

Report of the Design Research

1) **Title:** Locality

2) **Team**

Jack Adam interviewed members of Southern Brooklyn Scrapbook and had the original idea for our project. He also rendered the storyboards and some of the designs.

Itai Almor interviewed the Yale librarian, took notes for the interviews with Southern Brooklyn Scrapbook members, and drew some of the designs.

Jessica Hong organized and conducted the interview with an anthropology student.

Shannon Yasuda created and organized a survey about young people's relationships to their communities. She also captioned the story boards.

We all brainstormed ideas, features and tasks together and collaborated on write-ups.

3) **Problem & Solution**

Problem: We hope to solve the problem of community engagement in areas that may be experiencing rapid change in demographics. New residents to a neighborhood often don't have the means to connect with lifetime residents of that same neighborhood. Visual histories of specific areas or neighborhoods are tough to find, and so it can be difficult to track the changes in land usage, ownership, and density without access to cultural institutions such as libraries and historical centers. Thus, stories, memories, and artifacts are often lost upon one's passing, and history can disappear without a trace.

Our goal is historical preservation and appreciation. We hope to give newcomers and old-timers the resources and space to connect in an effort to eliminate their divide. We also hope to maintain a non-institutional record of community changes driven by small, individual contributions, and that this system creates agency among various communities.

Solution: We have designed a system which allows users to upload and share time-period and location-specific media, as well as hold discussions surrounding this media. Users are able to search for posts with time and location parameters and can see posts visualized on a map. Users also have individual profiles and can connect with one another.

4) **Research Goals, Stakeholders & Participants**

We conducted two interviews with members of "Southern Brooklyn Scrapbook". These were kept informal in the interest of being accessible and casual and thereby prompting full and honest answers. We were conscious of our position as outsiders as we sought to understand their very community-oriented experiences within this Facebook group. The two interviewed participants are middle-aged men. One is the administrator of the group, and the other is a frequent contributor. Both were interviewed electronically, the former on Skype and the latter via email. We lastly collected 44 Facebook comments from members of the group. These varied greatly in length and were made in response to a post we made asking them to reflect on their experiences in the Scrapbook community.

We also interviewed a Yale librarian. This interview was conducted in person at the Yale British Art Center reference library, and its purpose was to understand the needs and practices of researchers searching databases and library collections. The interview was followed by a contextual inquiry in which the librarian “taught” us how he uses database search functions and how the Yale library organizes its materials.

We spoke with an undergraduate student in the Anthropology department who warned us of the difficulties anthropologists often encounter when working with members of a specific community. She also noted the potential benefits of having consolidated information, and discussed the lack of standardized information across different communities.

We lastly prepared a survey and distributed it to Yale students. This anonymous research method allowed us to hear honest responses from young people, one of our principal target user groups, about their current and desired relationships with their communities.

5) Research Results & Themes

Themes:

- People appreciate geographic *specificity* in cultural history.
- People connect a huge part of their identity to their communities.
- The information we are facilitating people to collect is a type of *social history* built through communities.
- People want to be able to reconnect with “the entities you interact with on a daily basis” and the “people with whom you crossed paths.”
- Facebook allows for discussions groups through which *informal discussions* on community subjects can be held and documented, if only casually.
- Facebook allows *a place* for historical and cultural information to reside or be collected.
- People love to *learn* information about their neighborhoods.
- Scrapbook: “*pictures* often have the power to more instantaneously communicate the substance of a given memory.”
- The Internet provides a layer of anonymity that encourages people to chat.
- It is important to be able to locate materials within their context, allowing a practical “zooming out”, say from a photo of a pizza shop, to the street it was on, to the neighborhood, to the city, to the year, with information at every level providing a framing for that shop.
- There are standards for the cataloguing of research materials which we must consider. For example, museums use the MARC Bibliographic Standards.
- People are more interested in meeting community members who they perceive to be useful or interesting, for example, organizers, artists and people who can teach them about the history of their neighborhood.
- People are interested gaining *deeper relationships* with the people that they already know but only at surface level.

Problems:

- Users of Southern Brooklyn Scrapbook find that there is currently no systematic effort to preserve the niche aspects of history that their page is centered on.
- There is currently no way to find history about individual stores, for example, on the block you grew up on; there is no way to preserve memories of certain places, things, people or cultural traditions.
- It is difficult for researchers to find community members who are willing to share information about their lives.
- Community members don’t always want their information to be shared with “outsiders.” How can we design an interface that mitigates the formation of toxic “in” and “out” group dynamics?

- Community-wide groups can become platforms for discrimination and generally suffer from unequal representation of the community's groups. How can a design incorporate effective moderation and oversight?
- Searching for specific information in archives almost always requires difficult textual searches. Unskilled use often yields either too many or too few results, which leads to frustration and abandonment of the search.
- Searching for information from previous posts in Facebook groups like Southern Brooklyn Scrapbook requires tedious textual searches for keywords.
- There is no way to use an image to search for similar images.
- How could a design we make incorporate and unify existing archives, collections and repositories of materials?
- Existing archives most often have their various collections separated, not allowing a single search to bring up results from across them all (Example collections might be: "The Personal Documents of Rand Omman", "20th Century Parisian Photos from the Example Museum's Collection", or "Early Propaganda Posters from PlaceLand's Third Republic.")
- How are search results sorted? Different databases have different criteria and algorithms for determining "relevance."

