

Stakeholders, Goals, and Task Analysis

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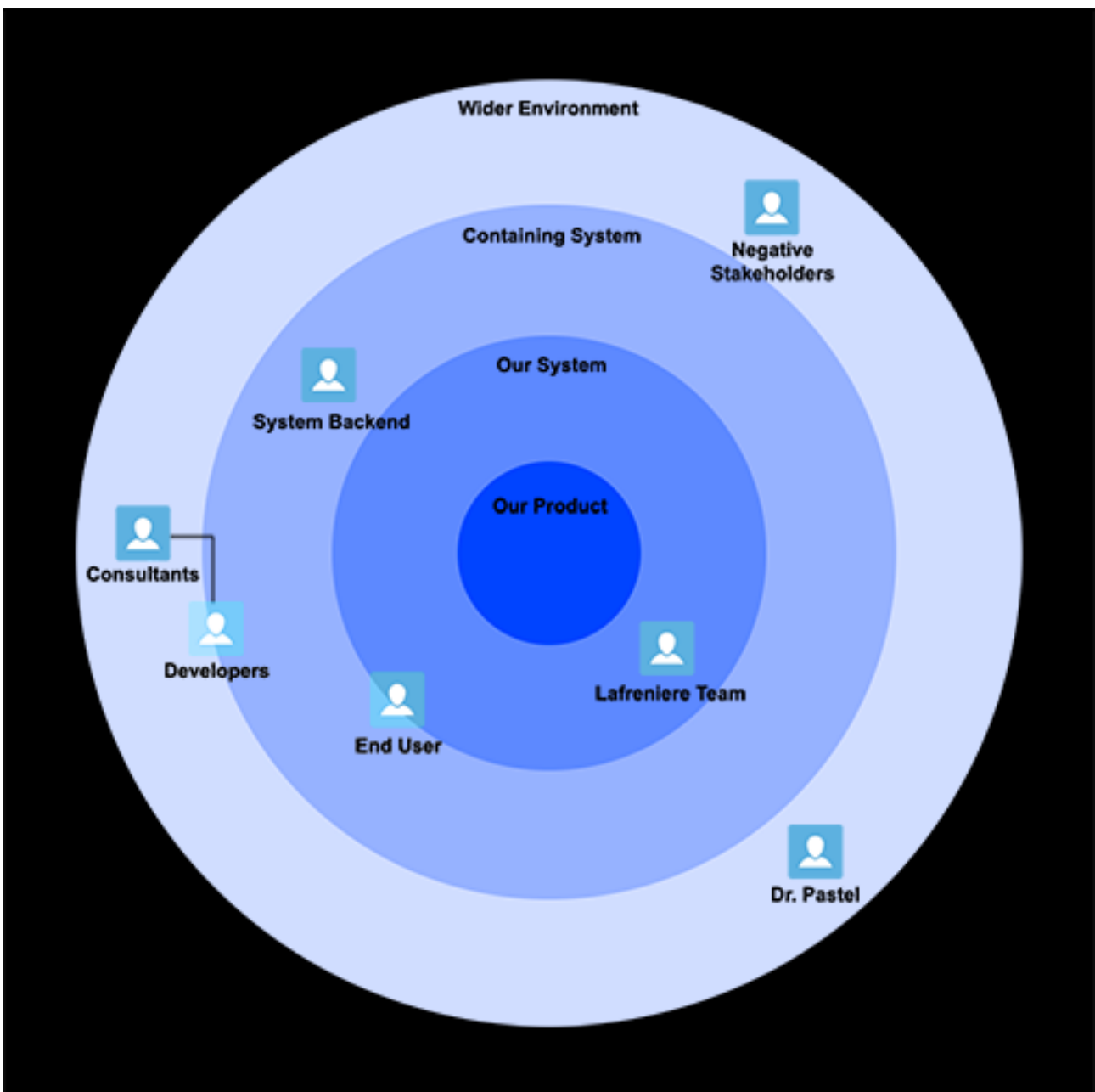
Team 1 – Grad 6

Michigan Technological University

The Undergraduate System

Team 1's system is a “time traveler” system of sorts, documenting photos, people, locations, and anything else deemed to have historical importance from around the Keweenaw, dating between 1850 and 1950. The app is intended to be used by the average person (many of whom would likely be elderly people living locally), and should be not only easy to use but fun to use as well. Toward this end, some early suggestions from the project manager include commenting, a streamlined and semi-unmoderated submission process, and both desktop and iPad compatibility.

