

SpokenText Reader (STR) v2

A Study Support Mobile Application for Visually
and Learning Impaired students

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Date: April 13, 2020

V1

What is the audio equalivant of?

The participants repeated many of the claims that some feminists make about postmodernism. "You cannot be a feminist and a postmodernist," I was told. Postmodernists are a- or even unispolitical. They are relativists; if we take them seriously, any political stance will be impossible to maintain or justify. Feminists must generally and sustain a notion of truth so that we can adjudicate conflicts among competing ideas and legitimate the claims of (some) feminist theorists and activists. Since postmodernists believe there is no truth, conflict will only be resolved through the raw exercise of power (domination). Postmodernists' deconstructions of subjectivity deny or destroy the possibility of active agency in the world. Without a unitary subject with a secure, empirical sense of history and gender, no feminist consciousness and hence no feminist politics is possible. Since postmodernists believe meanings are multiple and indeterminate, if you write clearly and comprehensibly you cannot be a postmodernist. In fact, postmodernists write obliquely on purpose so that no one outside their cult can understand them. One must choose between total acceptance or rejection of their position. Acceptance entails abandoning feminism or annihilating its autonomy and force, subordinating it to a destructive and inhospitable, male-dominated philosophy.

Neither these claims nor the evident emotional investments were illuminated in this particular encounter. But the experience did highlight some of the questions at stake in feminist debates about postmodernism: what are the relations between knowledge, power, and action? What kinds of subjectivities can demand and support feminist politics? What are the relationships, actual and potential, between feminist theorizing and the practices of feminist politics? Is the actualization of feminist visions of the future dependent upon the production of better feminist knowledge or theories of knowledge (and in what sense is this so)? What are the statuses of feminist intellectuals, especially those who teach in universities, in relation to each other, to other women and to power of various kinds? What forms the self-consciousness of feminist intellectuals and what motives and desires (including unconscious ones) drive us to make the kinds of claims about our selves and the nature and status of our theorizing? Can feminist theorizing (and women's studies programs) develop best in isolation from nonfeminist modes of thought? Should feminist theorists try to produce new grand theories as inclusive and self-sufficient as Marxism claimed to be?

Dreams of Innocence

Postmodernism is threatening to some feminists because it radically changes the background assumptions and contexts within which debates about such questions are usually conducted. While it is often recognized that white-feminist politics in the West since the 1960s have been deeply rooted in and

dependent upon Enlightenment discourses of rights, individualism, and equality, the epistemological legacy that feminists have inherited from these same discourses has only recently been called into question.⁵ Postmodernism, especially when combined with certain aspects of psychoanalysis, necessarily destabilizes the (literal and figurative) grounds of feminist theorizing, just as it does many other forms of Western philosophy. If one takes some of its central ideas seriously, even while resisting or rejecting others, postmodernism is bound to induce a profound uneasiness, or threatened identity, especially among white Western intellectuals, whose consciousness and positions are among its primary subjects of critical analysis.

While there are many aspects of the threat that postmodernism poses to the self-understanding of white Western intellectuals, there is one I will emphasize here. Postmodernism calls into question the belief (or hope) that there is some form of innocent knowledge to be had. This hope recurs throughout the history of Western philosophy (including much of feminist theory). While many feminists have been critical of the content of such dreams, many have also been unable to abandon them.⁶

Innocent knowledge means the discovery of some sort of truth which can tell us how to act in the world in ways that benefit or are for the (at least ultimate) good of all. Those whose actions are grounded in or informed by such truth will also have their innocence guaranteed. They can only do good, not harm to others. They act as the servant of something higher and outside (or more than) themselves, their own desires and the effects of their particular histories or social locations. The discovery of such truth would enable political theorists and philosophers to solve a central philosophical and social problem: how to reconcile knowledge and power (or theory and practice).⁷

A central promise of Enlightenment and Western modernity is that conflicts between knowledge and power can be overcome by grounding claims to and the exercise of authority in reason. Reason both represents and embodies truth. It partakes of universality in two additional ways: it operates identically in each subject and it can grasp laws that are objectively true; that is, are equally knowable and binding on every person. This set of beliefs generates one of the foundational anomalies in Enlightenment thinking—superstition/domination versus knowledge/freedom (emancipation).

