

Tavern Keeper

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Overview

Tavern Keeper is a world-building web application designed for game masters and creators to organize and develop their fictional worlds. The platform enables users to create, edit, and manage various aspects of their worlds, including maps, characters, organizations, and locations. The application's interfaces are built with user friendliness and ease of access in mind, and it aims to be an introductory tool to an inexperienced user in the realm of world building.

Solving Complexity in World-Building Apps

This solves the problem of other world building applications, such as World Anvil, being too complex. The websites are not user friendly, and you have to spend hours upon hours of working on the website to get a feeling for where things are. Through Tavern Keeper, users should be able to get a feel for how the website is structured almost immediately with our simple, yet creative designs.

Technology

For our tech stack, we plan to use

- ❑ React: A Javascript library for building the frontend
- ❑ Node.js & Express.js: a Javascript runtime and framework to handle backend functionality
- ❑ Vercel: A cloud platform for hosting our frontend and backend
- ❑ PostgreSQL: A relational database to efficiently manage data relationships.

Home page and Header

- ❑ We plan to design a visually appealing homepage that clearly communicates the purpose of our website, ensuring users can easily understand its functionality.
- ❑ The home page will provide an overview of what users can accomplish, offering a seamless introduction to our platform.
- ❑ Additionally, we will implement a well-structured header that doubles as a navigation bar. This header will be fully responsive, adapting smoothly to mobile devices by transforming into a convenient hamburger menu for effortless navigation.

Sign In

- ❑ Users will be instructed to sign in using their Google email.
- ❑ We will implement Google's OAuth API to handle authentication, ensuring a higher level of security than a custom-built solution.
- ❑ Upon signing in, users will be automatically redirected to the homepage, where they can navigate to other sections of the site.

World Page

- ❑ Users must sign in to access the World page.
- ❑ This page will feature a grid layout displaying all the world's a user has created, along with an option to add a new world.
- ❑ Upon clicking the “New World” button, users will be navigated to a popup, in which they will enter key information about their world such as world name, a picture of their world, and the genre of the world.

World Preview

- ❑ The World Preview page is meant to be a peek at what the users world would look like if it were on the Community Board
- ❑ Users can preview their changes to see how it will look stylistically
- ❑ The World Preview will contain labels at the top of the page for:
 - ❑ World Title
 - ❑ World Description
- ❑ World data will be separated by category (Map, Character, Location, etc.) by headers all organized in different sections on the page
- ❑ Data will be interactive but NOT editable on this page
 - ❑ Each bit of data will be a widget where upon clicking, a more detailed view pops up, revealing more about the entry

World Editor – Main Content

- ❑ The World Editor is the hub where users will be able to enter their information about their world and configure general aspects about their world
- ❑ Here they will be able to edit:
 - ❑ World Name
 - ❑ World Description
- ❑ Users will also be enabled to toggle:
 - ❑ World Genre
 - ❑ Presets - Fantasy, Sci-Fi, Romance, etc.
 - ❑ Public or Private status of world
 - ❑ (private worlds are not displayed on the community board)
 - ❑ (while public worlds are displayed there automatically)

World Editor – Sidebar

- ❑ The World Editor will also contain a sidebar consisting of interactive widgets
- ❑ Each icon will be a button that will send the user to the respective World Editor Sub-Page to enter data into that specific category
- ❑ World Editor Sidebar buttons:
 - ❑ Home icon - links back to the main World Editor page mentioned prior
 - ❑ Map icon - links to the Map Page
 - ❑ Character icon - links to the Character Page
 - ❑ Organization icon - links to the Organization Page
 - ❑ Location icon - links to the Location Page
 - ❑ Timeline icon - links to the Timeline Page
 - ❑ Misc icon - links to the Miscellaneous Page
 - ❑ Submit icon - whenever this is clicked, this icon submits entered user information on a sub-page and updates the database

World Editor Sub-Pages

- ❑ Each Sub-Page will contain the Sidebar mentioned previously, linking every page to each other as well as the main World Editor page
- ❑ Sub-Pages will contain a button at the top of the page to add new data in that respective category (map, character, etc.)
- ❑ Sub-Pages will list every previously entered entry for that category
 - ❑ Each of which will be editable (more on that later)
 - ❑ Each entry will be an icon with a name label under it

