

# REHORSE

an app for bands

Jos van den Oever







Piano piece

Conductor piece



# THE PAPER ERA

- Large archive with all songs
- Heavy binders with sheet music
- Musicians only have their own score
- Time lost switching between songs
- Distributing new songs takes long
- Time lost putting songs in order for performances
- Coordinate transfer of binder to substitute player
- Sheet music become messy from all the annotations and corrections







# THE DIGITAL ERA

- Individuals buy tablets
- Mostly two operating systems (80/20)
- Proprietary apps for viewing sheet music
- Sheet music on cloud drive
- Annotations stored on devices

# DEPENDENCY ON BIG TECH

- The most used tablets are closed
- Apps need to be approved
- App store revenue leads to decent apps initially
- Danger of lock-in and enshittification
- Feels bad to use

# THE THIRD DEVICE

1) Laptop / Desktop

GNU/Linux

2) Mobile phone

/e/OS

3) Tablet

?



*As recorded by the Stan Kenton Orchestra*

*As recorded by the Stan Kenton Orchestra*

Trombone 3

## STAGEBAND WORKSHOP

Composed and arranged by Willie Maiden

[illegible]

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Printed with Permission by Sierra Music Publications, Liberty Lake, WA 99019.  
REPRODUCTION OF THIS MUSIC IS STRICTLY PROHIBITED BY LAW.

Handwritten musical notation for the second system, featuring a treble clef and a key signature of one sharp (F#). The notation includes various musical symbols such as notes, rests, and dynamic markings (e.g.,  $ff$ ,  $sf$ ,  $f$ ,  $sfz$ ). The system concludes with a double bar line and the instruction "(opt. repeat)".



# THE THIRD DEVICE

1) Laptop / Desktop

GNU/Linux

2) Mobile phone

/e/OS

3) Tablet

Laptop with touchscreen

2<sup>nd</sup> hand iPad

# A BETTER DIGITAL ERA

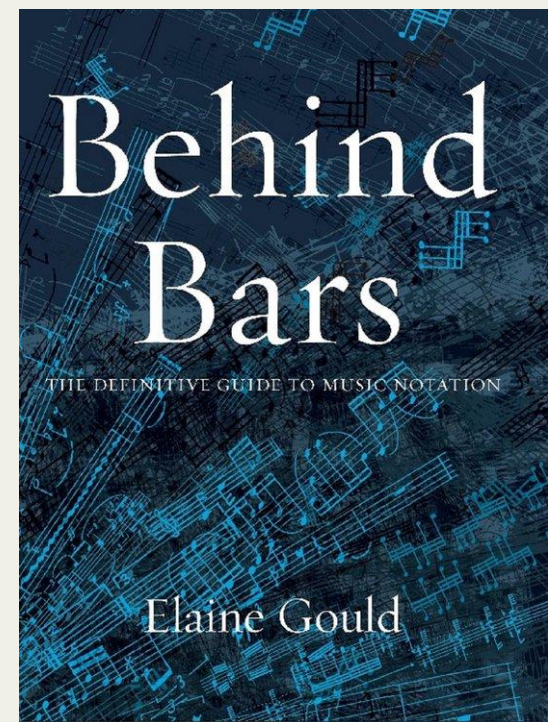
- Self-host Free Software
- Independent of operating system
- Shared notes and clever library

Let's write an app!



# PREHISTORY

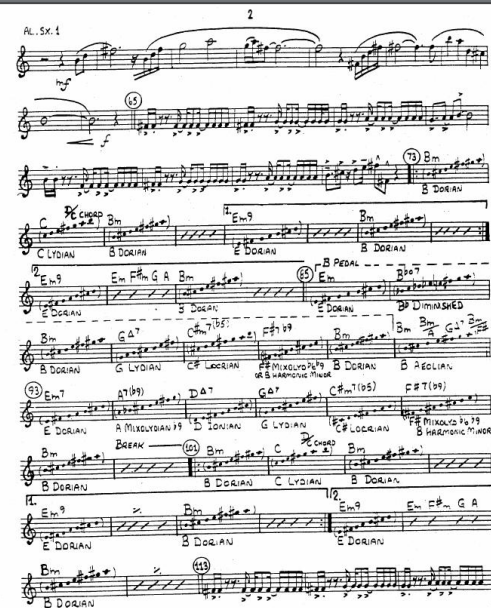
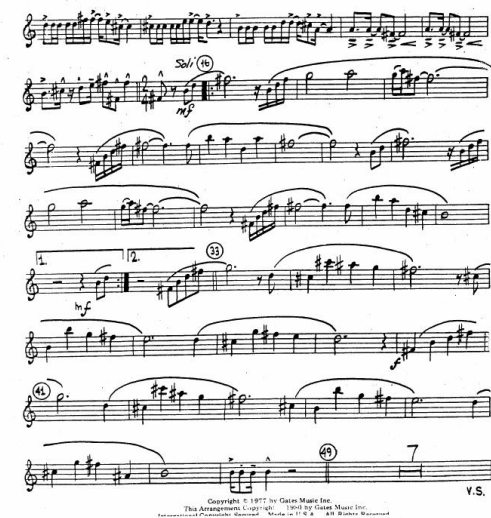
- App for Nokia N900
- Render music, listen to players, score the performance



