Chalice: Anastasia Lee, Andy Shyklo, Jack Blair, Jady Lei
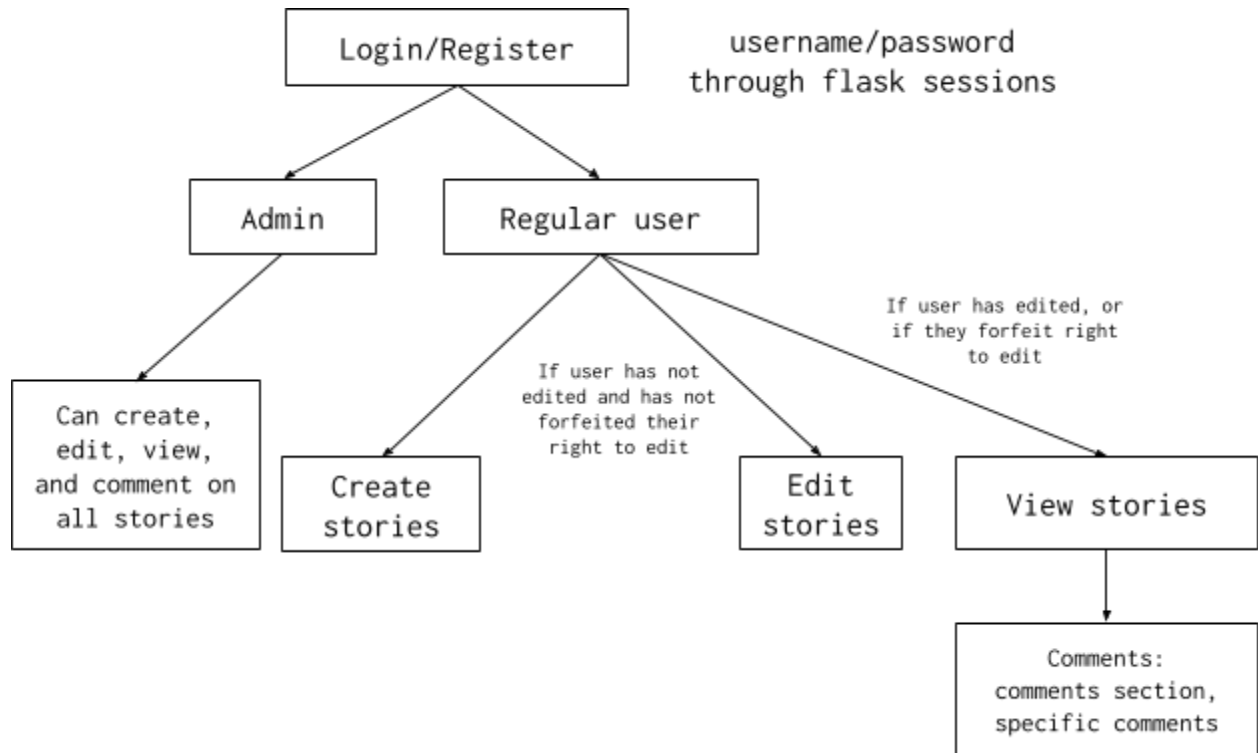SoftDev
P00
2024-10-29
TARGET SHIP DATE: 2024-11-04

Scenario One: Your team has been contracted to create a collaborative storytelling game/website, with the following features:
- Users will have to register to use the site.
- Logged-in users can either start a new story or add to an existing story.
- When adding to a story,
  - Users are shown only the latest update to the story, not the whole thing.
  - A user can then add some amount of text to the story.
    - Limit roughly to a sentence (can be edited by the creator).
- Once a user has added to a story, they cannot add to it again.
- When creating a new story,
  - Users get to start with any amount of text and give the story a title.
  - Logged in users will be able to read any story they have contributed to on their homepage (the landing page after login).
    - Potentially include the ability to view the story as plaintext, or with highlights that allow for the viewing of contributor and similar data. This could be one of several QOL features involving sorting and user interaction.

