Project Name: Astray

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• Description of the Project:

We will build a micro-location based personal storytelling app that allows a place to accumulate memories and stories of the individuals who have been there. Upon entering a location that has been tagged with a story, the user would receive a notification, and can choose to play the story that narrates the memory of a previous user. The story would include photos, text, and/or narration, describing an event, personal experience, musings, or poetry. The user would be immersed in the story, becoming closer to the storyteller through their physical presence. The story might then lead the user to another location, along a trail or in various stops, where they would experience more of the story.

There will be a map where the beginning of stories are displayed, with an option to turn them off and stumble onto others' memories, indicated by location-triggered notifications from the app. The app can also be used for adventures such as taking the user to a specific location, and asking them to enter a code they would find at a restaurant menu or on a bookshelf, to continue listening to the story.

• Need for the Product:

Our product creates human connections and enriches the physical space around us. Often, in our networked world, we isolate ourselves through digital connection. When walking from point A to point B, rather than experiencing the area through which we are moving, we might look down at our phones and return to the familiar blue and white of Facebook or Instagram. Other times, we do not move at all, instead electing to 'move' only digitally. These digital experiences certainly have some value, but due to their ease, they usually come at the expense of experiences in the physical world. Our product aims to merge the digital world with physical adventure so that users do not have to trade one type of experience for the other.

Additionally, our product aims to break down the barriers between strangers that prevent us from knowing the stories that are most important to each other. Currently, we are mostly limited to superficial knowledge of those whom we have known only briefly. By allowing users to learn about the stories that other users want to share, more empathetic and more deeply felt bonds within the human community can be formed.

• Potential Audience:

The potential audience for this product includes anybody who is physically active or mobile. It includes but is not limited to young people with ample spare time, such as current or recent college students. Others who would likely be interested in using our product are those who are familiar with similar activities like geocaching or scavenger hunts, which often require some base level of technical sophistication. It can be expected that the audience will be able to recognize basic app design patterns such as map markers, lists, and swipe scrolling.

Another audience for the app is storytellers, spoken word artists, and podcasters, who will gain a platform where their stories and narratives can be shared at a location-immersive setting, along with supplementary media in the app screen if necessary. We have already reached out to Stanford Storytelling Project and Spoken Word Collective, and hope to collaborate with them. We also will reach out to Stanford Mystery Society, since they can use the app to craft engaging adventures.

Furthermore, the app may be used for Stanford tours, where parts of the tour guide experience may be recorded. Astray can also display pictures of old Stanford, that pop up right at the vantage point from where the picture was taken.

• Discussion of Competing Products:

There are multiple apps that have certain aspects similar to Astray, but to our knowledge our app is unique. One well-known app that is similar in its confinement by location is YikYak. Astray is different in that, along with its romantic nature of sharing longer, more meaningful stories, it will not have comments, but only ratings for well-liked stories to be discovered. Stories can be anonymous, or connected to a profile, for people to discover more memories from specific artists. Furthermore, it requires the user to engage directly with one memory by being at a specific location.

Other similar apps are Detour and Stray Boots, which also contain location-based cues that trigger media to play. Detour is for city tours and is highly curated, with each tour taking approximately half an hour. Stray Boots is for users to create scavenger hunts. We intend for our app to have a collective database of memories created by and about individuals, and to not be too time-consuming.

The central concept of Astray draws inspiration from the activity of geocaching, where players find and leave little boxes containing clues around the world, and exchange them. Our app is meant to be like geocaching on an abstract level, with stories instead of real objects, and with the end goal being the sharing of human memories rather than the thrill of puzzle-solving.

• Major Technologies Used:

We plan to develop the app for iOS. We will use the standard iOS development tools, such as XCode as the IDE and Swift as the language. We will use Parse, a web backend, to meet our need for a complex but free backend provider. iOS development skills and resources will come from Codepath, a software boot camp. For version control, we will use GitHub.