676 pages

# PREHISTORY II

- Convert PDF files to PNG
- `<img/>`
- Vertical scrolling



# REHORSE REQUIREMENTS

- Rehearse with recordings
- Music Library for Band
  - Archive
  - Hand out
  - Share annotations
- Sheet music reader





# TECHNOLOGY

- Progressive Web App
- Typescript
- Vue
- pdf.js
- NodeJS
- The rest of the stack (thank you!)

# PROGRESSIVE WEB APP

- Web app with benefits
- Install on Android and iOS without app store
- Run full-screen on tablets
- Keep screen on
- Write once, run anywhere
- Local storage: works offline

# SERVER: NODEJS

- Typescript on client and server
- Storage: json, audio, pdf files
- Communication with HTTP and Websocket



# REHEARSE WITH RECORDINGS

- Reason to start an app
- Rehearsing with audio is annoying
- Whole piece at once
- Find the parts you want to study in the recording, play, rewind
- Rehorse makes it easier



Brussels Jazz Orchestra

Bigband Eighty-Nine

Fraggle Jazz

Overig



## Bigband Eighty-Nine

Agenda

Playlists

Arrangements

Recordings

## Recent pieces

### Today


14:47 — (Everybody's Waitin' for) The Man with the Bag –  
Trombone 3

14:47 — (You Make Me Feel Like) A Natural Woman –  
Trombone 3

### Earlier

## Recordings











Cancel

 Choose audio files...

uploading...

## Recordings



Add

-  06 Making Whoopee Walter Donaldson, Gus Kahn, arr Dave Wolpe – karinajazzsinger
-  88 Basie Street – Sammy Nestico – Tomasz Momot Orkiestra
-  A Foggy Day - Dave Wolpe - Twisted Swing Big Band
-  Afro Blue (gedeeltelijk) - Mongo Santamaria - arr. Michael Philip Mossman
-  Afro Blue - Mongo Santamaria - arr. Michael Philip Mossman - Borealis Big Band
-  After You've Gone
-  After You've Gone - Turner Layton - arr. Mark Taylor
-  Aggressive Shuffling – Tom Kubis
-  Agua de Beber - Antonio Carlos Jobim - Arr. Anita Kerr - Vocal Virus Project & Guus Tangelder Bigband
-  A Little Minor Booze (Stan Kenton) – arr. Willie Maiden

# REHEARSE WITH RECORDINGS

- One person sets the markers corresponding to the sheet music
- Everybody can use them

Reharse / bb89 / recordings [Log in](#)

  **Day By Day** Volume: 10 ▾ Tempo: 100% ▾  
**arranged by Mark Taylor –**  
**Hal Leonard Jazz Ensemble**

|       |   |    |    |     |     |     |
|-------|---|----|----|-----|-----|-----|
|       | 5 | 21 | 37 | 105 | 121 | 129 |
| begin | 5 | 21 | 37 | 105 | 121 | 129 |
| einde |   |    |    |     |     |     |



# MANAGE SHEET MUSIC

- Composition has different parts for all the players
- Each has to find their part in a collection of pdfs

# MANAGE SHEET MUSIC

- One person uploads the music
- Adjust pages
- Assigns pages to parts
- Watermarks added to each pdf
- Everybody download their parts from zip
- Or uses the embedded viewer

## Arrangements

Details

Add



**'Deed I Do** / composed by Fred Rose / arranged by Quincy Jones / words by Walter Hirsch



**'S Wonderful** / composed by George Gershwin / arranged by Dave Wolpe / words by Ira Gershwin



**(Everybody's Waitin' for) The Man with the Bag** / composed by Irving Taylor Dudley Brooks Hal Stanley / arranged by Rick Stitzel / words by Irving Taylor Dudley Brooks Hal Stanley



