

Project Deliverable B

1. A list of client statements/observations obtained from client interviews.

- a. Users are primarily librarians. Ideally make it useable for students as well.
- b. Students can be blind, have learning disabilities, etc.
- c. Documents may be PDF or Word or Epub. Want to convert to MP3 or Daisy Format.
- d. As many voices as possible are ideal, Natural Reader was mentioned.
- e. File size can be up to 12,000 pages split amongst 10 different files
- f. MP3s by chapter is ideal.
- g. Examples from chat: <https://www.naturalreaders.com>
<https://www.sensusaccess.com/>
- h. Only languages are English and French
- i. Include copyright disclaimer
- j. Dell laptops will be used
- k. Image scan into MP3 is possibly good.
- l. OCR? To image scan.
- m. Web based application is preferred.
- n. Functionality matters much more than UX

2. A list of translated and prioritized customer needs (using the five techniques shown in class: what not how, specificity, positive, attribute of the product and avoid words must and should).

- Web application shall be capable of accepting a text-based document with a size ranging from 50mb to 500mb.
- Web application shall be capable of converting a text-based document to an audio based document that can be downloaded.
- Web application shall be fully accessible in both French and English
- Web application shall be accessible from Dell Laptops
- Web application shall include a copyright Disclaimer

Additional requirements (if time permits)

- Web application shall convert images into text-based documents
- Web application shall include at least 3 different voice types per language

3. A problem statement (what is the problem, who has the problem, and what form can the solution be).

Design a web-based application for librarians and students with disabilities with the purpose of converting text-based documents of large sizes to English and French mp3s.

4. A list of metrics with associated units. Identify which needs each metric address and if the metrics are functional/non-functional or constraint.

[Benchmarks.xlsx](#)

5. Benchmarking of similar products (this can be products that satisfy some or all the needs defined above). Provide descriptions and pictures when possible!

[Benchmarks.xlsx](#)

6. A set of target specifications (both ideal and marginally acceptable values). Provide reasons for your choices.

[Benchmarks.xlsx](#)

7. A reflection on how the client meeting impacted your results and the process. A reflection on what information remains unknown.

The client meeting gave many details about the project that had not been discovered. Initially, the form of the application and the specific requirements were unknown. After the client meeting these have now been narrowed down. The options for how to begin have been limited, allowing for a swift decision on 3rd party applications and a start on actual work.

These unknowns are still what language to code in, what text to speech program to use, what filetypes to prioritize, and how efficient to make the code. Efficiency in particular was left vague after the client meeting.

Team goals:

The team will complete a pdf reading feature for the web-based application as measured by a text output of all words on a pdf page.

The team will complete a bare bones web application with its own UI as measured by having a file that can be successfully opened and interacted with on an unrelated laptop or desktop.
The team will complete a text to speech function for the web application that takes text as an input as measured by a resulting audio file that can play the text out loud in its entirety.

The team will complete a UI that can be used by the client as measured by 3 functional visual aspects: A place to upload a file, a progress bar for conversion, and a place to download the resulting file(s).

The team will complete a segmenting function that can take a text input and break it down by chapters using distinguishing features of chapter breaks as measured by a text output that is broken down into chapters without splitting at the wrong parts.

These goals will be set; however, success will depend on the achievement of subsequent goals, and the goals that are further out may change. This will be based on challenges met along the way.