ThingDoc

http://thingdoc.org

Printable parts

We are living in the internet of things

Lasercut parts

That means, we can share real Hardware online!

PCBs

Simple How-tos

We just don't know how to organize it ...yet!

http://thingiverse.com - mess
http://instructables.com - even more mess

...

You can publish only completed projects. With hand tailored documentation.

Software has better solutions!

They can make documentation automagically!
JavaDoc, PHPDoc, ...

ThingDoc solves that!

It can generate your HW project documentation.
Works on simple text comments.
Printed parts, lasercut parts, ...

ThingDOC is being developed on Prusa
Mendel RepRap parts.

Generator isn't lazy!

Normally you have to change documentation with every update of the design! Thats hard if documentation is long as small book and you update the design twice a day!

It causes:

1) Errors
2) Out of date documentation
3) Demotivates to update design often
4) If you use wiki, its hard to find older documentation

Forking is hard!

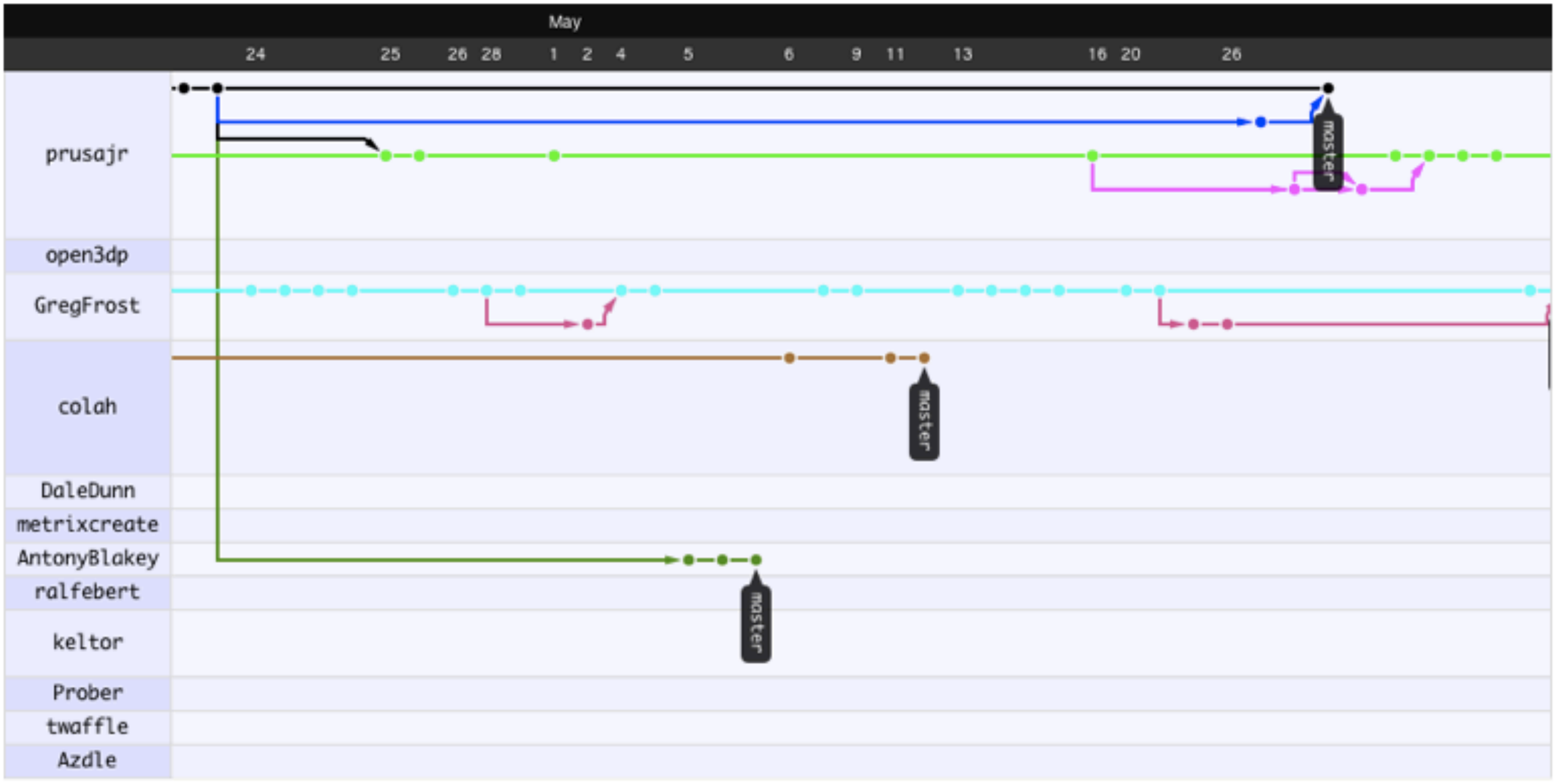
The PrusaMendel network graph

Keyboard shortcuts available

*All branches in the network using **prusajr/PrusaMendel** as the reference point. Read our blog post about how it works.*

Show Help

Last updated: 34 minutes ago



With ThingDOC every thing in project has it's own info about properties and relationships!