Knowledge in this scheme has a curious double character. It can be simultaneously neutral and socially beneficial (powerful). The Enlightenment hope is that utilizing truthful knowledge in the service of legitimate power will assure both freedom and progress. This will occur only if knowledge is grounded in and warranted by a universal reason, not particular "interests." The accumulation of more knowledge (the getting of more truth) results simultaneously in an increase in objectivity (neutrality) and in progress. To the extent that power/authority is grounded in this expanding

Motivation

- SpokenText Reader (STR) will aid me in my PH'D
- STR will be an open source, iOS app that is bias to audio not text. Developed using SCRUM over time.
- Will let me: critically read a large number of research articles, reflect on them, sight portions of them in presentations and papers and discuss them in class. While not braking my sense of flow and mental thought.
- Results from my thesis work will inform the design of version 2 of SpokenText Reader
- App is audio focused, but the synced raw text is only a swipe away. Useful when the TTS says the wrong words, or you want to review tables or pictures contained in the text.

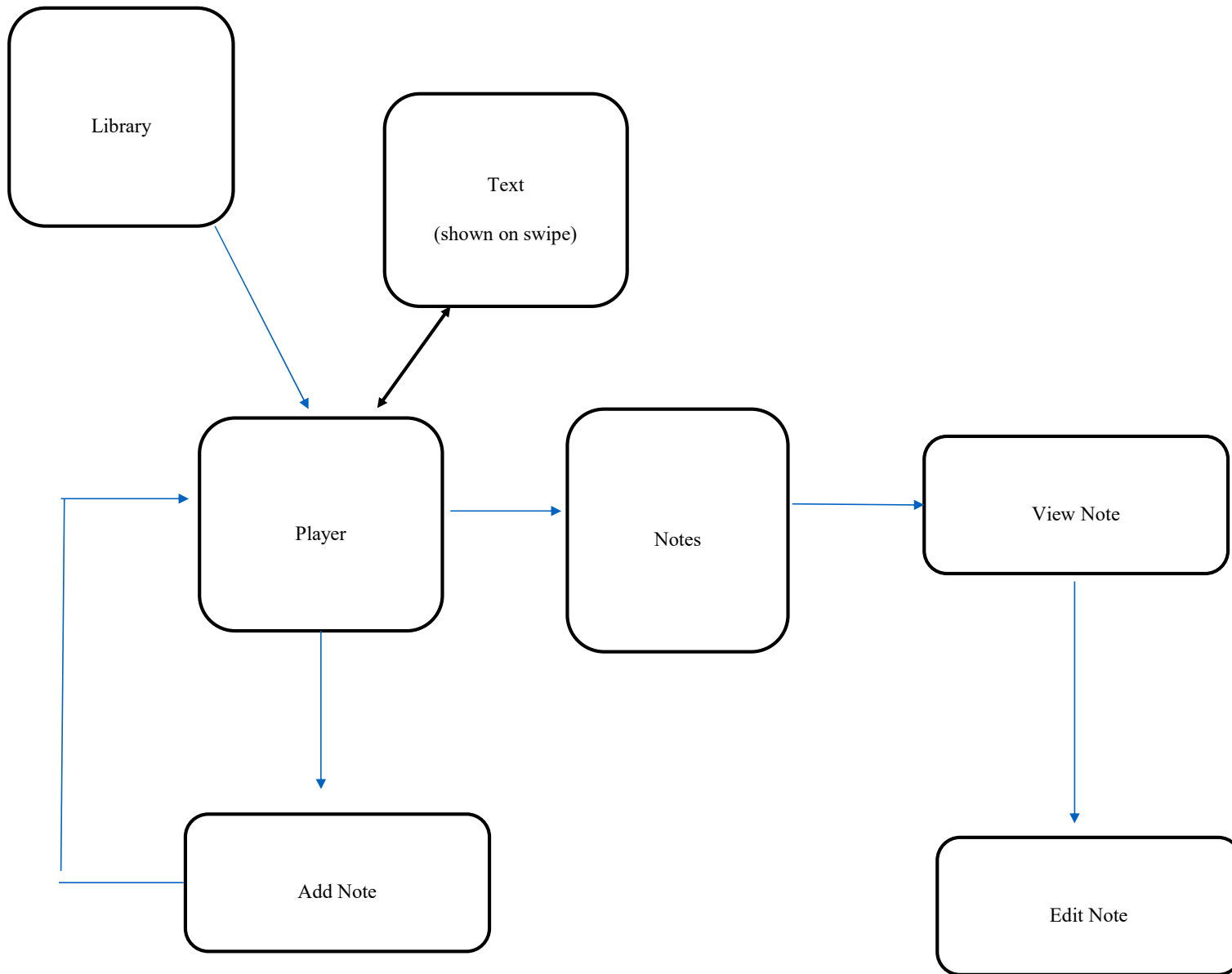
Best of both worlds

- E-text under the hood but offers two interfaces