World Editor Sub-Pages – Map Page

- ❑ When adding a new Map, a popup will surface containing:
 - ❑ A textfield for the user to enter the name of the map they are adding
 - ❑ An upload button which opens file explorer, allowing the user to upload their map from their desktop
 - ❑ PDF, PNG, and JPEG
- ❑ Each previously uploaded map will be visible under the add button and will be editable and interactable allowing for:
 - ❑ Map name to be changed
 - ❑ Different file to be uploaded
 - ❑ Viewing map in detail
 - ❑ Place, View, Edit, and Delete pins
 - ❑ Pins will be added as Location entries in the database (more on that later)
 - ❑ Zoom in and zoom out buttons - zoom in by 25% per click

World Editor Sub-Pages – Location Page

- ❑ Location page operates exactly as the Organization page does
 - ❑ Adding a location prompts user to enter name and description
 - ❑ Editable by the user - both name and description
- ❑ When adding pins on maps, those also show up here as entries automatically

World Editor Sub-Pages – Character Page

- ❑ Add Character Popup contains:
 - ❑ Textfield to enter the character name
 - ❑ Textfield to enter description of the character
 - ❑ Optional upload button to choose generic preset character portrait PNGs
- ❑ Editable character icons:
 - ❑ Edit character name
 - ❑ Edit character description
 - ❑ Add, remove, or swap character portrait

World Editor Sub-Pages – Organization Page

- ❑ Add Organization Popup contains:
 - ❑ Textfield to add name of organization
 - ❑ Textfield to add description of organization
- ❑ Editable Organization Icons:
 - ❑ Edit Organization Name
 - ❑ Edit Organization Description

World Editor Sub-Pages – Timeline Page

- ❑ Users will be able to create and fill a timeline with events
- ❑ Add Event popup contains:
 - ❑ Textfield to enter name of Event
 - ❑ Textfield to enter description of Event
 - ❑ Start date combobox
 - ❑ End date combobox
- ❑ Once an event is submitted, all events in the timeline will be sorted in chronological order
- ❑ Events will be editable via buttons
 - ❑ Name, description, and date are all editable
 - ❑ After an edit, if a date is changed, all events will be re-sorted

World Editor Sub-Pages – Miscellaneous

- ❑ Similarly to previous sub-pages, when adding a miscellaneous entry, textfields for the name and description will popup
- ❑ This is mainly for data that doesn't fit in the aforementioned categories
- ❑ All Miscellaneous entries will be editable
 - ❑ Name
 - ❑ Description

Profile Page

- ❑ Upon loading the profile page, users will be prompted to select a profile picture from a pool of predetermined images on the website
- ❑ Users will also be able to add a profile description to allow others to know anything important about themselves

Community Page

- ❑ Users will be able to view other world's created by users
- ❑ Each world will display the title, picture, author, genre, and date created
- ❑ A filter option will be available to narrow worlds by genre
- ❑ Users will be able to search by author or world name to narrow specific results of public worlds.
- ❑ Users will be presented a detailed interface of another user's world when pressed to view
- ❑ The interface will include world characters, locations of interest, and major events
- ❑ Users will have the ability to like & dislike other user's worlds

Timeline

- ❑ Roles:
 - ❑ Frontend - Silas & Evan
 - ❑ Backend - Kaleb & Kenny
- ❑ 2/10 - 2/21
 - ❑ Frontend: Create skeleton UI
 - ❑ Backend: Outline and implement database structure
- ❑ 2/24 - 3/7
 - ❑ Frontend: integrate Google sign-in and mobile compatibility
 - ❑ Backend: Begin developing backend functionality for integrating with the frontend
- ❑ 3/10 - 3/28
 - ❑ Frontend: Adjust frontend implementation to integrate new backend functionality
 - ❑ Backend: Continue developing backend functionality

Timeline (cont.)

- ❑ 3/31 - 4/11
 - ❑ Everyone: Tie up loose ends and ensure that the server is functioning properly
- ❑ 4/14 - 4/25
 - ❑ Everyone: Testing and bug fixing
- ❑ 4/28 - 5/2
 - ❑ Everyone: Create, practice, and give final presentation

Interesting/Difficult features

❑ Pagination

- ❑ We are planning on implementing pagination, allowing users to seamlessly navigate through multiple pages of worlds. This feature presents a significant challenge, as it requires efficiently managing our data while ensuring accurate and consistent display across all pages.

❑ Map pins

- ❑ The difficulty of the map pin feature is keeping track of the position of each pin
- ❑ Another challenge is keeping track of the extra information that comes with each pin
 - ❑ Description
 - ❑ Name
- ❑ Zoom in and zoom out - adjusting pins depending on zoom %

❑ Public world page + filtering system

- ❑ The interesting thing about this feature is the social aspect of being able to upload a world to be displayed publicly
- ❑ The difficulty from this feature comes through the filtering aspect of searching the community board
 - ❑ Efficiency + Potential scalability issues