Onion Diagram of Stakeholders



Stakeholder Breakdown

Dr. Lafreniere & Maintainers – Dr. Lafreniere, Dr. Scarlett, and others involved in maintaining the system. All people who work directly on the maintenance side of the project.

End User – These are the people who will be using the app to upload historical photos; view historical places, items, and events; and comment in a pseudo-social-network way.

System Backend – The server hosting the images, comments, and location data. This system will interact with the app by receiving this data from the app as well as supplying it upon query.

Developers – The undergraduate team developing the app.

Consultants – The grad students consulting on the app. Not directly involved in development.

Negative Stakeholders – If they exist, these people could take the form of competing app developers. Would rather their own app succeed.

Dr. Pastel – Invested in all students learning. Is constrained by the limits of the semester.

Stakeholder Goal/Influence Table

Stakeholder	Goal	Contributing Influences	Constraining Influences
Dr. LaFreniere & Team	Create a usable, fun Time Traveler app; collect data	groundwork for app development; tools and consultation	Time; scope of project; standards
End User	Have fun; learn about the history of the Keweenaw; interact with others	Collect images; post comments; interaction with the app	Ability to use app; ability to figure out technology; computing power of their chosen interface
System Backend	Uptime; successfully handle all queries	Stores data so the app doesn't have to	Latency; storage space
Developers	Gain new knowledge and skills; develop a successful, usable app	Writing the code	Time; balancing other coursework
Consultants	Gain new knowledge and skills	Consultation	Time; balancing other coursework/research
Negative Stakeholders	Failure of Project/Success of Alternative Project	N/A	Competition for funding, users, etc.
Dr. Pastel	For students to learn; for students to produce an end product that will	Project help and consultation	Time

Summary of Stakeholder Goals/Influences

Most of the stakeholders in this app share the goal of creating a successful app that is used by many people from a wide variety of backgrounds. I will now discuss these stakeholders and influences in the order in which they appear above.

Dr. LaFreniere and his team of builders, maintainers, and visionaries are the most obvious

stakeholder in this app. They realize that if the end user is not having fun, the app will not be used at all. This in turn would mean that the app would not collect interesting pieces of Keweenaw history, would not collect comments and attract new users, and therefore would not end up documenting much of significance. Toward this end, their primary goals are to develop an app that is both fun and easy to use. They need users to upload pictures and post comments – they define the essential functionality of the app.

In contrast to Dr. LaFreniere and his team, the End User is probably the least obvious stakeholder. Perhaps the most common fatal flaw in the world of app and interface design is the neglect of the end user when considering stakeholders. The audience for this app will be residents of the Keweenaw, which consists mainly of two somewhat disparate groups – college students (and their professors), and elderly people who have either lived here all their lives or made a home here. To this end, the app must be not only usable by an often-technophobic generation, but also interesting for a younger generation who would be interested in learning the history of their often-temporary abode, though a focus on the former group would be preferable. The former group is likely in possession of more historical information – old photos of relatives, trophies, trinkets, and the like. Catering the app to an older generation is essential to its success.

The system backend merits little discussion. It simply requires adequate hardware to store the uploaded data from the userbase and an adequate internet connection so that the data can be accessed quickly and easily by the app. Some sort of image compression would likely be preferable, lest the app be unable to quickly pull up pictures, causing users to lose interest.

The developers are heavily invested in making the app a success, both for their newfound experience in making it and also for the sake of their class grade. The developers face the lion's share of the work; they need to code the app and make sure it's able to function properly. They're to a large extent subject to the whims of the LaFreniere Team, and they've also got to take into consideration recommendations made by the consultants.

The consultants are also invested in making the app a success, but more on the end-user side of it. Rather than coding the app, their concern is with making the app more usable by the average person. This includes, but is not limited to, giving suggestions to the app developers on ways to improve the interface and functionality of the app; and running experiments on potential users in the target audience to verify the app's functionality and identify unforeseen issues.

