

Heuristic Evaluation

Assignment 2

Keweenaw Time Traveler Story Query Tool

Team 4: Konnected Keweenaw

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Description of Undergrad Design

This app is a web application that aims to bring *user submitted history* to the public and present it in an organized way. Apart from retrieving the information/data from the user quickly and accurately, the main goal is that the user should be subjected to gain more interest into the site using recommended stories or pictures based on their searches since the more time a user spends on the site, the more stories are shared. The Undergrad team will be updating the search function to interact with the existing and operating database to bring better, more relevant search results to a user. Furthermore, an emphasis on the scalability of the database and querying function is required by the scientists. The submitted data from users would be gathered by the database. Scientists and researchers can view such collected data and extract the information from this database.

Identification of UI Domain

This app is a website and optimized for mobile viewing. It allows users to submit experiences or documents as their stories and link this information to a specific time period and location in the Keweenaw, and then sends such data to the database. According to the information provided by users, it gives recommended stories to a user to give a great reading experience of stories. This UI also offers an entrance to scientists. Through it, scientists would view the data gathering by the database, and analyze these data for research and improve the user experience.

Heuristic Usability Principles

1. Visibility of System status

As it's a web application which should give the user a great reading experience or share their own story, Visibility is one of the most important principles. The navigation towards creating a story or searching any story should be accurately visible and the user shouldn't face any difficulty in searching for the story that he/she desires to read.

2. Robustness and Error Prevention

The application should be robust as their user will be existing and new as well. So, when the new user is trying to search for any story the system should not crash due to error in data entering operations or anything.

3. Flexibility and Efficiency of Use

The application should be quick and easy for the experienced and inexperienced users. It should be flexible enough for specifically a new user to search his desired story accurately. It might be improved with advanced search options.

4. Consistency and Standards

The application should give clear and consistent results especially towards the left side of the screen when the search is done. It should have proper indentation of the stories that

are displayed in order not to confuse the user. Pink dots on the map should serve its purpose properly to the user rather than confusing him/her, it would be good and clear if they are replaced with any other feature like map sign.

5. Adequate Information

The user should be provided with adequate instructions and provide simple description about what kind of stories can she/he search for, because if the user is new and wants to search for something which is not relevant to Keweenaw without knowing that this application is specifically about Keweenaw.

6. Aesthetic and minimalist design

Every information that is provided in the website should be relevant information and diminished with the relative visibility. Apart from working on advanced search query being our primary scope, we can also have a better UI to attract the user more to spend more time on stories.

7. Help and documentation

Help button on the top is provided with proper documentation of *Common Map Abbreviations* and *Historical Sources* which can give user a better understanding when searching for a story.

8. Feedback

The application has *submit feedback* button which brings out the concerns related to the app from the user. These suggestions might as well include the feedback on search results which might help in improving the application.

Usability Problems generated from the Heuristic Evaluation

- When the user is searching for a story, the results window that pops up is shallow and vague. The user might feel uncomfortable in visiting the website next time due to this reason.
- Pink dots on the map are not corresponded and are not relevant to the searches that are made.
- UI design for the search results in inconsistent.
- Multiple pink dots on a single building clutters the map.
- Format of search results are not clear

- Whenever a search is made, that concerned search term is disappeared after the search. In many cases, user might forget and check what did he exactly search for, this problem stands to be a concern for the user.
- Search results is capped at 200 entries with a slide bar, with no next page option. Next page option would be more efficient.

Identification of critical usability concern

- The application should be scalable for larger amounts of stories/data to be stored.
- Whenever a search is made, it results with story markers on the map. When the map is zoomed out, huge group of story markers are present in a single location which makes the visibility a bit clumsy. Hence, the story markers should be grouped when zoomed out of the map.
- When a search is made, pink dots on the right side are not corresponded to search results. Hence, search results should correspond to the dots shown on map.
- When a user is searching for a story, the categories in the search mode (addresses, people, places, stories) the search result should be made default for all categories.
- Search results should adopt a proper pagination which divides the search results into discrete sections.

Illustration of critical usability concerns with a short story

Barry Allen is a high school student who is very much interested in surfing the internet about the stories of historic moments. When he came across the term Keweenaw Time Traveler he was excited and wanted to search something interesting. He thought of searching in the people's category to know the stories about the people with last name "Smith". He got many search results which included every category in the search mode such as (place, year, ethnicity, occupation) but not every category was relevant with each other which confused him a bit. When he saw the pink dots on the map, he thought that those were the relevant dots of places corresponded with the stories in the search results, but when he moved the cursor to the dot, it was not relevant. He got confused and wanted to know the exact purpose of the dots. On the other note, when he was checking for the search results, it was a bit annoying for him to keep sliding down unless he sees something interesting. He thought it would have been better if he had next page option instead of sliding bar. Thus, the overall feedback from Barry was that the search options and user interface of map should be improved for the better user experience.