6) **Task Analysis.** Answers to the task analysis questions. The answers should be updated based on the understanding of the problem and design at this stage of the process.

- Who is going to use the design?
 - Older people who want to **reconnect** to communities from their youth
 - Young people who want to **connect** to previous residents of their neighborhoods
 - People of all ages who want to **engage** with their community as it *currently* exists and expands
 - Academics interested in **researching** urban studies, anthropology, history, etc.
 - People who want to **share** their knowledge of and history with a place
 - Locals or tourists who want to **learn** about the history of the establishments in their vicinity
- What tasks do they now perform?
 - Members of Facebook groups such as "Southern Brooklyn Scrapbook" currently **upload, search** (textually), **comment** on, "**react**" to and **browse** photos and stories on the page. They "tag" their photos with locations and names. They also **view profiles** of neighbors and **connect with them individually** via direct messages.
 - Anthropology majors and other researchers currently **search database** collections for primary sources by using textual searches with boolean operators, **analyzing subject tags** and using them to **refine a search**. They ask also **contact individuals** and groups for research purposes and **obtain consent** to conduct ethnographies and/or use their materials.
- What tasks are desired?
 - Researchers:
 - They want an easier method of connecting with community members who are willing to share about their lives and experiences for research
 - They want a central source of information with the records of and information about a community
 - They want to be able to use search methods other than simply textual ones, for example using images to fetch other images of similar topics.
 - Others:
 - They want to be able to "go" to a place to learn about the history of individual places and people. They want geography-specific information and time period-specific information.

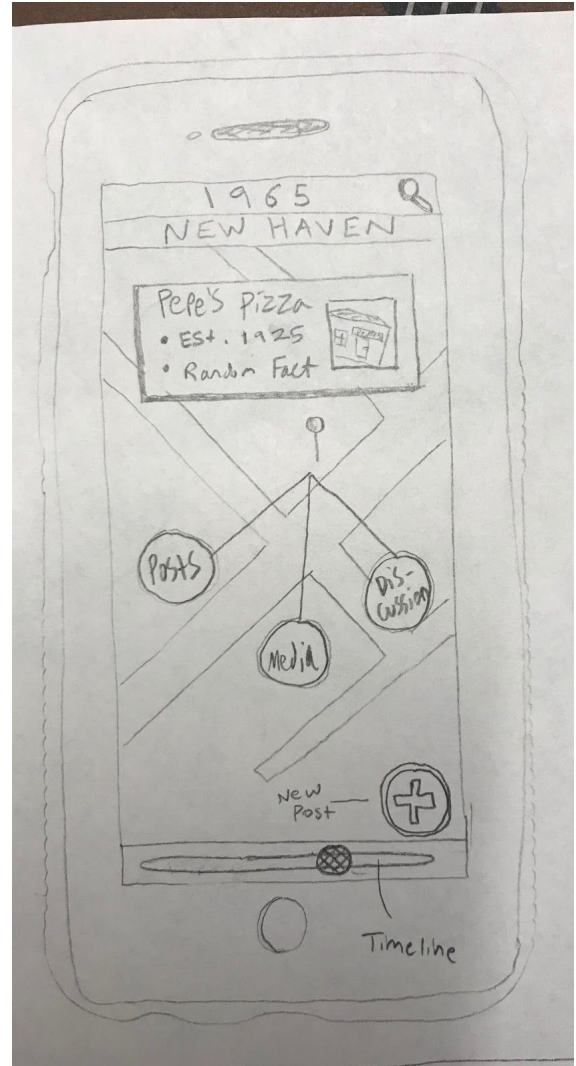
- They want to connect with more people, find out about more individuals and have discussions about their communities
 - They want to be able to connect with people from their past. This includes people they were previously in communities with, or people they have connections to through activities, groups, etc.
- How are the tasks learned?
 - In the case of Facebook, tasks capitalize on *conventions* of social media and web-page interaction. If users do not already possess these skills then they are able to experiment with the clearly-labeled interface until they quickly achieve their goals. There is also a “Help Center” to offer interface assistance when necessary.
 - In the case of research using database and library searching, the tasks still reference convention (for example, using a Search Bar), but they require a finer skill set. Skills like Boolean Operators must be learned from a specialist or a specific online tutorial.
 - Social tasks, such as messaging, posting and interacting in a virtual community, each have associated norms, which are learned through experience, observation and trial and error.
- Where are the tasks performed?
 - Facebook, other web applications and services, mobile phone applications, research and historical centers, libraries. Specifically in certain groups pertaining to relevant communities, as well as in departments and archives.
 - On a digital system, users will have profiles indicating basic information about themselves and their histories.
 - On a map which allows for the logical visualization of interactive data.
- What other tools does the person have?
 - All the users can find general information about a community online or at a local library. Libraries will likely also have older records, which can be used as a primary resource for historical data. Researchers will have more access to academic journals and other experts in urban studies or in the community specifically.
 - To connect with other people, there are Facebook groups like the one described above, “Southern Brooklyn Scrapbook” that can be used to network. However, these groups are limited to those who have computer/Internet access, and to those with Facebook accounts. They also do not guarantee that the people who are a part of the group are willing to meet in person.
- How do people communicate with each other?
 - At a library or similar place, people communicate face-to-face.
 - Online, people communicate in comment sections and in private messages. There is also indirect communication through the sharing of memories and stories.
- How often are the tasks performed?
 - Connecting to other community members can happen at any time. They may occur more frequently during reunions or times of reminiscence. Researchers will perform field research after preliminary background studies about a community.
- What are the time constraints on the tasks?
 - For laymen or community members, there isn’t much of a time constraint on the tasks. For researchers, there may be more pressure to complete tasks before a paper or publication deadline. However, all of these are fairly flexible.
- What happens when things go wrong?
 - If individuals are unable to find material relevant to their topic of interest, they can look in other places, or turn to individual people who may have specific knowledge.