So when you update or switch one file, you still can get full featured documentation!

Means:

Easy forking!

github
SOCIAL CODING

Easy updating!

PrusaMendel / Commit History

2011-05-26

Merge pull request #18 from prusnak/master

kliment (author)
May 26, 2011

fix missing IDs


prusnak (author)
May 26, 2011

2011-04-21

Correct footedness for stl files

kliment (author)
April 21, 2011

Fix footedness of frame-vertex to correctly read makefile variable.

kliment (author)
April 21, 2011

Documentation is hyperlocal!

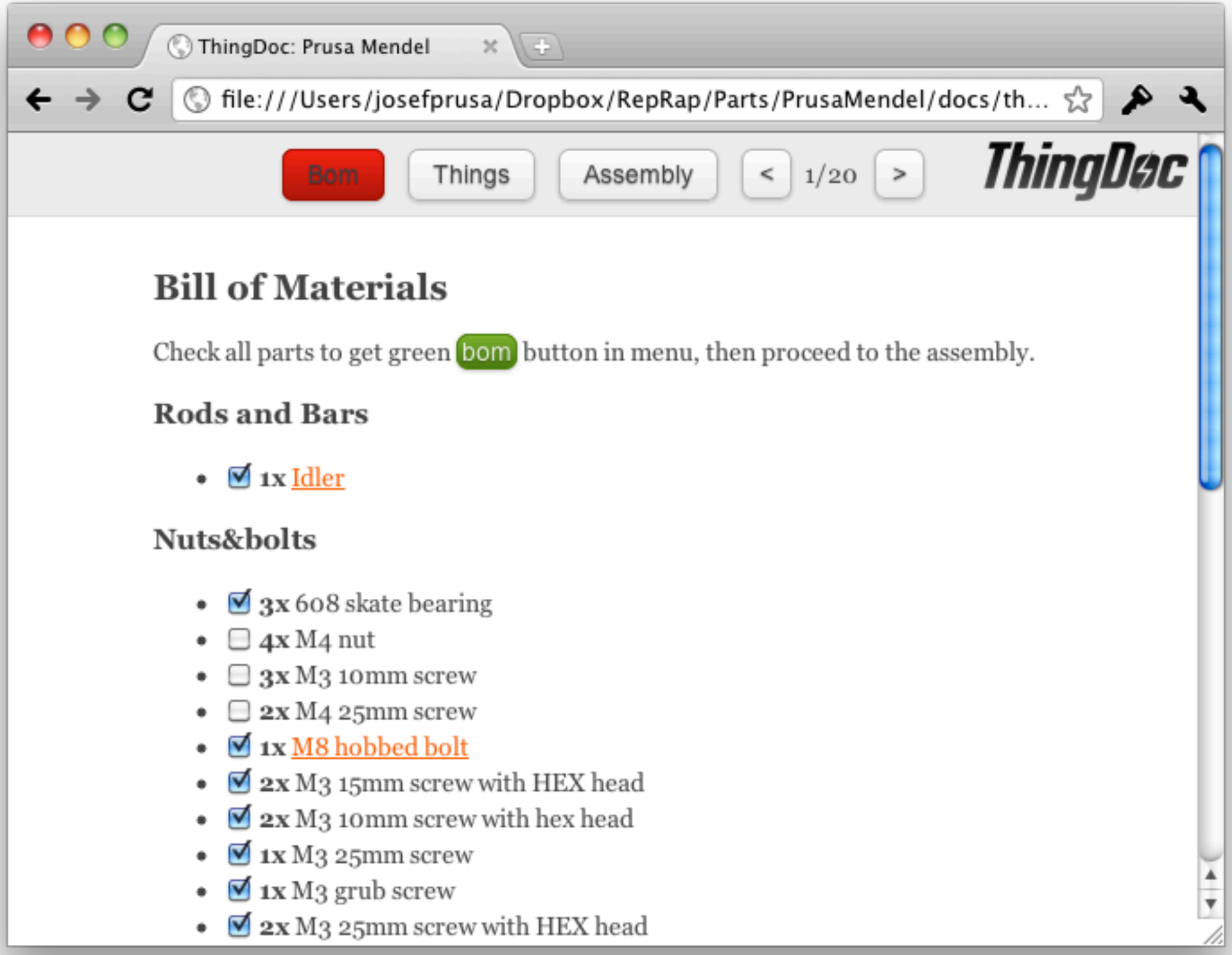
Informations about the object
are embedded in the same file!