 1. User experience biased to audio, with audio generated on demand via TTS.
 2. User experience biased to interacting with the e-text and optionally a TTS audio stream
- With this hybrid design, print disabled people could decide for themselves which approach they wanted to use for consuming the material and might even switch between the two depending on the material they were consuming.

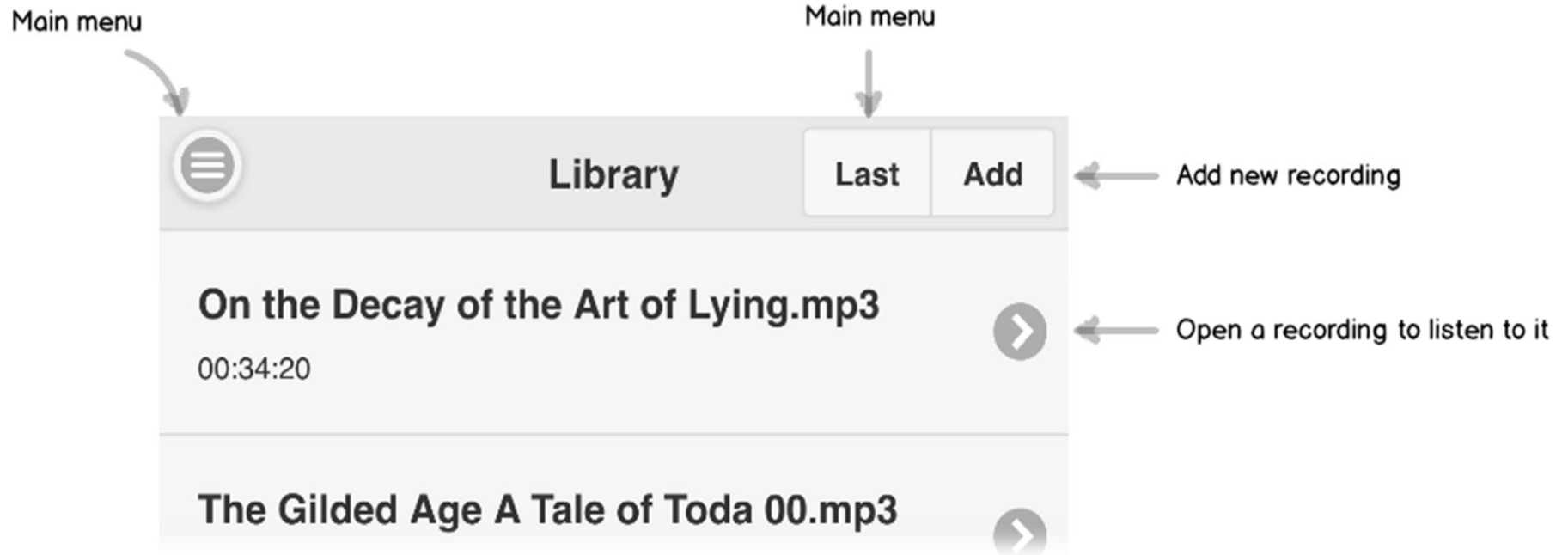
Questions

- How should we code the app to support an audio first interface? Can OnDemand speech generation work?
- User needs the ability to interact with the auto generated speech like it was pre-recorded
 - Smooth rewind/fast forward
 - Smooth scrubbing of audio
 - No pause in audio stream when moving from line to line of text.
- Should we generate the speech sentence by sentence and cache the current position and the line before and after?
- Should we linearize the text and feed it to the TTS in large chunks. This is how STR v1 recorded text to mp3. Text was extracted and feed to TTS in one huge file.
- Can an iPhone X or 11 generate speech on the fly and send it to Bluetooth headphones with no lag? V5 of Bluetooth working well in testing. V4 had lag when testing with Voice Dream and a BuckShot MP3 speaker.
- Do we need to cache the audio, to provide a pre-recorded like feel, If so what is the best way to do this?