**(You Make Me Feel Like) A Natural Woman** / composed by Gerry Goffin Carole King Jerry Wexler / arranged by Paul Murtha / words by Gerry Goffin Carole King Jerry Wexler



**88 Basie Street** / composed by Sammy Nestico



**A Foggy Day** / composed by George Gershwin / arranged by Dave Wolpe / words by Ira Gershwin



**A Little Minor Booze** / composed by Willie Maiden / arranged by Willie Maiden



**A Minor Affair** / composed by Sammy Nestico / arranged by Sammy Nestico

## (You Make Me Feel Like) A Natural Woman

Edit

composed by Gerry Goffin Carole King Jerry Wexler

arranged by Paul Murtha

words by Gerry Goffin Carole King Jerry Wexler



Trombone 3



Trombone 1



Trombone 2



Bass trombone



A Natural Woman - Carole King - arr. Paul Murtha

## Edit arrangement

Save

Cancel

(You Make Me Feel Like) A Natural Woman

Gerry Goffin ✕

Carole King ✕

Jerry Wexler ✕

Paul Murtha ✕

Gerry Goffin ✕

Carole King ✕

Jerry Wexler ✕

Version

A Natural Woman - Carole King - arr. Paul Murtha ✕

Choose pdf files...

Upload

(YOU MAKE ME FEEL LIKE)  
**A NATURAL WOMAN**

ALTO SAX I

Words and music by GERRY GOFFIN,  
CAROLE KING and JERRY WEXLER  
Arranged by PAUL MURTHA

Conductor

BB89 A natural woman.p ✓

0° ✓

2

Choose pdf files...

Upload

(YOU MAKE ME FEEL LIKE)  
**A NATURAL WOMAN**

ALTO SAX I

Words and music by GERRY GOFFIN,  
CAROLE KING and JERRY WEXLER  
Arranged by PAUL MURTHA

Copyright © 1971 by G. K. Music, Inc.  
All rights reserved. No part of this score may be reproduced without permission in writing from G. K. Music, Inc.  
GK1010000  
(You Make Me Feel Like) A Natural Woman - 1

3 copy sold by Easemusic

YouTube.com  
Search: BB89L02L02

Conductor

BB89 A natural woman.p ✓

0° ✓

2

14

Female vocals

BB89 A natural woman.p ✓

0° ✓

15

17

Alto saxophone 1

BB89 A natural woman.p ✓

0° ✓

18

19

## Concerts

Add

zondag 7 december 2025 om 11:30

zaterdag 20 september 2025 om 19:30

maandag 21 april 2025 om 12:00

zondag 13 april 2025 om 12:45

dinsdag 3 december 2024 om 10:00

zondag 3 november 2024 om 11:30

zondag 1 september 2024 om 15:00

vrijdag 22 december 2023 om 20:00

vrijdag 3 november 2023 om 20:00

zondag 10 september 2023 om 15:00

vrijdag 23 juni 2023 om 20:30

## Rehearsals

Add

## zaterdag 20 september 2025

Message

Edit

Start 19:30

End 22:00

Location Theater De Voorveghter  
Hardenberg

Remarks Vechtdal Jazz

## Playlist

Download ▾



Prime Time

Trombone 3  
9 files

Crazy Little Thing Called Love

Trombone 1  
9 files

Just Friends

Trombone 2  
9 files

Love for Sale

Bass trombone  
9 files

L-O-V-E



# USER MANAGEMENT

# READ AND ANNOTATE

- Render pdf with pdf.js
- Annotations on top with svg
- Use special music fonts (standardized)
- Vertical scrolling
- Works offline

# Prime Time

Edit

composed by Sammy Nestico

Trombone 3

Trombone 1

Trombone 2

Bass trombone

Count Basie - Prime Time – johnnystaccata

Prime Time - 2

BB89



Play on queue

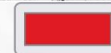
Trombone III

dividual notes

Metronome marks

Octaves

Repeats



Font size:

- 11 +

Play on queue

☐ with background

|      |      |      |       |    |      |
|------|------|------|-------|----|------|
| 8    | 8va  | 8va  | 8ba   | 15 | 15ma |
| 15ma | 22   | 22ma | 22ma  | (  | )    |
| 8vb  | 15mb | 22mb | bassa |    |      |

# THE FUTURE

- Fix paper cuts
- Keep working on newer devices
- Documentation, easier installation
- Maybe a website
- Organic growth

# THANK YOU!

