

## Title

Links at: <http://rkwilley.com/presentations>

## An optimistic view

### Robots

As blue-collar labor is replaced by technical and professional work, and artificial intelligence and robots take over manufacturing and middle management, many individuals will find themselves with no clearly defined social role.

### Welfare

Assuming that our masters see it in their best interest to provide a basic guaranteed income, the 60 million American amateur musicians will have more time for leisure activities

As we move from a services-based economy to one that provides experiences and transformation, one avenue the music industry could take is to serve amateur music makers who want to play music themselves instead of being entertained by professionals.

Support customers with lessons, music, playalong tracks  
Provide transformational experiences – education, instrument playing, social music making, memorable events, social interaction

### Spaceman

Music will also be a relaxing way to pass the time as we become an interplanetary species and spend more time in confined spaces

## Singalong groups

### Demographics

Back on planet earth, groups of amateurs have formed singalong groups. Members are typically in the 50-70 age range. Many don't read music, but can follow along with a leader singing songs from their youth.

### Groups of 10-50

Around the world, groups of 10-50 members meet once to four times a month

### Motivation

Besides being fun, members have a variety of motivations

### Nostalgia

Many songs are from the 1950s – '70s

Daniel Pink reports many benefits to group singing: "Nostalgia delivers two ingredients essential to well-being: a sense of meaning and a connection to others...can foster positive mood, protect against anxiety and stress...boost creativity...heighten optimism, deepen empathy...alleviate boredom...increase physiological feelings of comfort and warmth...Nostalgia (makes) people more tolerant of cold and perceive the temperature to be higher...It is a bittersweet but predominantly positive and fundamentally

social emotion...offers a portal to who we really are. It makes the present meaningful.”—Daniel Pink, *When: The Scientific Secrets of Perfect Timing*.  
socializing – connected to a group. Again, according to Pink emotional benefits:

- Enhances one’s sense of purpose and meaning
- Members synchronize their heart beats
- Strengthen feeling of togetherness and sense of purpose,
- Increases sensitivity to others, and feelings of social well-being

Stimulation

Brain picture - neuroplasticity

- cognitive benefits from learning a new skill

Health benefits

- Increases the production of immunoglobulin and immune response
- Boosts positive mood
- Lifts self-esteem
- Reduces feelings of stress and symptoms of depression, Parkinson’s and lung disease

Increases life expectancy

Stimulating

- Neoplasticity – emotional, cognitive, and physical benefits from making music and learning a new skill

Instrumentation

Ukulele

relatively inexpensive and easy to learn

Fun instrument

Doesn’t drown out voices

Mistakes masked in a group

Many people are intimidated by the scrubbed voices they hear on recordings and believe that they can’t sing. Singalong groups help bring back individual music making and empower people to use their voices, whether they sound like recordings or not

Other instruments (or none) accepted

Guitar, bass, violin, harmonica

Meet 1-4X a month, free. Yearly festivals.

Make new friends.

Community benefits – groups play at all kinds of events supporting non-profits

Belonging to a group promotes accountability to practice, so

peoples' skills improve over time.

## About

Santa Cruz Ukulele Club - Santa Cruz, CA founded in 2002. Varied size of gatherings, almost every day of the week. Greatest number of ukulele events per capita. "The first rule of Ukulele Club of Santa Cruz is, "there are no rules," and that rule has served the club well.

There's no formality, no dues, no by-laws, no roster, you just show up with your ukulele at any of the places ukulele players gather in Santa Cruz, join in the fun, and you are a member."

High Desert Sand Fleas Ukulele Club – Albuquerque, New Mexico. "We are a bi-monthly gathering of uke minded people who's family and friends really got sick of us playing around the house. We mean no harm...Each club meeting reeks of anarchy. Put a bunch of ukulele players in a room; lock the door and the last one still singing wins."

Stretford – Manchester, UK. "Stretford Uke is a group of ukulele players of all ages and abilities."

Brisbane Ukulele Musicians Society (BUMS) since 2007 " started as a small group of enthusiasts helping each other to learn to play ukulele."

Ukulele Orchestra of Toronto "is a learning ensemble led that includes beginning players as well as those with many years of playing experience. We play some music by ear and some using written music notation. Music is arranged with easier and harder parts to accommodate the range of experience in the group.

The JustUke Strummers – Yishun, Singapore. "We are a group of fun-loving ukulele enthusiasts with the spirit of sharing the joy of singing and

strumming the ukuleles. We gather weekly to enjoy our happy moment and sharpen our singing and strumming techniques with new songs.”

Nihon Ukulele Association – Tokyo, Japan. Established in 1959. Experienced members provide lectures and workshops, followed by a party. “We enjoy playing Ukulele, Steel Guitar, dancing Hula and singing songs.”

Ukulele Underground Club, 2010 – Philippines. Started by a bunch of college friends and into a supergroup consisting of Filipino ukulele musicians of all ages and walks of life. This group boasts a growing number of 3,000 members.

