Mark Book

A minimal markup language implementation for songbooks

# The team

Coming from an engineering background, it was hard to find more people interested in both music and programming at such short notice, so I partnered with my advisor, a PhD in Production Engineering who loves to code both professionally and as a hobby.

**Carlos Henrique Tarjano Santos,** Universidade Federal Fluminense, MSc in Production Engineering, 2018 - I’m currently a PhD candidate in production engineering developing research about applications of artificial intelligence in sound synthesis, including voice and traditional musical instruments emulation.

**Mentors:**

* Valdecy Pereira. Being my PhD advisor, he provided important insight about programming languages, possible programming patterns and the general freedom to explore areas not classically related to production engineering.

# The Concept

Many people play the guitar, be it acoustic or electric. While some of them go on to transform the hobby into something more, even professionalizing eventually, the majority are hobbyists, that play to relieve some stress, entertain friends, or even make their brain sharper. For this last group, it is not uncommon to forget some of the songs you learned along the way. Maybe you can even pull off the chorus, but struggle to remember how the song begins, or the chords that make that exoteric bridge.

Mark Book provides the amateur guitarist with the ability to carry his songbook with him all the time, be it on the cellphone, desktop or web. Those a little older probably had contact with magazines full of chords and lyrics. Nowadays websites filled that niche, and you can refresh your memory by searching for a tab.

But more often than not, the tabs in those places are a little off, and the presentation is not as compact as it could be. Mark Book is an app that provides you with a simple and efficient way to carry your songbooks with you all the time. It uses a very simple markup language, inspired by markdown, to encode your songs in a human-readable, open format, and renders this source file beautifully and compactly, with chord diagrams above the chords and other conveniences.

## Target Audience or Market:

We designed and built Mark Book with the amateur guitarist in mind, but it certainly can be used by professional artists, perhaps when doing a voice and guitar presentation. We kept the user interface and the options minimal, to make usage simple and intuitive. Although at the moment the command descriptions are in English, the interface is mostly visual, to be accessible to people with little familiarity with the language.

### Personas

One archetypal user would be the heart of the party type of guy, that loves to carry his acoustic guitar when gathering with his friends. There are some of those who still carry an old school songbook in the pocket of his acoustic guitar case, but not our guy. This Mark Booker just fires his cellphone and is ready to play even the songs he doesn’t have played in years. He can even share his songbook with his friends – even if they don’t use Mark book, they can still read and understand the format in virtually any device that is able to read a .txt file.

## Feedback

We showed the app to some musicians, and they noted that the usage wasn’t immediately obvious. From their feedback, we improved the default text, which serves as a readme, to provide quick usage instructions.

# How it works:

First and foremost, we used the VS Code IDE to develop the app. Its amazing Flutter support literally made the project possible, since we had a window of a couple of weeks before returning to the PhD research. The code is also versioned using GitHub, which enables constant feedback from my advisor.

We use also use Microsoft’s Azure hosting to the web app. This stack allowed us to bring the same user interface and experience to all versions of the app. Using Mark Book directly in the browser, installed in your Windows system or in an Android phone should provide the same experience.

## Core Technologies

The Flutter + VS Code combo are at the heart of the app, as they enable a single codebase to be used in the development of all versions of the app.

# The Business Plan:

The general idea is to gauge the public interest and establish, and possibly refine, the markup format. Once we get in a universally accepted format, maybe used even in other implementations, we expect to provide could syncing via a small monthly subscription fee. Basic functionality is intended to be free to use at all times.

## Competition:

There aren’t many direct competitors to Mark Book. This was the primary motivation for the development of the app. Today, if one wants to make and maintain a digital songbook, the best approach is to use fully-fledged music notation apps such as Guitar Pro, Sibelius and MuseScore. For chords and lyrics songbooks, those apps are overkill imposing a steep learning curve.

## Business Model

At this first stage, the app is free, and we expect to receive the resources necessary to cover server costs for the web version of the app from donations and, failing that, advertisements. After a critical mass of adoption, and refinements to the UX based on early users’ feedback, we intend to implement Syncing capabilities between all versions of the app, at a small subscription fee. We expect this fee to be around a few dollars per month, since the volume of data isn’t expected to be substantial. Being primarily a text format, even the biggest songbooks will be encoded in a few Kbytes.

# Additional Information:

Web app:

<https://markbookapp.z13.web.core.windows.net/>

Windows installer and general info:

<https://github.com/tesserato/Mark-Book>

Play store link:

<https://play.google.com/store/apps/details?id=mark.book>