- Old materials may need to be restored, digitized, or cleaned due to wear over time. They may also be forced to rely on general and unverified information from Internet sources like Wikipedia.

7) Proposed Design Sketches

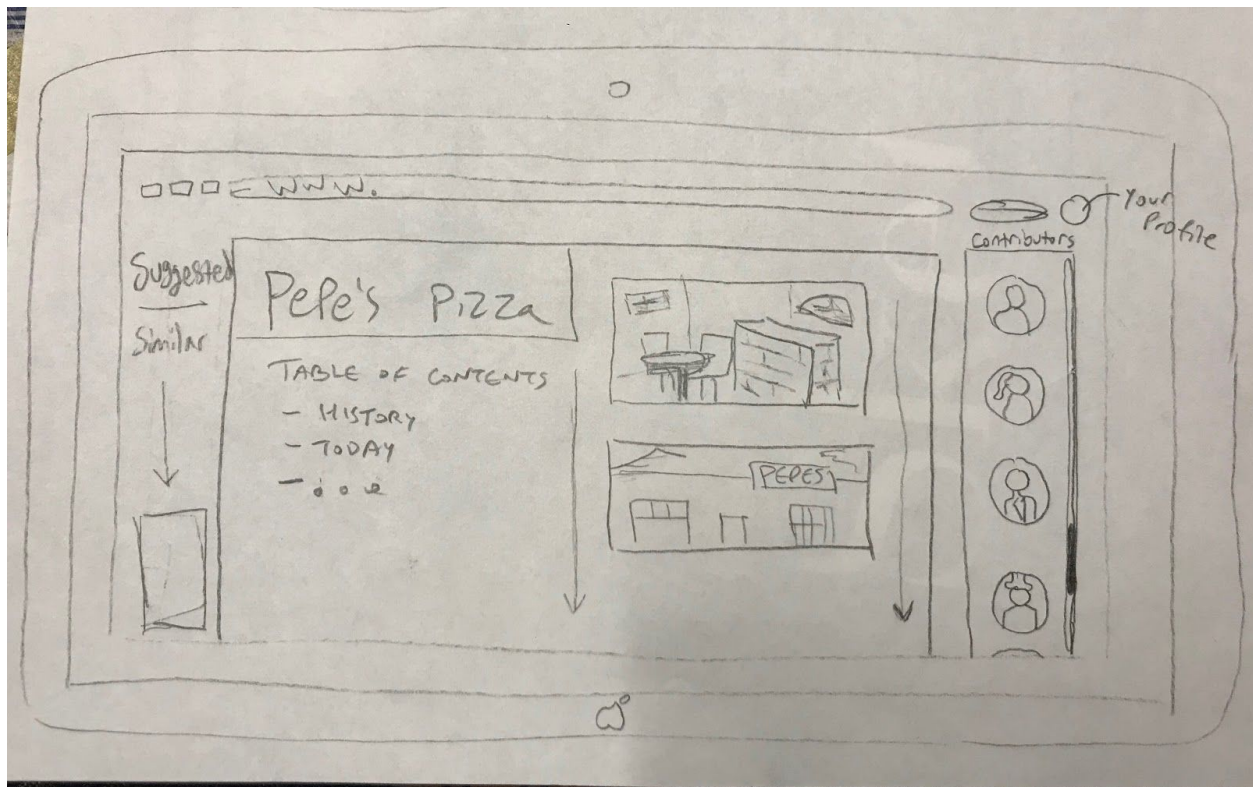
1. App with a Map

- Overview: A phone application that provides a user with a map interface, showing the local area. The map is accompanied by a timeline which can be slid to alter the map's content chronologically. Users can post media to a place and time, or view media that other users have posted.
- Sketch:
- Tasks:
 - Sharing (1): Users, primarily older individuals interested in discussing their histories, upload and share photos of and information about places
 - Searching (2): Users, such as librarians and researchers can search for different places and times
 - Learning about the past (4): Users, such as younger individuals and academics, can use the timeline feature to learn about the past
 - Learning about the present (5): Also using the timeline feature in the present, older users curious about the current state of their neighborhood can see the state of the "map" as it currently is



