

unGuided

Link to prototype: <https://projects.invisionapp.com/share/MX1M2B0SG#/screens>

1. Problem and Solution Overview

Tours—guided in person, with audio, or other forms of media—can be exceptionally immersive and informative in ways that a purely “self-guided” tour cannot match. In current form, however, they present a number of intrinsic problems. Guided tours are bound by a fixed schedule, which requires visitors to make rigid plans. In many cases, visitors ignore the benefits of a tour because waiting bores them or they feel it wastes time. Preplanned guided tours are also bound to a fixed path; while following this path, if an alternate artifact, building, or route catches a visitor’s interest, they often must suppress their curiosity or quit the tour altogether. Audio tours per se are more flexible, but are rarely available outside of museums and require dedicated and unfamiliar hardware that requires manual input. Museums regularly require visitors to hand over collateral (often a government ID, which can be an inconvenience) to rent an audio tour. The number of devices an institution has also limits the numbers of visitors who can simultaneously access the tour. Finally, the above tours are often highly scripted and provide a limited perspective on what they seek to describe. Our solution is to, through a mobile application, let visitors experience a tour when, where, and how they want created by a variety of sources. There is no starting point, no set path, and no required perspective. The user can arrive at his or her destination, and using a mobile device’s geolocation, hear and see unique, crowdsourced stories about the places they visit—built by anyone with knowledge and passion for a given space.

2. Tasks

While our implementation has changes over time, our tasks have remained quite firm.

Create a Tour (complex)

This task involves developing content for the application’s other class of users to consume. We intended it to allow a user to create “stories” or submit media about different points of interest, link them together geographically, and allow the user to present them publicly, to friends, or for private re-consumption later.

Take a Tour (moderate)

This task solves a need we observed early in our CI, which users sought tours tailored to them that did not require a tour guide. It involves taking geolocation-based tours through an area, primarily consuming audio (and potentially other media) recorded by individuals who have had experiences in or know a lot about a place.

Discover (simple)

This task involves users being able to freely explore the points of interest around them, recorded as part of tours or independently. “Exploration” could involve hearing stories about specific POIs, reading information about them, or be as simple as learning what they are called.

3. Revised interface design

Please also see an interactive demonstration of our scenarios, linked at the top of this report.

From our previous report: In our low-fi user testing, we found that people have different ways of narrating tours, not everyone is comfortable sharing to the same degree or in the same manner, it is important to have multiple ways to keep users engaged, and to use traditional symbols wherever possible to smooth interactions. Specific UI changes our test users suggested or that we intuited from their reactions included that 1) there should be more media content on point of interest information pages, 2) the share button should suggest the platform that is sharing the tour, 3) there should be a way to edit audio clips, and 4) the direction arrow (the direction finding component of our low-fi “take a tour” task) should be more advanced—and include elements like estimated time and distance to a location.

What we modified the most was our “take a tour” function in response to ideas that sprung from our feedback in 1) and 4). We made taking a tour more interactive, allowing users to modify the tour in real time; added a feature similar to Cover Flow in Apple’s mobile iTunes, where tapping on a point of interest presents an information screen with deeper data and more media; and adding more fluid mapping that did not obstruct the rest of the tour (best illustrated in our medium-fi live prototype).

In “create,” we gave the record button more specific iconography because test users were not sure what to do with a red button out of further context. We also added a drawer to organize points of interest within the tour; low-fi test users were not sure how to make changes to pieces of the tour after they had created them.

We tweaked the “discover” function to better reflect our overhauled “take a tour” interface, by placing cards representing points of interest in a mosaic located based on where the user is standing. That design also made it easier for us to implement than an earlier idea, which had required a form of augmented reality through the camera.