Program Components:
- Login/logout, register for new users. Differences between users will be embedded within user tables (access level).
  - Admin can view and edit everything
    - Useful for debugging & testing
    - Allows for moderation of potentially harmful or useless content
    - Moderators and Admins will be decided by website owners through things like interviews and trials, if the website grows
  - Regular users:
    - Can only view the most recent edit while editing
    - Can only view a whole story after they edit it
- Stories:
  - List of story titles and IDs on homepage
  - Ability to add stories
  - Ability to edit stories
  - Ability to view stories
    - Show edit history
- Extra Features:
  - Ability to comment on texts, with both a comment section and specific comments. Comments will also be equally limited as the chapters.
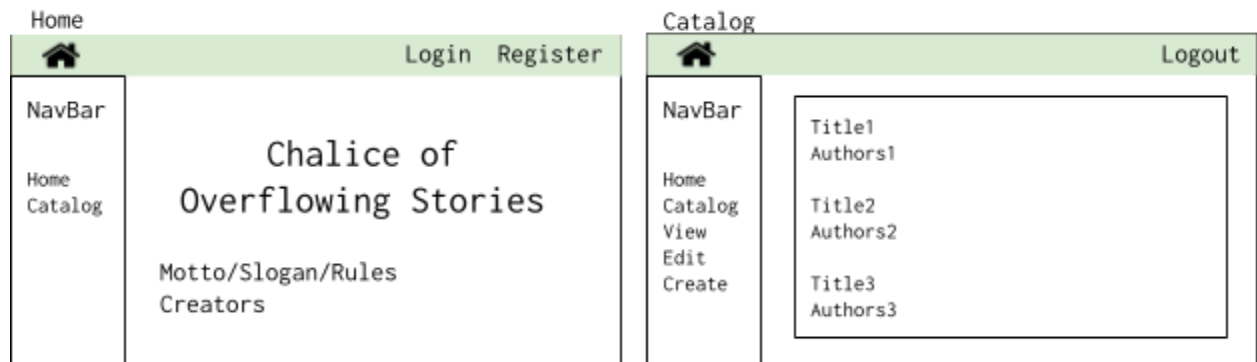
Component Map:

```
                    ┌──────────────────┐      username/password
                    │  Login/Register  │      through flask sessions
                    └──────────────────┘
                       ↙           ↘
              ┌──────────┐      ┌──────────────┐
              │  Admin   │      │ Regular user │
              └──────────┘      └──────────────┘
                  ↓            ↙      ↓        ↘
                            If user has not      If user has edited, or
                            edited and has not   if they forfeit right
                            forfeited their      to edit
                            right to edit
   ┌──────────────┐   ┌──────────┐   ┌──────────┐   ┌──────────────┐
   │ Can create,  │   │ Create   │   │  Edit    │   │ View stories │
   │ edit, view,  │   │ stories  │   │ stories  │   └──────────────┘
   │ and comment on│  └──────────┘   └──────────┘          ↓
   │ all stories  │                             ┌──────────────────┐
   └──────────────┘                             │ Comments:        │
                                                │ comments section,│
                                                │ specific comments│
                                                └──────────────────┘
```

Front-end (HTML, CSS, Displaying info):
- **Home page**
  - Site logo (links to home page) in top left corner
  - NavBar: links to home page and catalog
  - Login/register in top right corner
  - Once logged in:
    - Displays username and logout button in top right corner
    - NavBar expands to include links to view stories, edit stories, create stories
    - On main screen, displays list of contributions (most recent at the top)
      - These stories are fully viewable to the user upon selection, since they have previously edited them
- **Catalog**
  - List of all stories, displaying title and authors
  - A preview designed for non-registered users, who will be able to read, but not view fully or edit, the information presented
- **Login/Register (same from front-end perspective)**
  - Username, password, and submit button
- **View stories**
  - Similar to the catalog, except selecting a story redirects you to fully view it (title, authors, and text)

- ○ If the user has not previously edited the story they have selected, displays a pop-up asking whether they want to forfeit their right to edit (Yes/No buttons)
- **Edit stories**
  - ○ Last update, textbox, and submit button
- **Create stories**
  - ○ Title, start of story, and submit button

Home

⌂	Login Register

NavBar	
Home	Chalice of
Catalog	Overflowing Stories
	Motto/Slogan/Rules
	Creators

Catalog

⌂	Logout

NavBar	
	Title1
Home	Authors1
Catalog	
View	Title2
Edit	Authors2
Create	
	Title3
	Authors3

Login/Register

NavBar
Home
Catalog
View
Edit
Create

Username:

Password:

Submit

Home - Logged in

Logout

NavBar
Home
Catalog
View
Edit
Create

Welcome, user_name!

