

# Create PDFs with Node.js and Puppeteer

FEBRUARY 6, 2020

```
{title: Amazing Grace}
{artist: Words by: John Newton, John P. Rees}
{artist: Music by: William W. Walker, Edwin Othello Excell}
{key: G}
{tempo: 90}
{time: 3/4 }
```

**TEXT TO HTML TO PDF!**

**{comment: Verse 1}**

A - [G]mazing [G/D]grace [D7]how [Em]sweet [C]the [G]sound  
That [G]saved a [G/D]wretch [D/C]like [G/B]me  
I [G]once was [G/B]lost but [C]now am [G]found  
[G/B]Was [Em]blind but [G/D]now [D7]I [G]see

**{comment: Verse 2}**

'Twas [G]grace that [G/D]taught [D7]my [Em]heart [C]to [G]fear  
And [G]grace my [G/D]fears [D/C]re - [G/B]lieved  
How [G]precious [G/B]did that [C]grace ap - [G]pear  
[G/B]The [Em]hour I [G/D]first [D7]be - [G]lieved

## Amazing Grace

Words by: John Newton, John P. Rees  
Music by: William W. Walker, Edwin Othello Excell  
Key: G | Tempo: 90 | Time: 3/4

### VERSE 1

G G/D D7 Em C G  
A - mazing grace how sweet the sound  
G G/D D/C G/B  
That saved a wretch like me  
G G/B C G  
I once was lost but now am found  
G/B Em G/D D7 G  
Was blind but now I see

### VERSE 2

G G/D D7 Em C G  
'Twas grace that taught my heart to fear  
G G/D D/C G/B  
And grace my fears re - lieved  
G G/B C G  
How precious did that grace ap - pear  
G/B Em G/D D7 G  
The hour I first be - lieved

### VERSE 3

G G/D D7 Em C G  
The Lord has prom - ised good to me  
G G/D D/C G/B  
His Word my hope se - cures  
G G/B C G  
He will my shield and portion be  
G/B Em G/D D7 G  
As long as life en - dures

 CHARTS

### VERSE 4

G G/D D7 Em C G  
Through many dan - gers toils and snares  
G G/D D/C G/B  
I have al - read - y come  
G G/B C G  
'Tis grace hath brought me safe thus far  
G/B Em G/D D7 G  
And grace will lead me home

### VERSE 5

G G/D D7 Em C G  
Yea when this flesh and heart shall fail  
G G/D D/C G/B  
And mortal life shall cease  
G G/B C G  
I shall pos - sess with - in the veil  
G/B Em G/D D7 G  
A life of joy and peace

### VERSE 6

G G/D D7 Em C G  
When we've been there ten thou - sand years  
G G/D D/C G/B  
Bright shining as the sun  
G G/B C G  
We've no less days to sing God's praise  
G/B Em G/D D7 G  
Than when we first be - gun

I love to play music, especially in a band. There's something amazing about the synergy of multiple people harmonizing voices and instruments. However, for a band to be successful, everyone needs to be on the *same page* or it just sounds like a mess.

Come to think of it, I could make a lot of comparisons between a group of people that play well together in a band and a productive, highly-performing software team. But, I digress. Maybe another time!

One way a band to be on the *same page* is to follow sheet music or chord charts.

I recently updated a personal project named [Charter](#) that uses Node.js to convert ChordPro formatted text files into PDF chord charts. It was a lot of fun!

Now, you may be thinking,

"I'm not a musician or singer. Why do I care?"

Regardless of your personal need for chord charts, you might find the source code for this project useful. Here are a few things you might learn:

- Create a CLI app using Node.js and Yargs
- Load a text file and parse text
- Use Jest to test Node.js code
- Use handlebars to turn text into HTML
- Use Puppeteer to convert HTML into a PDF

Regarding PDF rendering, I tried lots of solutions including [wkhtmltopdf](#), [electron-pdf](#), [phantomjs](#), [automating Chrome](#) with command-line switches, and finally landed on using the latest version of [Puppeteer](#). Puppeteer supports a [ton of options](#) for generating PDFs. There's a lot of untapped potential here for doing lots of cool things!

