Alison Wong, Brandyn Bayes, Christopher Chen, Danial Chowdhry CSE 440 Section C

Assignment 2f: Design Check-In

List of Tasks:

1 Tracking time spent reading Harry Potter

Charlie and a 12 year old boy whose parents have been trying to encourage him to read more. To do so, his parents have given him his older sister's collection of Harry Potter books. Charlie's parents want to be able to track how much their son reads, but knows he will not be diligent in recording his reading time. Additionally, his parents feel as though asking him to keep track of his reading habits would make Charlie less inclined to read more since he would view it as a chore rather than as entertainment. His parents have been trying to get him to read before going to bed, so they have been setting a lamp timer for Charlie to read for an hour before sleeping.

2 Find book recommendations based on reader's interest in Ender's Game

Sally just finished reading the Ender's Game series. She enjoyed the book so much that she wants to find books similar to it. Sally consults her friends, who also enjoyed Ender's Game. Phil, an avid reader, tells Sally that she should check out *A Hitchhiker's Guide to the Galaxy* by Douglas Adams because it also has an interesting space themed setting. Sally also consults Google and Amazon reviews to find other books in the Science Fiction genre that have high ratings. Eventually, Sally decides that she will take Phil's recommendation and proceeds to buy and read *A Hitchhiker's Guide to the Galaxy* from her local bookstore.

3 Putting your iPhone on "Do Not Disturb" to minimize distractions while reading

Tyrone normally puts his phone on "Do Not Disturb" mode before his reading session, in order for him to have effective reading session. One night however, he forgets to put his switch his phone while reading Ender's Game. His phone suddenly makes a sound - a new Facebook Messenger notification. He places his book face down on the table and glances over his phone to see the the message and briefly texts his friend for five minutes. When he picks up his book again, he realized that he forgot which line he was on, and has lost his train of thought. Tyrone decides to start over from the beginning of the page, hoping that re-reading it will allow him to remember what was happening in the story.

4 Trying to read a certain amount of books on a particular subject within a limited timeframe

Juanita is trying to learn more about how to manage her personal finances. She sets a personal goal of reading two personal finance books in the next month. She decides she will devote the first half of the month to reading her first book, *Suze Orman's Financial Guidebook* by Suze Orman. She then looks at the total number of pages and finds the book is 192 pages and decides she will read the

same number of pages each day for the first number of pages for the first 15 days of the month. She decides she will read at least 13 pages a day. For the last half of the month, she decides she will read *Rich Dad Poor Dad* by Robert Kiyosaki. The book is 207 pages. For the remaining 15 days of the month, she decides she must read at least 14 pages per day. After sticking to her schedule, by the end of the month Juanita has completed both of her book and has gained more information on how to achieve fiscal responsibility.

5 Share with friends on Facebook after finishing the Divergent series to complain about the ending

Cersei recently finished reading the Divergent series. After being upset at the ending of the last book, with them having killed off the main character (she doesn't like it when main characters die and you are left with an abrupt ending) so she wants to discuss it online with her friends through Facebook. To this end, Cersei also wants to include links to the books themselves for anyone who has not read them, as well as thoughts by other individuals who have read the books for further discussion. This will help to give her a group of people that she is familiar with so that they can discuss the content.

6 Showing articles/news/other media relating to the Hunger Games series and the success that the movies were

Kimberly just finished "The Hunger Games", the first book of the Hunger Games series. She enjoyed it so much that she did a Google search to check out the author's Wikipedia page and if there are any sequels to the novel. Not only did she realize that there the Hunger Games series is a trilogy, but also that a movie adaptation of the first novel recently made a box office hit, with the sequels currently in production. In addition, people often use the term "Hunger Games" to describe contexts in real life outside of the story. Understanding how successful the storyline was, she becomes determined with finishing the rest of the novels before hitting the movie theater.