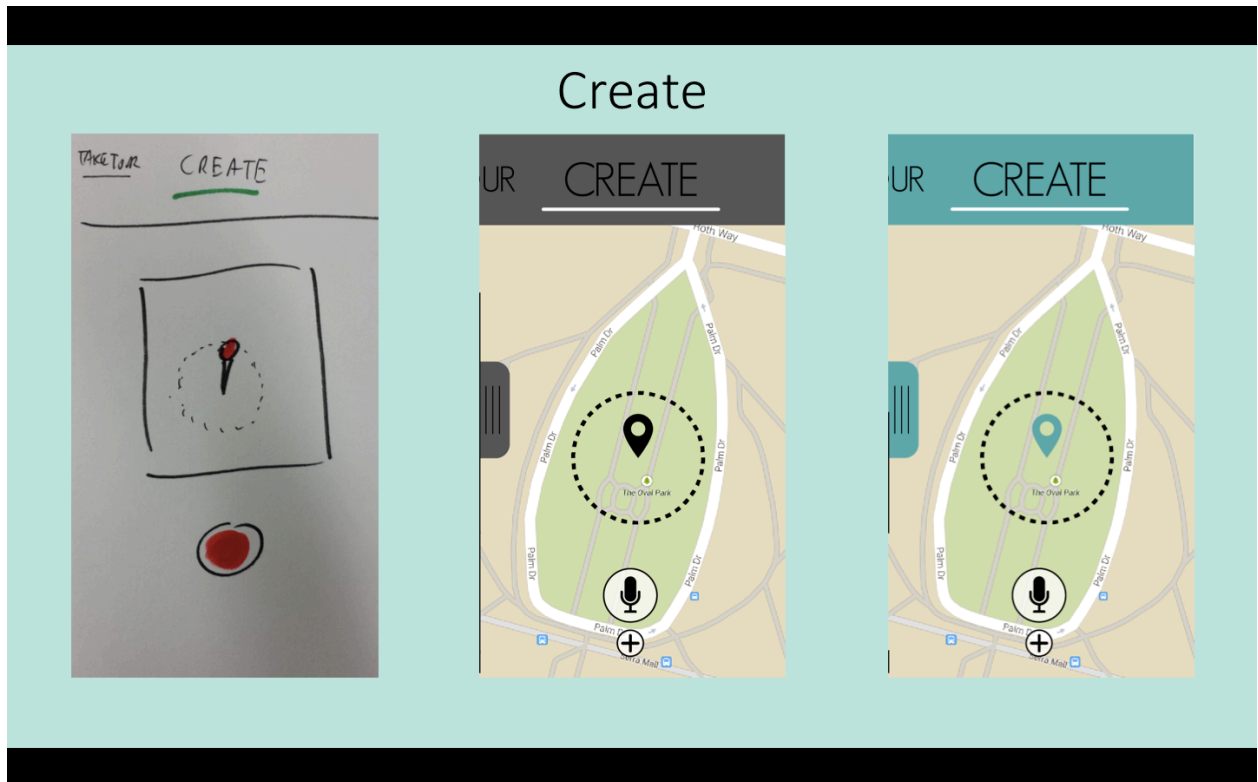


Figure 2a: Changes to “Create”



Figure 2b: Changes to “Discover”



ER

TAKE TOUR

CI

Stanford's Must-see Spots

1.5 mi. 30 min 5 spots

My Lake Lag Story

0.4 mi. 15 min 7 spots

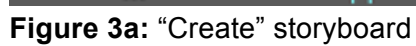
Arts at Stanford

0.6 mi. 45 min 22 spots

My Quarterback Years

0.2 mi. 30 min 0 spots

Figure 2c: Changes to “Take a Tour”