## Save Any Web Page to PDF using Node.js

Assuming you already have [Node.js](#) installed, open your terminal or command line, create a new project folder, and initialize it.

```
mkdir pdf-test
cd pdf-test
npm init -y
```

Next, install Puppeteer as a dependency.

```
npm install puppeteer
```

Here is an example of how to use Puppeteer to turn the Google home page into a PDF. Create a new file named `index.js` and paste the following code.

```
"use strict";

const puppeteer = require("puppeteer");
```

```
(async () => {  
  const browser = await puppeteer.launch();  
  const page = await browser.newPage();  
  await page.goto("https://google.com");  
  await page.pdf({ path: "./google.pdf", format: "Letter" });  
  await browser.close();  
})();
```

Run the application using the following command.

```
node .
```

You can change URL to something else. However, keep in mind that some pages load dynamically with JavaScript, so without setting more options, the resulting PDF could appear incomplete.

## Convert a Local HTML File to PDF

Puppeteer is not limited to loading web pages. You can also load local HTML files. This is how the Charter application creates a chord chart. The Charter app first parses a ChordPro text file, generates an HTML file, and then uses Puppeteer to render the HTML and save as a PDF.

Create a new file named `sample.html` and paste the following HTML.

```
<!DOCTYPE html>  
<html>  
  <head>  
    <style>  
      * html,  
      body {  
        font-family: Verdana, Arial, Helvetica, sans-serif;  
      }  
    </style>  
  </head>  
  <body>
```

```
<h1>Hello World!</h1>
<p>Yay! My own PDF generator!</p>
</body>
</html>
```

Create a new file named `local.js` and paste the following code.

```
"use strict";

const path = require("path");
const puppeteer = require("puppeteer");

(async () => {
  const htmlFile = path.resolve("./sample.html");
  const browser = await puppeteer.launch();
  const page = await browser.newPage();
  await page.goto("file://" + htmlFile);
  await page.pdf({ path: "./sample.pdf", format: "Letter" });
  await browser.close();
})();
```

Next, run the code from the command line.

```
node local.js
```

You should now have your very own "Hello World!" PDF in your project folder!

## Create a Chord Chart with Charter

If you have Node.js 12.x or higher installed and want to take the CLI app for a spin, you can use `npm` to run the application directly. Of course, you will need a ChordPro text file to test. Here's an example, or you can find others on the Internet.

```
{title: Amazing Grace}
{artist: Words by: John Newton, John P. Rees}
```

```
{artist: Music by: William W. Walker, Edwin Othello Excell}  
{key: G}  
{tempo: 90}  
{time: 3/4 }
```

```
{comment: Verse 1}
```

```
A - [G]mazing [G/D]grace [D7]how [Em]sweet [C]the [G]sound  
That [G]saved a [G/D]wretch [D/C]like [G/B]me  
I [G]once was [G/B]lost but [C]now am [G]found  
[G/B]Was [Em]blind but [G/D]now [D7]I [G]see
```

`npx` will take a little while to download the first time, due to Puppeteer using Chromium.

```
npx chord-charter -f amazing-grace.chordpro
```

I hope you find the project useful! Get out there and be awesome!

#### ALSO ON REVERENTGEEK

##### Review: CodeStock 2016 – ReverentGeek

6 years ago • 1 comment

Ramblings on bacon, drawing, and technology

##### My Most Embarrassing Mistakes as a ...

3 years ago • 1 comment

Ramblings on bacon, drawing, and technology

##### Do you hate JavaScript? – ...

5 years ago • 2 comments

Ramblings on bacon, drawing, and technology

##### SQL Serve on a Mac?

6 years ago • 1 comment

Ramblings on drawing, and



LOG IN WITH

OR SIGN UP WITH DISQUS **Ashley McGlone** • 2 years ago

Have you tried the SongBook app? Cross platform chord sheet and playlist management. Been using it for a year. UI could be more intuitive in places, but it lets everyone in the band bring their own device.

 |  • Reply • Share ›**David Neal**  Ashley McGlone • 2 years ago

I have not tried SongBook. I've been using an app named Paperless Music on my iPad, and it's been working well for me.

 |  • Reply • Share ›