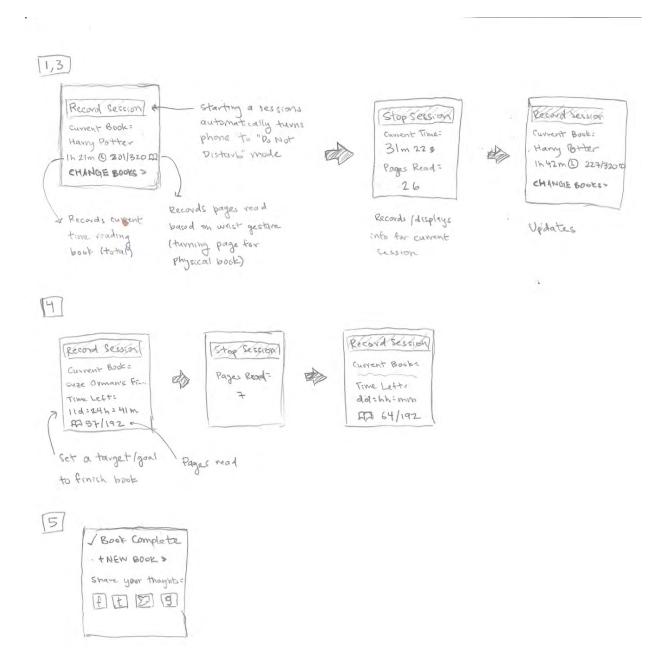
Designs:

Book Wearable

A wearable device (Apple watch in our case) for reading is something that would be simple and not be too intrusive on the user. Like mobile apps, it provides different technology features but at the same time, has less functionality. An user is able to interact with the wearable during his reading session easily through his wrist without having to look around for his phone and be distracted by other notifications from it. The watch's interaction allows for the user to perform a few tasks to help them understand their reading sessions. Since most watches complement phones, it is possible for it to send and control data stored on the phone.

- 1. The first interface lists the book being read in the <u>reading session</u>, and switches the phone to "Do Not Disturb" mode, then starts the session.
- 2. The watch keeps track of number of pages read using hand gestures

- 3. Stopping the reading session will allow it to update where the user is at in the book, along with the amount of time read.
- 4. Targets can also be set so the user can know how many pages read and how long he has left to finish a certain number of <u>pages in his timeframe</u>.
- 5. When the book is finished, he can <u>share his thoughts on social media</u> directly through the watch.



Mobile App

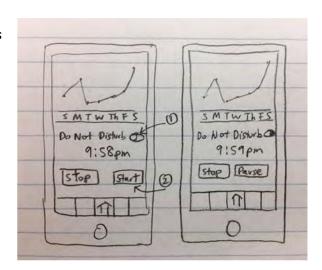
Even though many participants during our interviews noted that cell phone are a distraction, a mobile app allows for the most flexible tracking and sharing functionality. It can present many different tasks, and smartphones are something that people will bring along with them everywhere they go. Our mobile app to track the time spent reading and also enable "Do Not Disturb" mode, provide news and media recommendations, share books with your friends, and reading a goal number of books within a period of time.

Tracking time & Do Not Disturb

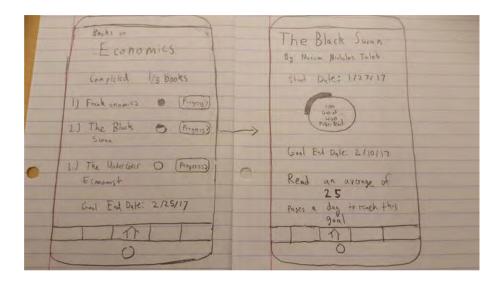
- 1. User can see how much he has read this week with the graph at the top.
- 2. By pressing the switch (1), the user can switch the phone to "Do Not Disturb" mode
- 3. User can start his reading session using the button "start" below (2).
- 4. User can stop or pause his reading session using the buttons below (2). The start button transitions to "pause" once it is pressed.
- 5. User can switch "Do Not Disturb" mode off with the same button.