2. Local-Wiki

- Overview: A primarily desktop-focused webpage design similar to wikipedia or ancestry.com. This focuses more on records and files which are organized into articles about points of interest. Articles can be written and edited by the community. Users have profiles and can form social messaging groups out of the people who have contributed to a given page. Article pages link to related pages.
- Sketch:

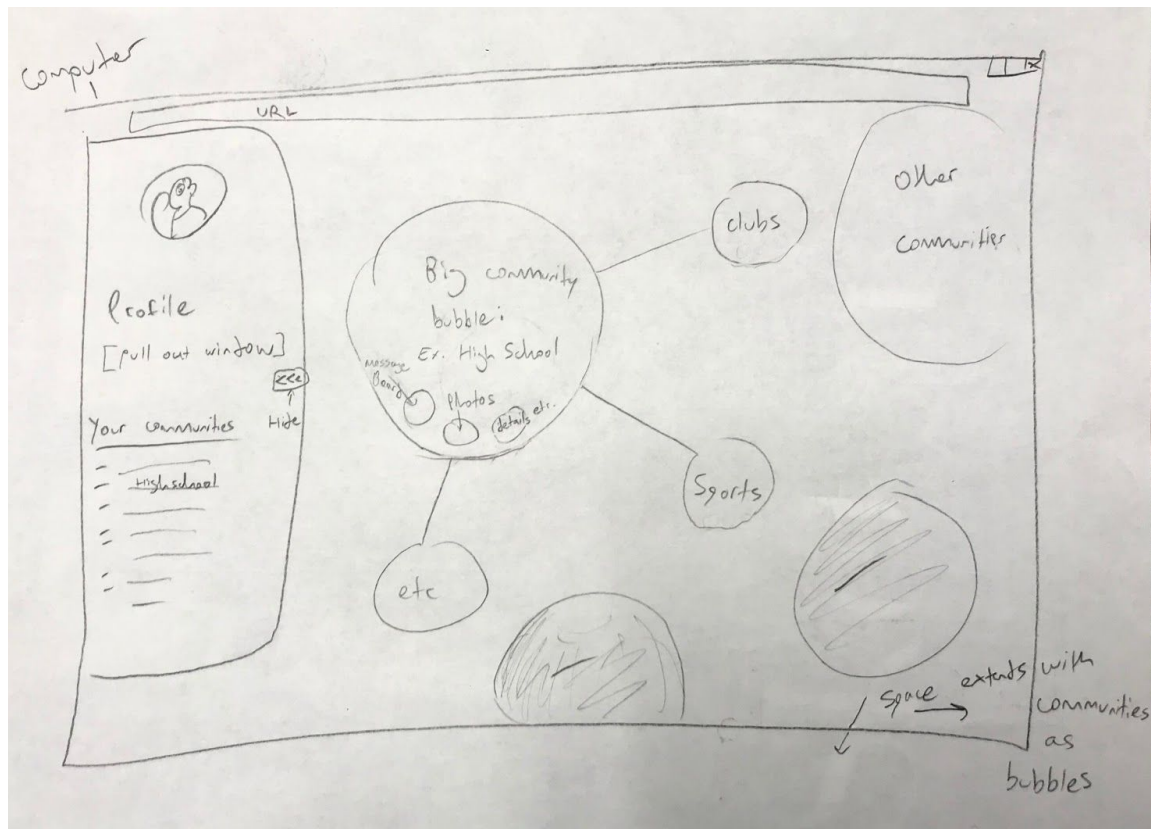


c. Tasks:

- i. Sharing (1): Older locals can contribute to pages about their neighborhoods/communities
- ii. Searching (2): Interested visitors and newcomers can search for information about specific places/events/people
- iii. Learning about the past (3): Enthusiasts can read information about places' histories
- iv. Learning about the present (4): Concerned locals of any age can read information about current states of places
- v. Connecting as an outsider (6): Researchers can see who has contributed to a page through their profiles and connect with them

3. Profiles and Community Bubbles

- a. Overview: Users create a profile and list the communities that they are interested in connecting with. These may be current ones, such as their present neighborhood, or past ones, such as a high-school sports team. Communities are represented by a "bubble" scheme interface. People can connect individually to one another's profiles based on overlapping communities, and each community is automatically outfitted with a group message board.
- b. Sketch:



c. Tasks

- i. Sharing(1): Members of communities can post their photos/information to their community bubbles
- ii. Reminiscing(3): Older individuals in the same bubble can discuss shared experiences
- iii. Learning about the present(4): Older people can connect with people currently living in their communities and request/look at information about its current state
- iv. Learning about the past(3): Younger people can look at posts and converse with people who previously lived in a certain place
- v. Connecting with outsiders(6): Outsiders, such as researchers and librarians, can request access to a community bubble and ask members about their experiences/learn from them

8) Chosen Design & Tasks

Our chosen design is a combination of designs 1 & 2 as described above. The system centers around a map interface which shows the user points of interest where other users have shared media specific to those certain locations. From the map, users can post, share relevant media of their own, and discuss the things that have already been posted. There is an advanced search engine which, assuming users have tagged their posts with relevant location, time period, and keyword tags, can be used to efficiently and precisely locate desired media.

