Kade Estelle ARTS 486 Project 1: As We May Rethink Functional Specification January 31, 2020

# The Memex

### Functional Specification

The function of this project is to design a machine one could use to store and review their records in a fast and efficient manner. My design will be directly inspired by the hypothetical "Memex" system described by Vannevar Bush in thee article "As We May Think" published in The Atlantic Monthly in 1945. My take on Bush's vision will stay as true as possible to the original goals and functions of the Memex while utilizing some more modern design elements. In addition to my functional specification I will be providing a user flow diagram, an illustration of the device and a magazine ad design. I imagine that such a device would cost between \$1,000 — 2,000 dollars in today's consumer market.

The Memex is designed to replace the user's typical desk setup with a mechanized private file. The device would use associative indexing mimicking the way the human mind works in an effort to increase the speed and efficiency in which information is stored and retrieved. The device would utilize microfilm to store a vast library of information. Microfilm could be purchased to add more content to your device. The user would refer to a code book for a file's number, simply typing the code on the keypad would pull up the corresponding document. The Memex would utilize speech synthesis so the user could record information quickly simply by talking to their machine.

To create a file the user could speak into the machine, write using a stylus or type using a keyboard. The file would then be stored on microfilm. A user can browse their files using a code book, codes could be saved into memory to be accessed faster using a lever. The user could then press a button to jump back to the first document. To store a photo in the Memex the user could place it on top the translucent scanner to capture the image and store it onto microfilm.

#### **Technologies Used**

- microfilm
- speech synthesis
- associative indexing
- projection screens
- photo scanner

#### **Physical Description**

- size of a desk
- slanted clear display
- levers and keys
- stylus

## Non-functional Requirements

- attractive, modern design
- controls that are satisfying to use
- ergonomic stylus
- High quality code book