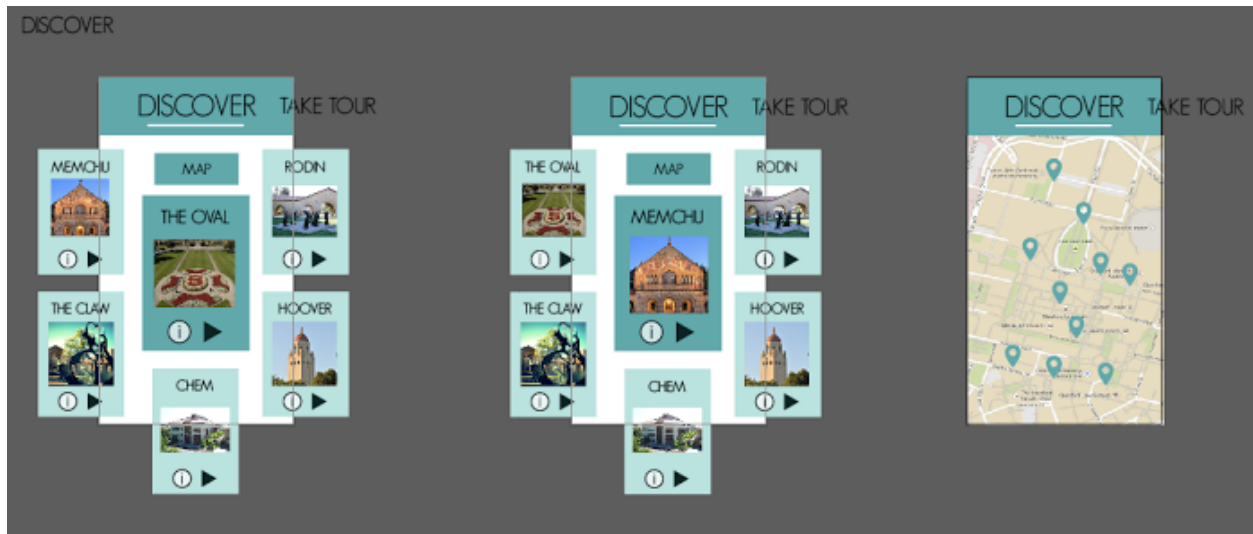


Figure 3b: “Discover” storyboard

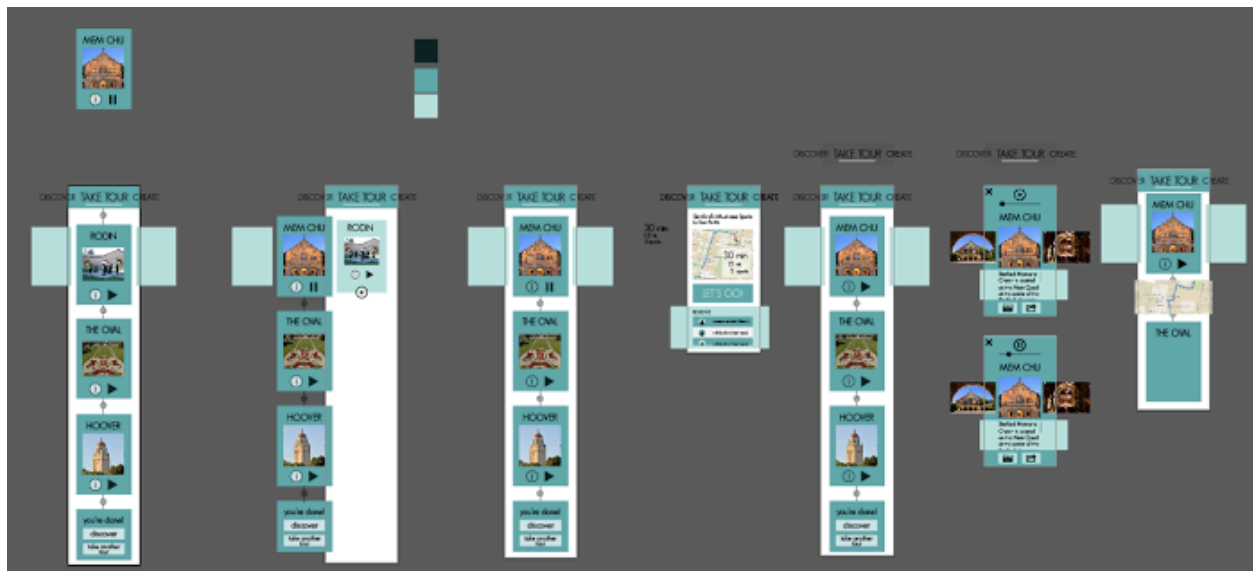


Figure 3c: “Take a tour” storyboard

4. Prototype overview

For our prototyping tools, we used a combination of paper (early re-sketching), Adobe Illustrator (to build mockups) and Invision (for wiring). Our initial reasoning had less to do with the prototyping itself and more to do with other practical constraints: Proto.io only allowed for a 15-day trial, and we didn't want to use up Dropbox space for Marvel (one of the tool's requirements), so we chose Invision. Our designer began with just paper prototypes to get an idea of how to use Invision (like what we did with POP for our low-fi prototype, and then used Illustrator to wireframe in grayscale. After our team reviewing and discussed features and design, we made some revisions and added color.