The two tasks we chose to further pursue were **searching** and **sharing**. These are the tasks that people, primarily older individuals and academics, most wanted out of an application based on our surveys because it allowed them to, respectively share their histories and better conduct research

9) Written Scenarios

Searching:

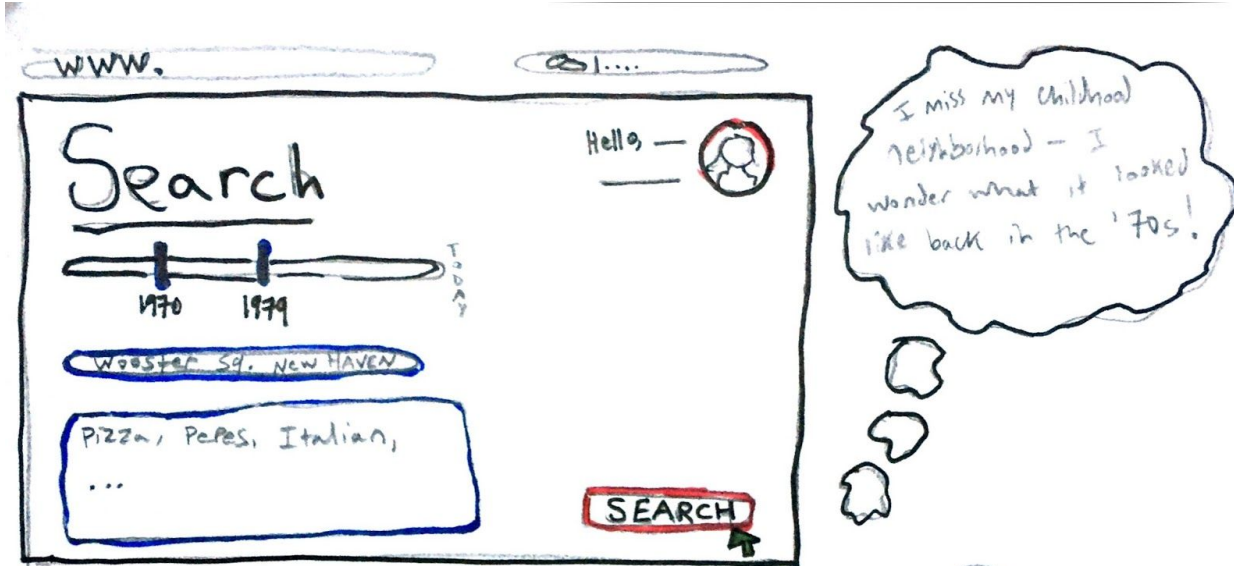
1. Lucy is an older woman who wants to search for information about a neighborhood restaurant in the 70s. On the search page of our website, she would drag a bar to indicate the time period and type in the location and keywords of interest before clicking search.
2. A map of the neighborhood is displayed with plots related to possible results (places) of interest. Above, she can still change the time and place if desired.
3. Lucy clicks the tab on the side to see a list of each result. Lucy can either click on the list item or directly on the map location to bring up a page about the location at the specified time.
4. Either way, a brief overview about the location as well as a list of posts from about the area is displayed.

Sharing:

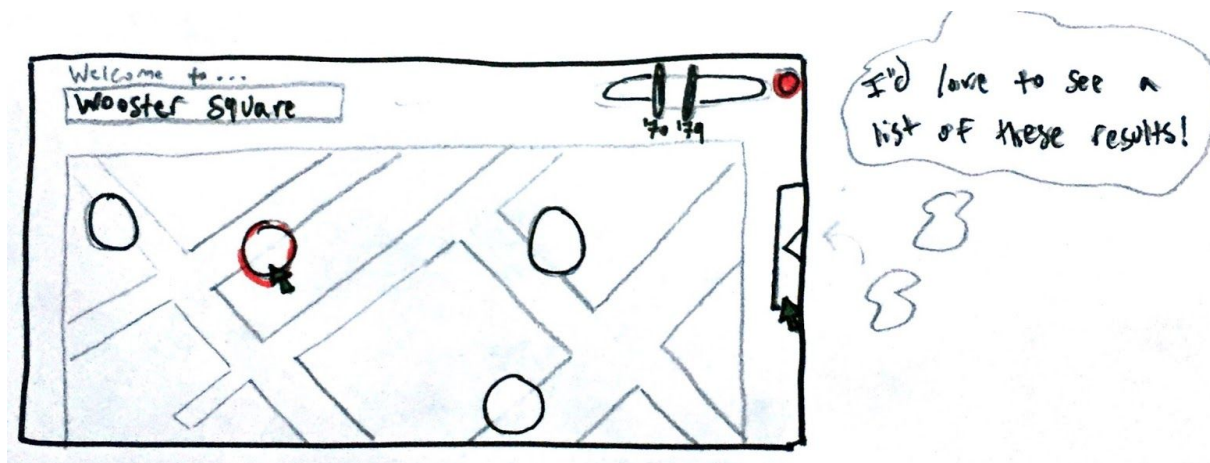
1. Lucy starts at a page about a certain place, and clicks on the “add post” button.
2. Lucy is brought to a page where they can adjust relevant time period and place if desired, and add keywords about the post so it is easier to search for.
3. Lucy can click “add media” which brings up a typical upload screen from her computer. She uploads two photos. After completing her post, Lucy clicks the post button.
4. The post appears in the feed for the page, colored to indicate that it was posted by Lucy.