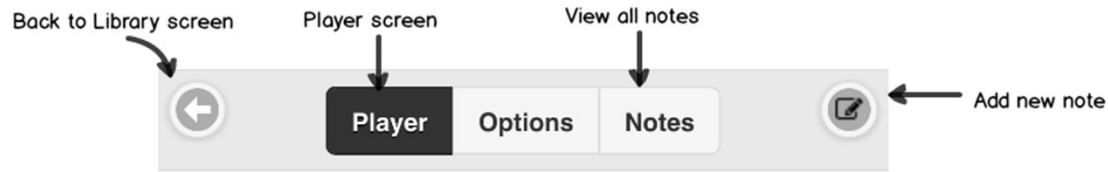
Primary STR v2 Screen flow



Library screen



Audio Player screen



On_the_Decay_of_the_Art_of_Lying.mp3

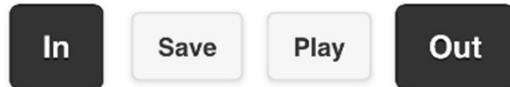
Length: 00:34:20

Play/Pause icon

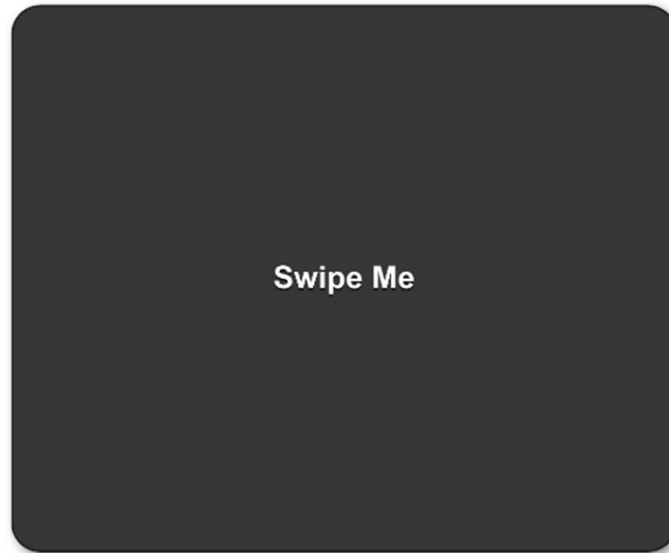


« Pull left to see sync'd text.
• Recording stops at the last word spoken? or should it keep playing?

Current position slider.
Let's you move to any point in the recording

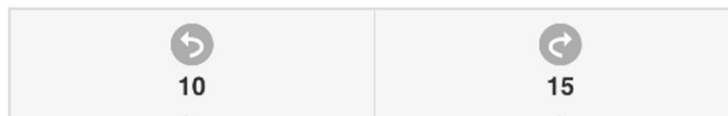


Clip note buttons from left to right: Set clip In point, Save clip, Play clip, Set clip out point.