Contributions:
  Stories Created
    - story1
    - story2
  Stories Edited
    - story3
    - story4

View Story

Logout

NavBar
Home
Catalog
View
Edit
Create

Title
Authors: username1, username2

Lorem ipsum
Lorem ipsum
Lorem ipsum

View Story - Haven't edited yet

Logout

NavBar
Home
Catalog
View
Edit
Create

Title
Authors: use

Lorem ipsum
Gibberish

Do you
forfeit
right to
edit story?
yes / no

Edit Story

Logout

NavBar
Home
Catalog
View
Edit
Create

Title

Last Sentence:
        Lorem ipsum

Textbox for user

Submit

Create Story

Logout

NavBar
Home
Catalog
View
Edit
Create

Title:

Start of story:

Submit

Back-end (Flask Nav/Requests):
- Login information stored or retrieved via flask session request using POST. If the account doesn't exist, run code to ask if you want to make an account, otherwise retrieve login info from SQL database.
- Specific user data stored with SQL with user ID compared to posts/views, and depending on this status, some stories may be marked as locked (not contributed) or unlocked (contributed).
- Posts have version history, creation date, contributors, and other parameters that will be held in an existing, separate SQL database.
- All redirects to specific parts of the website, and their subpages, are routed via flask render_templates and specific website elements.
- Stories should be updated both locally and globally around the website as it is being changed, this could be done with update requests (needs more research).

Database Organization:
- What NEEDS to be stored? (EVERYTHING LISTED IS A TABLE):
    - login information,
        - Access level(admin or not)
        - Username
        - Password
        - Viewable stories
        - Editable stories
    - stories,
        - story + story_id(key)
            - "chapters" + chapter_id(key)
        - Chapter metadata
        - table of authors, relative to chapters
        - *Extra: comment, comment metadata, add comment, comment on comments*
- Actions:
    - Account management:
        - User logs in
            - Check username in login table and authenticate user.
        - User registers new account
            - Adds new username and password to login table, session logged in.
    - User adds to a story
        - Check if user can add to story
            - Select most recent update to display
            - Make sure that updates are synchronized
        - Take request and enter it into the story
        - Store contribution metadata
        - Add story to user's viewable
    - User creates a story
        - Create entry in stories with title
            - Most stories will remain unmoderated, but you can flag some posts for inappropriate content.
        - Store contribution + its metadata
        - Add story to user's viewable
        - Adds story to all users' editable
    - User views a story
        - Check if viewer can view the story
            - If not prompt viewer to forfeit right to edit or just edit the story
                - Add story to user's viewable
        - Select all story contributions and display to viewer

User Database

Username	Password	Access	Viewable	Editable
admin	******	Admin	Full list	Full list
user_name	******	Normal		

Story ID	Story name
1	abc

Story ID	Story name
2	def

Story Database

Story ID	Story name	Authors	Chapters	comments for full story	comments for each chapter
1	abc	[table]	[table]		
2	def				

Order	Author
1	username1
2	username2

ID	Content	Contributor	Date
1	"d"	username1	10/24/2024 12:52 A.M.
2	"e"	username2	10/24/2024 12:52 A.M.
3	"f"	username3	10/24/2024 12:53 A.M.

Site Map:
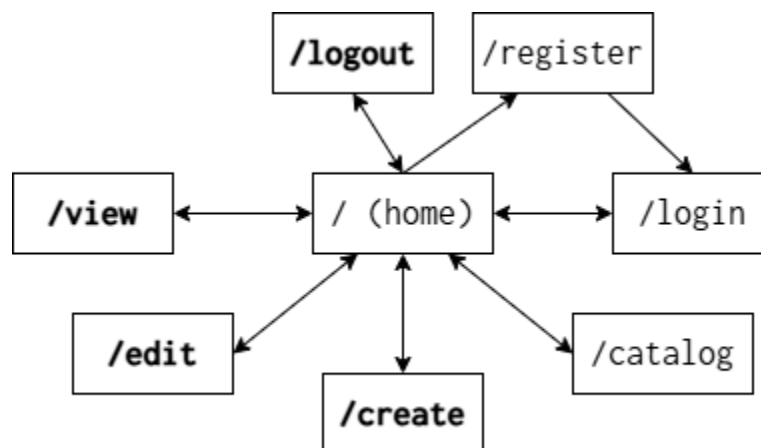
- Users can always reach the home page
- Once logged in, users can always log out
- **Bold** pages can only be accessed once logged in
- All edit and view pages are rendered by a template, with arguments from the databases

Task Assignments:
Anastasia: PM + Flask person 1
Andy: SQL Database + HTML/CSS
Jack: Flask Person 2
Jady: SQL Database + HTML/CSS