10) Storyboards of the Design. Updated storyboards of the design in reference to the scenarios.

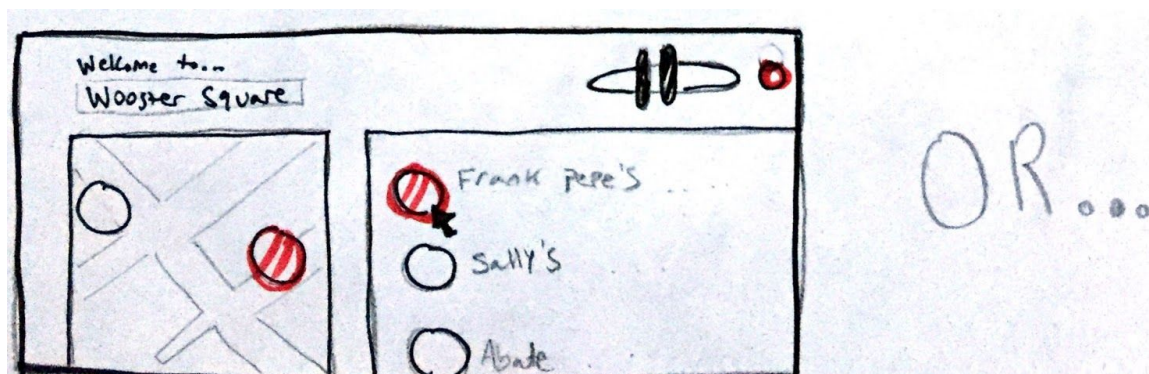
Searching



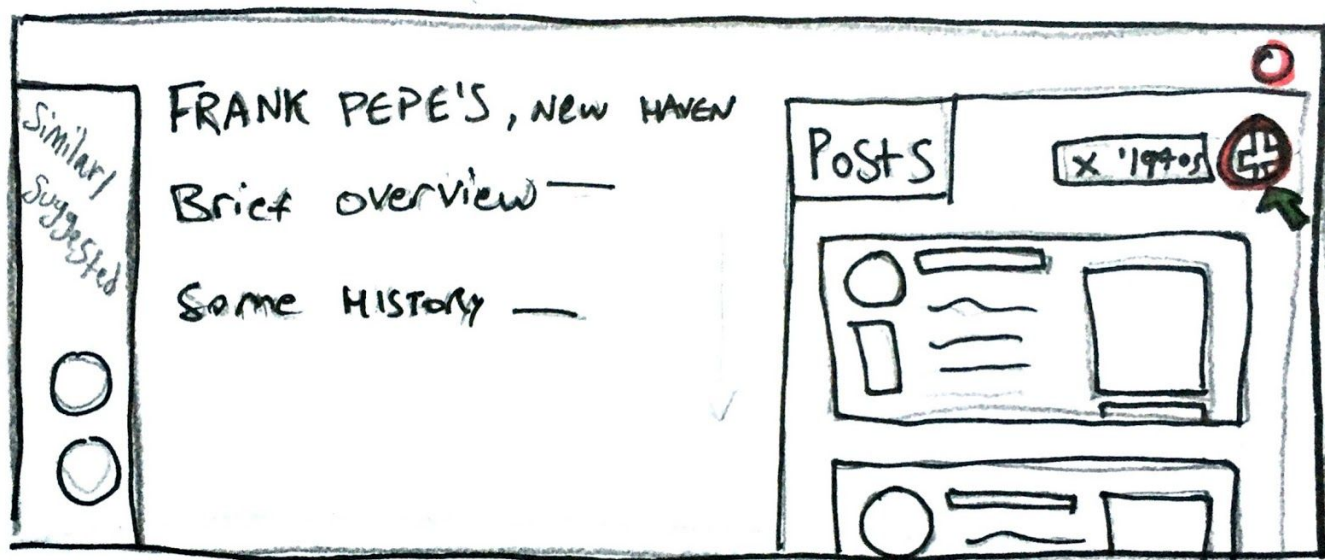
Lucy is an older woman who wants to search for information about a neighborhood restaurant in the 70s. On the search page of our website, she would drag a bar to indicate the time period and type in the location and keywords of interest before clicking search.



A map of the neighborhood is displayed with plots related to possible results (places) of interest. Above, she can still change the time and place if desired.