Pictures from around the world

Where songs come from

Books

Santa Cruz group was threatened in 2018 to stop distributing copies of their books

Each page in a different style

Websites

Free websites (labor of love) – study in advance, pool to pull material from that is then shared before sessions

Websites

Show examples

Jim’s Songbook – download Chordpro files  
(note: 2936 in collection) Dr. Uke has playalong track in the same key as the chart

Maring-Hunt library picture

Most efficient if setlist set in advance reduces conversation and maximizes playing time when groups meet

Someone in the hierarchy creates a setlist, which is then shared with members by email. The two most popular file formats for the song sheets are PDF and Chordpro

Art to making one

Variety

Flow

Mine: pedagogical

Start out with 1,2,3 chords

Gradual increase in complexity

Show new chords before each song

### Projections

San Jose, CA projects song sheets on a screen so no books are needed

Not every group has a projector or happens in a place that is conducive to it

### PDF

There are many song lyrics on the internet in PDF format. The problem with PDF files is that they don't adapt to different size screens. If you zoom in on a small screen, bits on the side and bottom go out of range.

### Chordpro

Many .pro files – common file format, editors, user base

Created in 1992 by Martin Leclerc and Mario Dorion for the Chord program

### God Only Knows – split screen

There are a number of programs that can create, edit, and display Chordpro files.

The songbook program is an editor that makes it easy to create Chordpro. You work on the right side and enter in tags between square brackets to indicate the title, composer's name, and on which words the chords change. On the left side you see how it will appear when the file is saved as a PDF or displayed by another program.

Not used

Show one of mine for an example

Meta-data Directive Marks in { }  
Title, subtitle, artist, composer, lyricist, copyright, album, year, key, time, tempo, duration, capo, meta

Environment directives: chorus, start\_of\_chorus, end\_of\_chorus, chorus, start\_of\_verse, end\_of\_verse, bridge

Directives: chord

{chord: name }, i.e. {chord: am)



Some change output, others just  
for keeping track of meta-data  
# comments

Any text editor can create them  
editor/viewers

Show Songbook editor –  
transposes, autoscroll, playlists  
[Songsheet Generator](#)

[ChordPro Buddy](#) – allows  
transposing

Electronic devices

Electronic forScore (DO I  
HAVE VERSION 10.2 ?)

elegant and powerful – Apple  
only

works with cloud storage  
can open PDFs or compiled  
setlist

Metadata

Tag composer, genre, rating,  
difficulty, time, duration, key,  
tags, and labels

hands free can operate from  
Bluetooth foot pedal

Bluetooth page turners from  
companies

like [PageFlip](#), [AirTurn](#),

and [IKMultimedia](#) make page  
turn pauses a thing of the  
past. Set one on the ground  
next to you and turn pages  
with foot pedals.

Half-page turns

If device has Apple's

TrueDepth camera system

you can use facial gestures to turn pages (turn head, move lips to left or right)  
Copyright: Content Providers  
A great sheet music reader needs great content, so we've teamed up with digital sheet music retailers [Musicnotes](#), [Noteflight](#), and [Virtual Sheet Music](#) to give you instant access to your purchases right from within our app. Digital sheet music from these content providers is digitally sourced so there's no tradeoff between quality and resolution. They're orders of magnitude smaller than image-based files, saving you storage space and keeping your device from working overtime. Best of all, they're fully licensed so you can avoid legal gray areas and support the people behind each song. Use forScore to download your purchases as standard PDF files. No more crooked scans or missing pages, just purely digital content the way it was meant to be used: free from unnecessary restrictions or awkward limitations. It's the high-quality sheet music you deserve and a best-in-class music reading experience you'll love. Groups like variety, play 20-30 songs. Would be prohibitive to purchase

There aren't just lyric sheets  
to purchase

Better to license

Scan

audio track sync

"cue" (sold separately, works

in conjunction with version

6.1 or newer) allows for 15

Mac (no charge, requires

10.15) or iOS devices to be

synced, even if they don't

have forScore installed. It

works for files that they have

in common. They have to

have on their device. Follows

leader's choice of song and

progress during a song

Dual Page mode lets you

display two full-sized pages

simultaneously, if you have

two devices. Two pages get

turned at a time.

2020, moving customers to

Fender Play, which includes

lessons - \$7.50/mo for year +

discounts on

guitars/amps/gear,

\$9.99/mo

Guitar, piano, ukulele

Partners with Sony/ATV

Music Publishing, Warner

Chappell Music, Kobalt, and

BMG

Practice, play along, perform

Files can include metadata to make it easier to  
search for songs with different attributes.

Zoomed out – when it is rendered in any of the viewer  
programs you see the lyrics and chord symbols lined up where  
they change.

Zoomed in

If the size of the window changes when it rendered by  
the display program, the text will be redrawn and the  
lines will wrap around

forScore is a popular viewing program for iOS devices.