Negative stakeholders come in many forms, and most of them would rather have the app fail than succeed. Often, negative stakeholders will take the form of competition, but for an app this small, there likely won't be any competing app, and therefore the likelihood of negative stakeholders even being a concern is minimal.

And finally, Dr. Pastel is a stakeholder only in the loosest sense. Among his interests are

student learning and the production of excellent apps, thus helping him continue to find partners to develop apps for in the context of the HCI class.

Personas

- Primary
 - Henry Jenkins, age 80, nearsighted, has lived in the UP all his life
 - Henry is a historian who's well-established in his hometown of Lake Linden. He recently heard about this app through an advertising campaign at the Orpheum in downtown Hancock, and he's got a lot of old artifacts from his family's life in the copper country that have been passed down through the generations. He's not very technologically savvy, but he's got an old Windows XP computer that he uses for his daily email routine. On the occasion that he uses facebook, he likes to comment on his friends' statuses, especially the statuses about reuniting with old friends. He wants to contribute his vast collection of family history to the project.
 - Britta Hopkins, age 22, MTU student
 - Britta is a student at Michigan Tech whose great uncle also attended Tech. She heard about the app through Michigan Tech's Student News Briefs, and much like her peers at MTU is at least somewhat interested in the rich history of the area. Her uncle lives in Hancock, but doesn't know anything about computers or iPads or smartphones and doesn't care to learn. Britta knows her uncle probably has some pieces of history tucked away in his attic somewhere that she would gladly contribute if she remembered to bring her iPad to her uncle's house.
- Secondary
 - Geraldine Zenker, age 47, high school teacher, using as the basis for a school project
 - Geraldine is a school teacher who moved to the Keweenaw a few years ago. She's well established in the school and knows a few people around the community, and she heard about the app through the grapevine. She has a small class, and the school library loans out iPads on a per-day basis. She'd like to use the app for a small class project where students would research an area of their choice in the Keweenaw.
 - Zane Landry, age 62, recently retired, MTU alumnus, wants to socialize with locals
 - Zane recently finished a very successful career and, having graduated from Tech in his youth, decided to retire to the town he knew many years ago. He owns an iPad, remembers a little about the history of the area, but doesn't know anybody in the area. Zane wants a meaningful way to interact with people in the area.

Simplified Hierarchical Task Analysis

Upper Level View

- Map of the area
 - Navigation
 - Submission

Lower Level View

- Navigation
 - Pop-up window w/ brief summary and picture
 - More Information
- Submission
 - Person
 - Description
 - Place
 - Description
 - Artifact
 - Description

Summary of Simplified Hierarchical Task Analysis

This app doesn't need to do a whole lot, but there's a wide variety within the few tasks it needs to perform; the challenge, therefore, is elegance rather than organization. The upper level view will be very simple; a map of the area, with small points indicating something of historical importance from that area. You'll be able to navigate around the area as well as create and submit your own historical points to the app's database.

The lower level views will include two things – the viewing side, and the submission side. On the viewing side, the intent is to be able to navigate around a map and tap or click on points. Once clicked, a pop up window with a brief description (or perhaps the beginning of the full description) and, ideally, a picture of the subject of the historical point. There will also, of course, be the option to get more information if it's not all displayed in the pop up.

Finally, on the submission side, there will need to be a way to upload an image, a text box to enter a description, and, if desired, a way to categorize the point. I've listed three suggestions, but as of this writing they haven't been formally discussed. My suggestions stem from the elementary-school definition of a noun – a person, place, or thing. These could perhaps be colour coded so that people looking for information on historical people wouldn't have to sift through data on places and things.

Appendix A – Raw, Unprocessed Notes

- Needs to work on desktop & iPad
- talking to people @ places like Pasty Fest
 - bring pictures of old yoooper things, print out places on maps, etc.
 - has excellent future historical value, too
- related items are separate points, i.e. grandfather & trophy he won

- pop-up window
 - multiple pictures (swipe), text, etc.
- desired – comments on timeline points
 - if links allowed – spam filter?
- facebook integration?

- **Fun!** - for the end user
 - **audience is yoopers**
 - think [REDACTED] & co. on facebook

- rather than a web link, perhaps internal app references instead of links for comment section