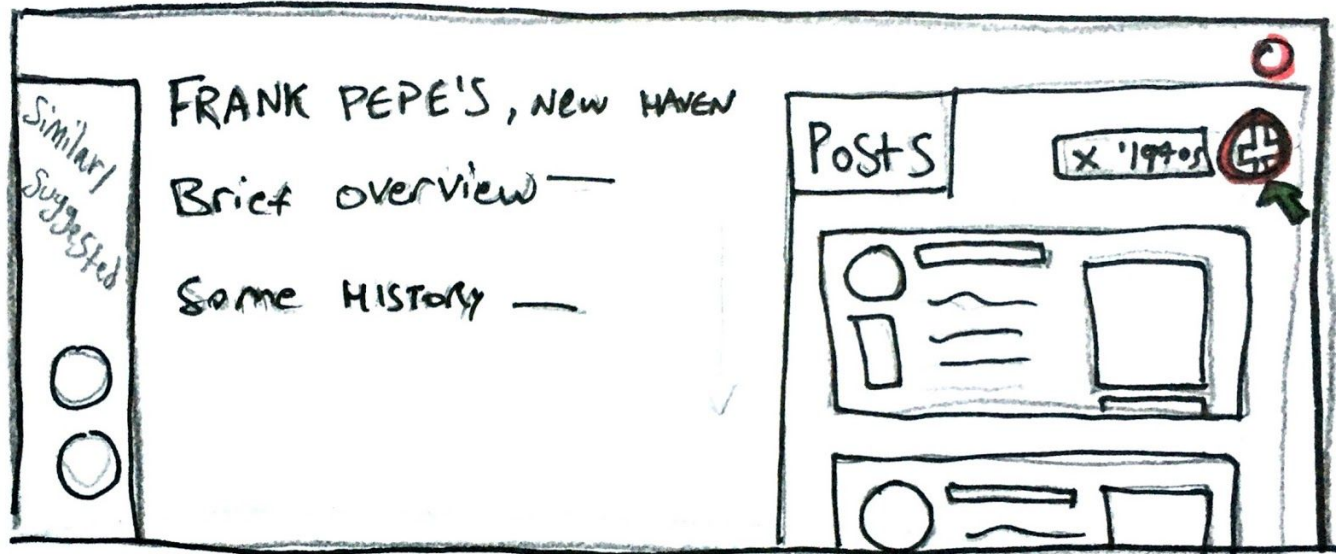


Lucy clicks the tab on the side to see a list of each result. Lucy can either click on the list item or directly on the map location to bring up a page about the location at the specified time.

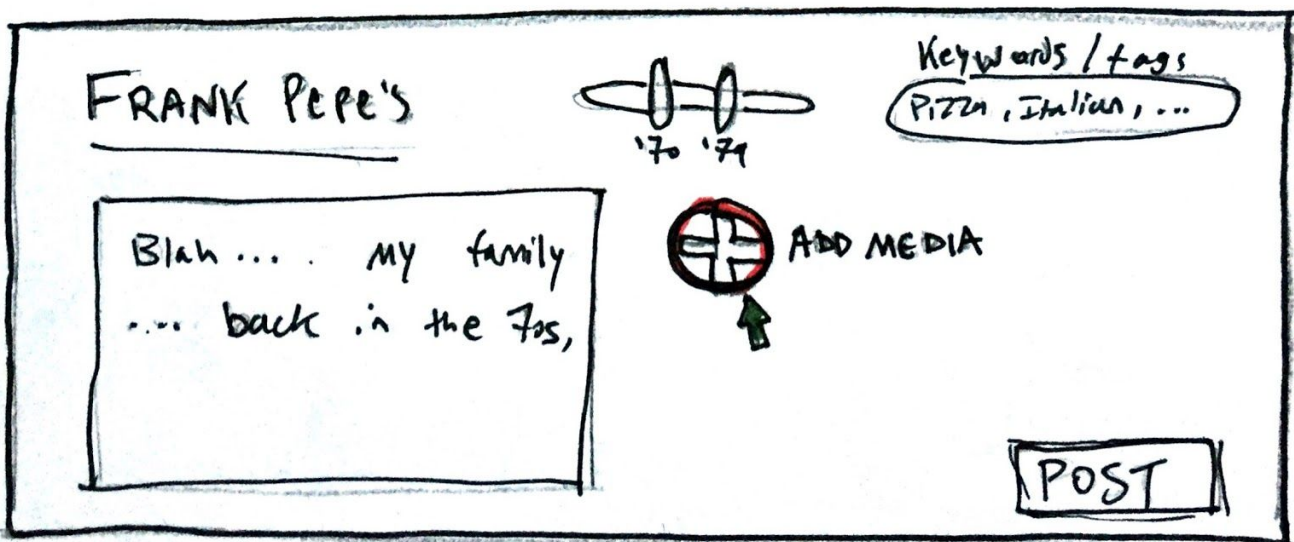


Either way, a brief overview about the location as well as a list of posts from about the area is displayed.