It shows you a list of songs in your library  
And displays songs in pdf format  
Songs can be tagged with metadata  
And organized into setlists  
Setlists can be exported as a combined PDF or a forScore file. Groups sometimes mail both formats to their members in advance of sessions.  
Members' iOS devices can be synchronized with the leader. The system works well if you have an iPad, but when viewing on a phone it is hard to read, and Android users are left out.

#### Problems

There are several problems with the way that singalong groups share lyrics. Some are reminiscent of those that people had with .mp3 files before the dawn of the iTunes store. It can be time consuming to locate scores, they may not be in the key that you want, and there may be errors in the lyrics, chord symbols, or arrangement. People don't seem too bothered with this.

Not everyone has or can afford an iPad. The scores are too small to read without scrolling on phones, which are the device that everyone has.

Not an easy and affordable way for people to share lyrics and chords when playing with others.

Unauthorized – not authoritative

Sites have versions with mistakes in chord symbols, lyrics, and form, and no choice of key to accommodate different vocal ranges. Do not provide consistent example of recording that corresponds to arrangement (one guy who does)

One site allows users to add corrections, like Wikipedia

Free sites don't compensate lyricists/publishers

There is no good cross platform solution, not everyone has an iOS device

Royalties are not being paid to publishers and lyricists. IT would be too expensive to buy all the lyrics legally, and they are presently not available in the format that they need for singalong sessions.

Members are not going to buy 20-30 new pieces of sheet music each week and then only play the songs one time. They don't need the melodies and the full score would require too many page turns for hands-free viewing. Instead they get the lyric sheets from websites and share them via email.

doesn't address royalty issue, easy to circumvent  
need to make it easy and affordable, like Steve Jobs did with iTunes store for iPod, turned the tide on filesharing  
Apple and Fender were partnering, but the system was for people playing by themselves, not synchronizing 2 or more musicians

## Proposal

Now I'd like to report on the progress some students and I have made for developing an alternative that addresses the problems I just described  
It is designed to work on Android or iPhones, or any internet-connected device

Our goals include to allow leaders to create setlists using songs from our library or to link to lyrics found in the wild

Leaders who pay a subscription to use the webapp will be able to create and lead sessions, which followers can join for free. The app will report how many times the lyrics for a song have been displayed.

Money from subscriptions will fund a pool from which publishers will be paid, in a similar way to what PROs do for songs and Harry Fox does for mechanical licenses, in proportion to the number of times their lyrics have been viewed.

## Demo

After a leader has created a session, they can go live, and advance the scrolling of songs with a Bluetooth foot pedal

Followers can join active sessions, after which their screens are synchronized with the scrolling on the leader's device. PLAY

Future plans. This was an ambitious project for a capstone project developed by 4 seniors in the computer science department. COVID isolation last spring prevented them from making it fully operational.

In the future, we hope that Hal Leonard will publish an API that allows third party developers to search their song database. We hope to grow a library of authoritative lyric sheets and index it with publisher information. We will then provide Hal Leonard a breakdown of how many times each song has been displayed and have them send each publisher their share from the pool of money collected from subscriptions. Hal Leonard already has many deals in place with publishers and is in the best position to add this revenue stream.

Income goes into pool to pay publishers

A new Harry Fox / PRO type organization set up to monitor frequency that songs were played and refer to a common title base

HL API search database

Pay HL along with accounting

HL makes agreement with publisher, takes fee from agency, distributes to publishers  
Deals with master rights holders to ensure chords are accurate to the actual music performed by the artists

App records how many times a song is displayed

Calculate split

Send payments to Hal Leonard, they make agreements with publishers, pay them individually

Access to search API

## Reference

### ChordPro

Editor/Viewers

[Songsheet Generator](#)

[Songbook Pro](#)

Song collections

Jim's Songbook -

<https://ozbcoz.com/Songs/cp/index.php?instr=soprano>

Autoscroll, YouTube recordings

[links](#), info on footswitches

Song sheet sites

[Dr. Uke](#) – going on 3,000 songs, with custom playalong recordings

Songbooks

<https://uketasticblog.wordpress.com/songbooks/>

<https://ukelelegroup.jimdofree.com/songbooks/>

San Jose Ukulele Club [songbook](#)

Clubs

[Top 21 clubs](#), according to ukulelemusicinfo.com

[More comprehensive list](#)

[The Ukulele Club of Santa Cruz](#)

Author's ukulele resource: <http://tinyurl.com/munciesings>

Joshua Waldman, [How to Start and Grow an Ukulele Group: An Easy Plan for Spreading Aloha in Your Town](#). CreateSpace Independent Publishing Platform, 2017.

## Bibliography

Chorpro Specification: <https://www.chordpro.org/>

Benefits of Singing Together

It's better together: The psychological benefits of singing in a choir

[Nick Alan Joseph Stewart](#)

[Search Google Scholar](#)  
[Adam Jonathan Lonsdale](#)

<https://journals.sagepub.com/doi/abs/10.1177/0305735615624976>

Daniel Pink, When: The Scientific Secrets of Perfect Timing.