• Resource Requirements:

This project will require standard app development resources, but also will draw upon unusual and non-technical resources due to its subject matter. The resources that will be needed to complete the project satisfactorily are as follows:

- ➔ Time. As with any app development project, this project will require significant time dedicated to writing and testing code, with the additional overhead of learning iOS development tools and paradigms for 3 of the 4 team members.
- ➔ Testers. Testers will be needed to determine problem areas for the app, and to guide app refinement. In addition, diverse testers will allow the app to become usable to a wide audience.
- ➔ Computers. Computers with internet access are central to the development of any app. This product will be developed for iOS, so it requires computers running Mac OS X, along with internet access and version control in the form of Git so that all team members may contribute simultaneously.
- ➔ Professors and TAs. Guidance from course staff will be necessary to ensure the project keeps on track and stays within reasonable ambitions. Feedback will also help the team become more efficient and more focused on important goals.
- ➔ Prototyping tools. Because this project is an app for a general audience, comprehensive UI testing will be necessary before serious coding. Prototyping tools, either in the form of pencil, paper, and scissors, or web-based prototyping platforms, will allow the team to try multiple UI designs and figure out what works best for this project's specific needs.
- ➔ Good stories and interesting people. This app will need some initial content even though the central conceit is that the users contribute their own stories. In order to build a userbase of contributors, there must be enough for those contributors to consume. To create these first stories, we will need to draw on creative and artistic storytellers who can craft interesting and captivating stories, initially from Spoken Word Collective and Stanford Storytelling Project.

• Potential Approaches:

There are numerous ways to share stories, so many of the features we will include in the app were chosen over other features to better fit with the type of sharing we want to encourage. A few of the tentative decisions we have made are as follows:

- ➔ Facebook linking. While the app's primary purpose is to create bonds between strangers, we recognize that users will especially desire to hear the stories crafted by their friends. Therefore, we will link user accounts on our app to Facebook, allowing users the ability to find stories uploaded by their friends.
- ➔ The choice of anonymity. We want the content produced for the app to be meaningful, and also want to ensure that the sharing of significant moments and events in users' lives is not hindered by the social barriers that come with being identified. Therefore, the app will have the option of uploading stories anonymously.
- ➔ Audio first, with text, pictures, and videos. Because our app is focused on the stories of individuals, it is important that users be allowed wide creativity in designing the stories they upload. For this reason, we will allow stories to be composed of multiple forms of media, including audio, text, pictures, and videos. However, we will encourage the use of audio as the primary medium, so that other users who find the story can make use of their visual and tactile senses to better immerse themselves in the shared physical space.
- ➔ Featured artists and storytellers. We recognize that the general quality of stories uploaded will vary. In order to maintain high quality content, we will include featured stories by artists and storytellers, which will be marked as featured but otherwise treated equally to other stories.
- ➔ Limited curation. It will be necessary to have a system for removing uploads that do not match the purpose of the app (e.g. spam). We do not want to give users the power to completely remove other users' stories, but will include a flagging system that will call the attention of curators, who can remove such content. In addition, curators may promote particularly high quality user-uploaded stories to featured status.
- ➔ Map and stumble modes. We envision there being two main ways to experience stories. One way is to see a map of uploaded stories and their locations, allowing the user to quickly find interesting content. Another way is to have the app send a notification when the user stumbles upon the location of a story. Since we see merit in both experiences, we will provide both map and stumble modes.

• **Assessment of Risks:**

The most significant risk to this product is the deterioration of the user-contributed content from being high-quality, worthwhile, and plentiful into being meaningless, uninteresting, or too sparse. Reducing this risk will be a difficult task and will most likely be accomplished mostly through clever app design. Frequent surveys and testing of sample users will be necessary to confirm good design decisions and scrap bad ones. Content quality control may even require direct content review by the team (or dedicated volunteers) to approve or reject submitted stories. To ensure the app receives enough content to remain usable, a concerted effort to create a critical mass of initial users must be made, perhaps through a 'story-making' event.

There are also risks in the development process related to the relative inexperience of the team with iOS development. It is possible that we will not be able to achieve certain planned features or that we will get stuck on critical elements of the app such as user accounts or location identification. To reduce these risks, we will need to review iOS development tutorials and general resources before we begin development so that we are aware of the abilities and limitations of our framework.

• Next Steps:

We would like to learn iOS development in parallel with prototyping the user experience. We already have confirmation from Spoken Word Collective to submit some recordings. In order to solidify our iOS development skills and create a foundation from which to work, we plan to complete a coding sprint in the next two weeks to produce a simple version of the app that can play an audio file at selected locations. The Codepath iOS bootcamp will be used to gain experience with the iOS development environment. We can then use this version of the app, along with a video mockup, in exploratory user testing that will give us feedback about the type of interactions that users desire and features they feel would improve the experience. Using the results of that testing, we will develop a schedule for development to complete the app.