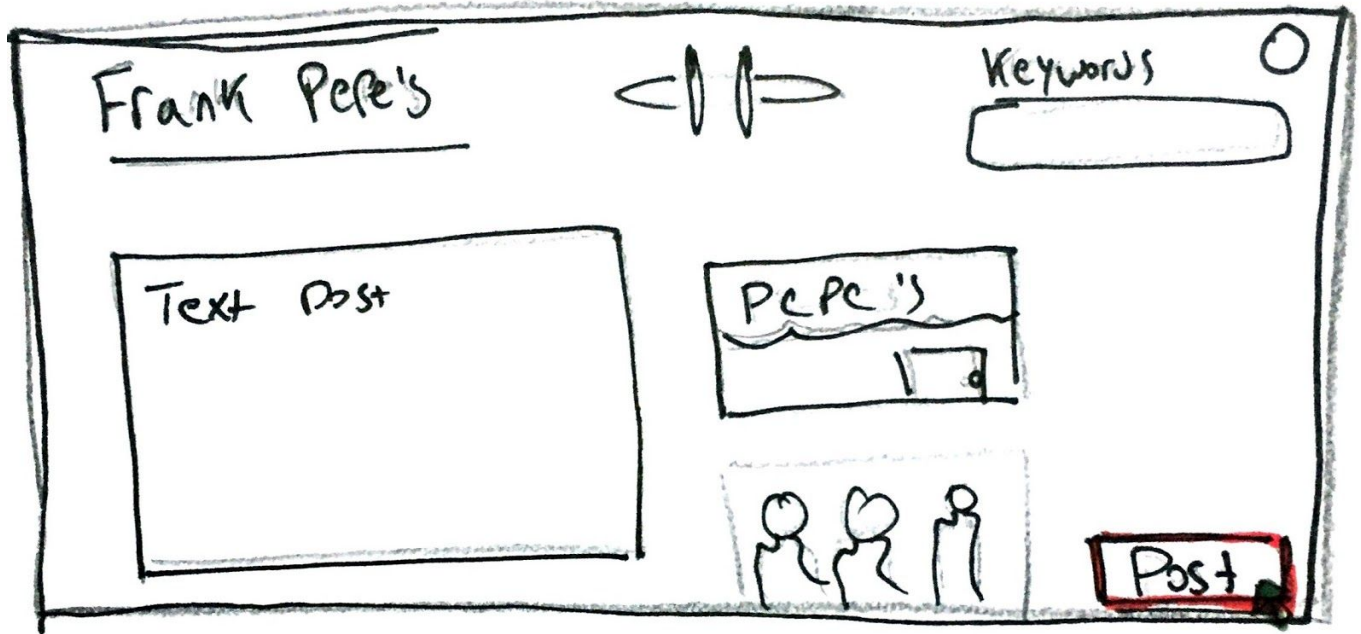
Sharing



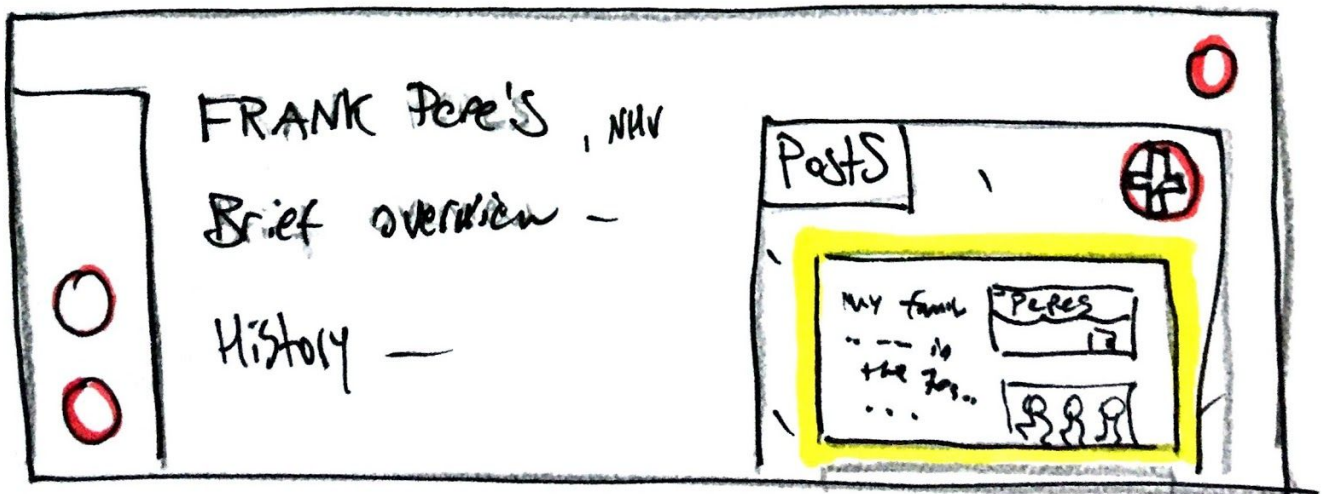
Lucy starts at a page about a certain place, and clicks on the “add post” button



Lucy is brought to a page where they can adjust relevant time period and place if desired, and add keywords about the post so it is easier to search for.



Lucy can click "add media" which brings up a typical upload screen from her computer. She uploads two photos. After completing her post, Lucy clicks the post button.



The post appears in the feed for the page, colored to indicate that it was posted by Lucy.