Swipe Me gesture controller

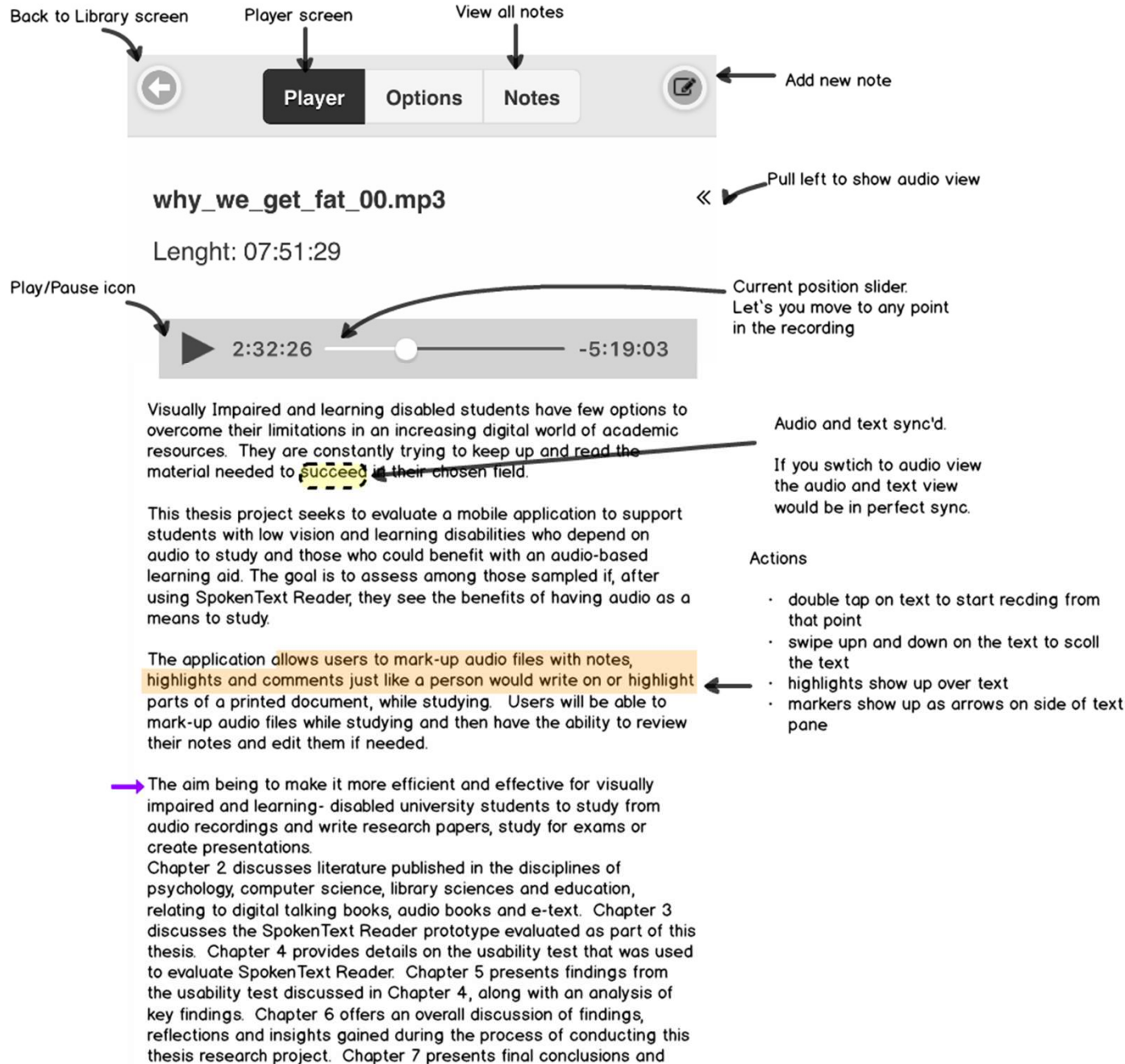
- Tap to play or pause the recording
- Swipe left to rewind 10 seconds
- Swipe right to fast forward 15 seconds
- Swipe down to set clip in point
- Swipe up to set clip out point
- Swipe to the left quickly uses the speed of your swipe and a multiplying factor to rewind the recording.
- Swipe to the right quickly uses the speed of your swipe and a multiplying factor to fast forward the recording.
- Press and hold to take a note



