Electronic Cantus Requirements

The user should be able to…

1. Navigate to any song by number, title, author, composer, or tune via a single search box.
2. View the sheet music for the selected song.
3. Select one or more of the following voices to play aloud:
   1. Instrumental melody only
   2. Instrumental 4-part harmony
   3. Vocal soprano, alto, tenor, and/or bass
4. View the sheet music while playing voice(s) aloud.
5. Start/pause/resume audio without obscuring the sheet music.
6. Turn the page for multi-page songs, either manually or automatically in sync with audio.
7. Browse song list:
   1. Ordered by number.
   2. Ordered alphabetically by title.
   3. Grouped by author, composer, tune, or category (e.g. supplication, communion, etc).
8. View sheet music in portrait or landscape.
   1. Landscape could show single sheet (scrollable large print) or multiple sheets.
9. Play the same song simultaneously on multiple devices.
   1. Each device may have the same or different voices (daddy sang bass, mamma sang alto).
   2. Song start must be synchronized so that the devices play together harmoniously.
   3. Ideally without requiring a WiFi network (blue tooth).
10. Create one or more lists of favorite songs.
    1. A simple bookmark would be the easiest way to put songs into a single favorites list.
    2. Name each song list if multiple lists are allowed (e.g. one per family member).
    3. Favorites should be shared across multiple devices within a family.
11. Play a sequence of songs in specified voice(s) for background music during the day.
    1. Sequence drawn from a favorites list or any browse grouping (e.g. author, category).
12. Operate without an internet connection.
    1. Worship should not depend on Internet connectivity.
    2. Enables worship outdoors (e.g. park, campfire, hike).
13. View Sunday worship song lists for:
    1. The upcoming worship service.
    2. Past worship services.
14. Share a favorite song with a friend via email (sheet music and/or audio).

# Data

1. Song (csv/xml)
   1. Title
   2. Cantus Page Number
   3. Sheet Music (ref)
   4. Vocals (ref)
      1. Soprano
      2. Alto
      3. Tenor
      4. Bass
      5. Combined
   5. Piano Accompaniment (ref)
   6. MIDI Melody (ref)
2. Sheet Music (pdf)
3. Vocals (mp3)
4. Piano Accompaniment (mp3)
5. MIDI Melody (midi/mp3)