Showing news and media relating to reading material

- 1. User can check all recent news articles and media reports about the book he is currently reading.
- 2. User can click an interesting article he finds, one for example is a news article regarding the newest movie created based on the book that earned over \$200M (1).
- 3. After reading the news article, the user notices a line that conveniently links to the sequel of the book (2).
- 4. The user can click the link to bring him to a third page explaining (without spoilers) what the sequel is about and a link to buy it.







Trying to read a certain number of books within a certain timeframe

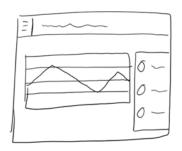
- 1. User can select a subject in which they want to learn more about and select books related to that subject. User can also specify the date by which they want to complete reading that list of books. The circles next to book titles illustrate how much of the book is read thus far based on information the user has specified for the book. The more filled in, the more of the book is complete.
- 2. For each individual book, users can click the progress button listed next to that book. Here the user can specify the length of the book, the desired completion date and the number of pages they read that day. The screen demonstrates how much of the book the user has left to read as well as the average number of pages they need to read per day to reach their completion goal.

Share with friends:

- User can add friends on the application by checking their contact list and adding contacts who also use the application, or add by username or handle
- 2. User can view a feed of comments and activities that friends have completed, such as reactions to books or announcement of a book's completion. User can also leave comments for other users to see
- 3. User can like other people's activities or comment on them.



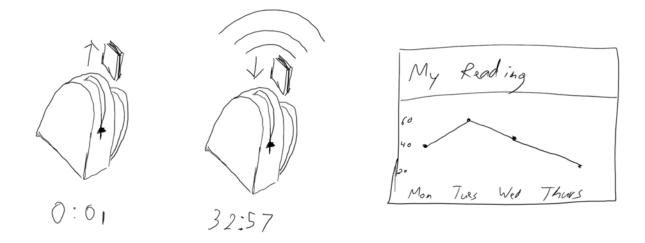






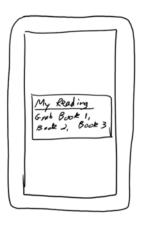
Smart Book Bag

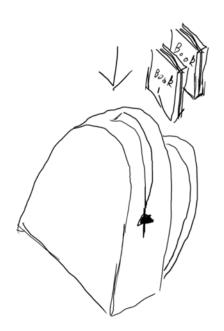
The smart book bag is designed around being able to seamlessly collect information about the books that a person carries, as well as for how long they read. It is paired with a mobile app to deliver notifications and reminders about grabbing books, and a web app for deeper communication with friends. The smart book bag is able to detect the books that it contains, is able to communicate wirelessly to convey how long a person reads for, and is able to automatically mute the person's phone so as to limit potentially distracting notifications.



Time Spent Reading

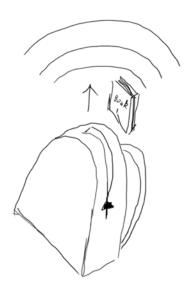
- 1. When a book is removed from the bag, a timer immediately starts counting.
- 2. When a book is returned to the bag, the timer is stopped
- 3. The bag will then automatically transmit the reading time to the online portal, where the user can see their reading history



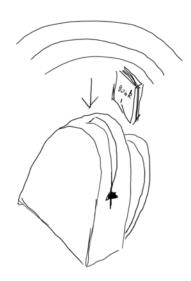


Book Recommendations

- 1. The online portal will help the user to find new books, which they can order online.
- 2. Before leaving the house, the app will remind the user of any books that are not already in their bags.
- 3. The user will then be expected to put these books in their bag for later reading







Do Not Disturb

- 1. When a book is removed from the smart book bag, it automatically communicates with the owner's phone, enabling do not disturb.
- 2. When the book is returned to the bag, the do not disturb setting is disabled.

Sharing with Friends

- 1. All reading that is done is automatically uploaded to the online portal.
- 2. The owner can share with friends what books they are reading, as well as how much they are reading.
- 3. The person can also look at books that others are reading, and then add them to their to read list.