We were pleased with Invision's animations, which are very smooth. The tool's ease of use was also impressive; particularly uploading and revising images was a simple process. The reusable templates reduced the amount of time we might otherwise have had to spend building the prototype. In addition, it points out user error much like POP while running the prototype, highlighting clickable areas when the user attempts to use something that is inactivated or out of bounds.

However, Invision doesn't allow designers to divide screens into separately scrollable components (like we envisioned for our "reviews" section on the tour information page). Also, a hotspot only maps to one gesture (i.e., the designer can't swipe and pinch the same hotspot, like we wanted to do with our map).

In the current prototype, we had to leave out audio and other media because we had no way to activate it, and for the sake of simplicity, our "tours" were pre-loaded. In addition, because the prototype does not have a mapping or geolocation function, we had to hard code the map and "pre-place" the tours. The media creation process was completely Wizard or Oz since our prototype did not accept complex forms of input.

5. Prototype screenshots

We have too many prototype screenshots to practically display in this document. Please see our folder at <https://drive.google.com/a/stanford.edu/folderview?id=0B3B1JRrQipQ-ODVQMnFPSE1CNHc&usp=sharing>. All screenshots labeled with the prefix "create" correspond to our "Create a Tour" function, those labeled with "discover" correspond to our "Discover" function, and those labeled with "take" correspond to our "Take a Tour" function. The files are ordered approximately as you find instructions in the README.

Appendix

README

unGuided

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-- README --

Welcome! unGuided allows you to take tours independently of any tour guide, discover points of interest around you that people have told stories about, and create your own tours-about any place that you are passionate.

MAIN NAVIGATION BAR

Tap to choose between "Discover," "Take Tour," and "Create."

TAKE TOUR

- Tap one of the tours in list (NOTE: only the first is active now)
 - Scroll down to see reviews

- Click “Let’s Go” to start a tour
- During a tour
 - Scroll through the list to see how the points of interest in the tour are ordered
 - Click the play/pause button to play/pause audio tour playback
- Click info button for more information about the point of interest
 - Click X button to close out of information window
- Back on the tour navigation screen, click the navigator button (the double-circle between points) to show the map navigation feature
- Tap a card to the side of the screen to see information about nearby points of interest
 - Click “+” button to add it to the tour at your current position
- When the tour finishes, tap to either take another tour or “discover,” which loads a mosaic of nearby points of interest that you might have missed on the tour

DISCOVER

- Click map button
 - NOTE: In full implementation, you can click on nearby points. The fully functioning application shows the 10 points of interest with the greatest number of tours attached.
- Tap anywhere to go back
- Tap on any point of interest nearby (in our prototype, only on the screen; MemChu on the left is currently the only active tile)
- Tap info button for more information about the points of interest
- Scroll through to show an image of the point of interest and information about it
- In Discover, you can listen to multiple perspectives about a place
 - Click on the play button to hear a perspective (perspectives are not yet implemented)
- Tap X button to close point of interest information screen

CREATE

The create function is limited in prototype form and is best followed in a linear manner to demonstrate its functionality:

- Tap title to add a title to your tour (it will be added for you in the prototype)
- Tap the map to add a point of interest’s location to your tour (the map is hardcoded)
- Tap the microphone button to record something about a point of interest
 - Tap plus button to show other media options and minus button to hide them again
 - Includes hard-coded transcription of what is being recorded and a timer of how long you’re recording
 - Tap the stop button to finish recording your snippet
- Tap the checkmark to finish your recording for the point
- Tap title to change the title of the point of interest
- Tap add point to place an additional point of interest on your tour
- Tap publish to finish your tour
- Tap a privacy option to note your share options: Self, friends, or global