Rewind 10 seconds

Fast forward 15 seconds

Text screen



Extra

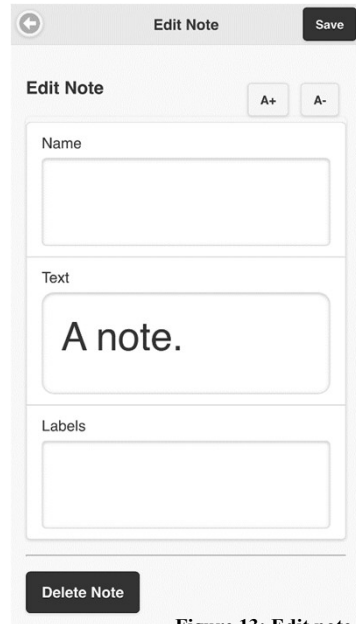
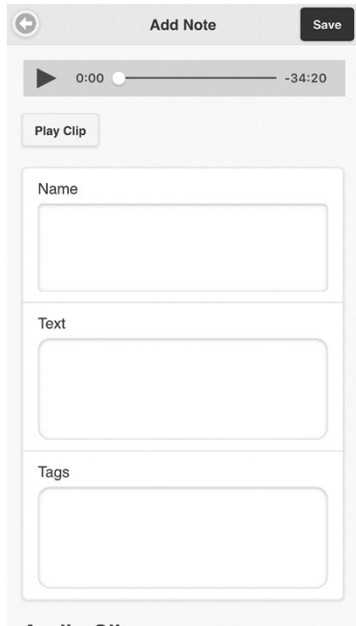
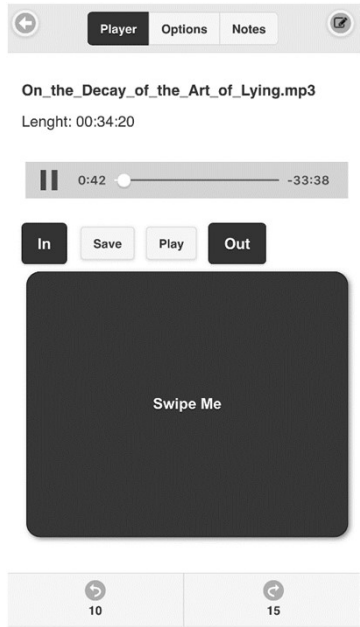
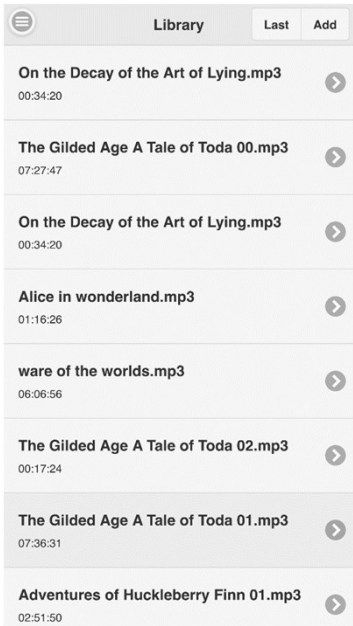


Figure 13: Edit note screen

Figure 11: Shows the main player screen (left) and the Add new note screen (right) which is

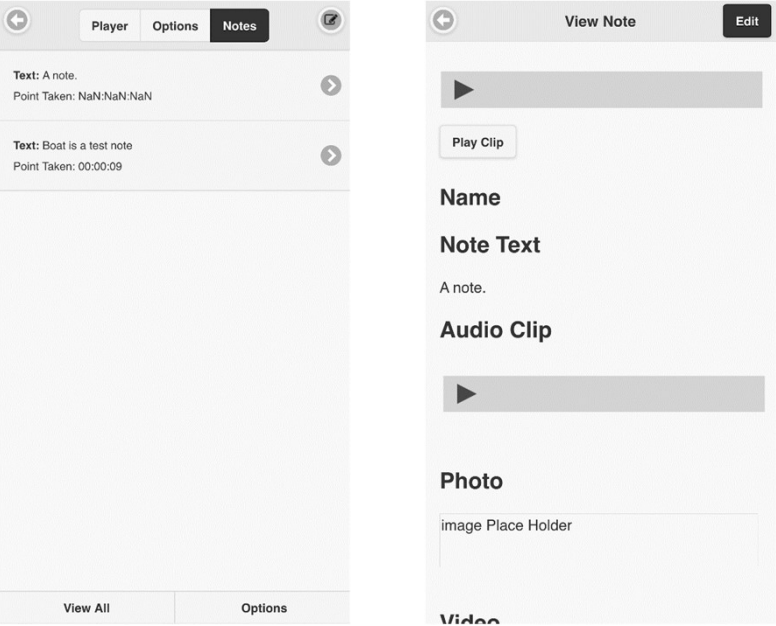


Figure 12: View all notes screen (left) View note screen (right)

Defining the print disabled

- Centre for Equitable Library Access (CELA) defines print disability as follows: a learning, physical or visual disability that prevents a person from reading conventional print.
- Learning disability: An impairment relating to comprehension
- Physical disability: The inability to hold or manipulate a book
- Visual disability: Severe or total impairment of sight or the inability to focus or move one's eyes

Literature Review

- Categorized into
 - Digital talking books
 - Audio books
 - E-text
 - Gap
- From the review of the literature, we can see that there has been a lot of progress made to provide better access to print material for print disabled people. However, there is little research around how to support students trying to use audio created from printed material for study purposes. Regardless of whether it is, audio generated in real time or prerecorded audio in the form of audiobooks.
- To add to the literature in this area, this thesis set out to research a solution to help students take notes and annotate audio they were using to study.