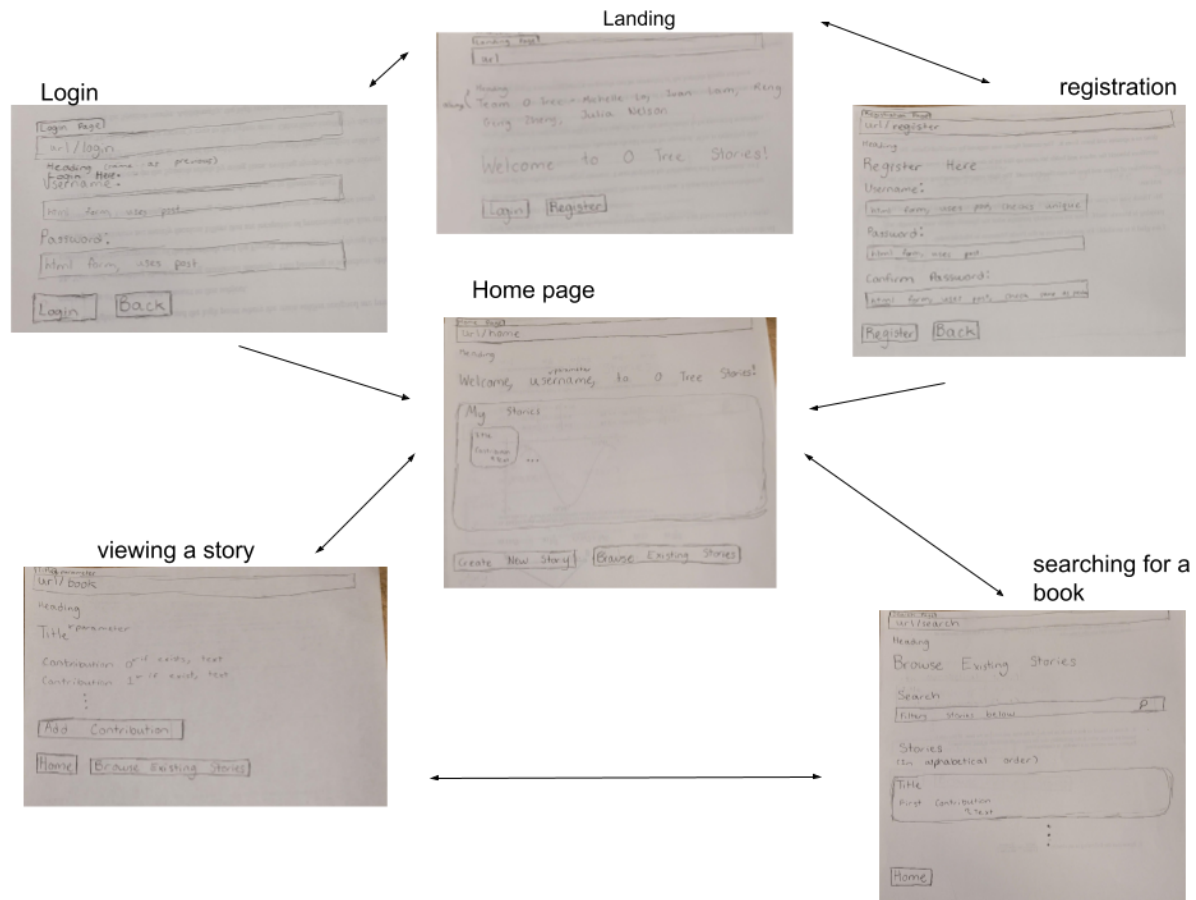
Tasks and Assignments:

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.
    d. Connect story management to pages
        i. Will display last entry with stories contributed to on home page
        ii. Will display first entry with stories on search page