What ThingDOC can do?

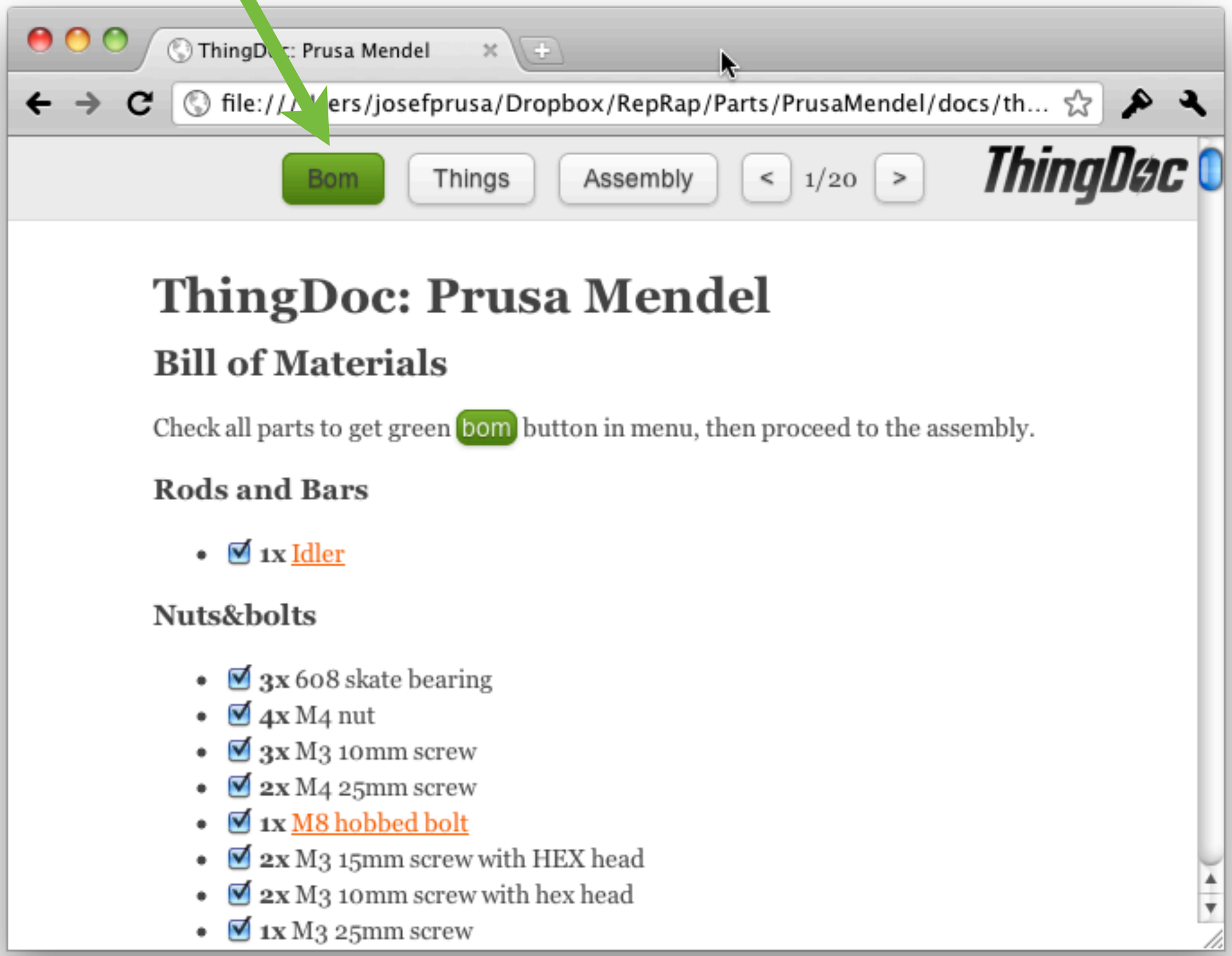
- Bill of materials
- Info about things
- Assembly instruction
- Structured data of your project

All in many formats! HTML, TXT, PDF, WIKI ...

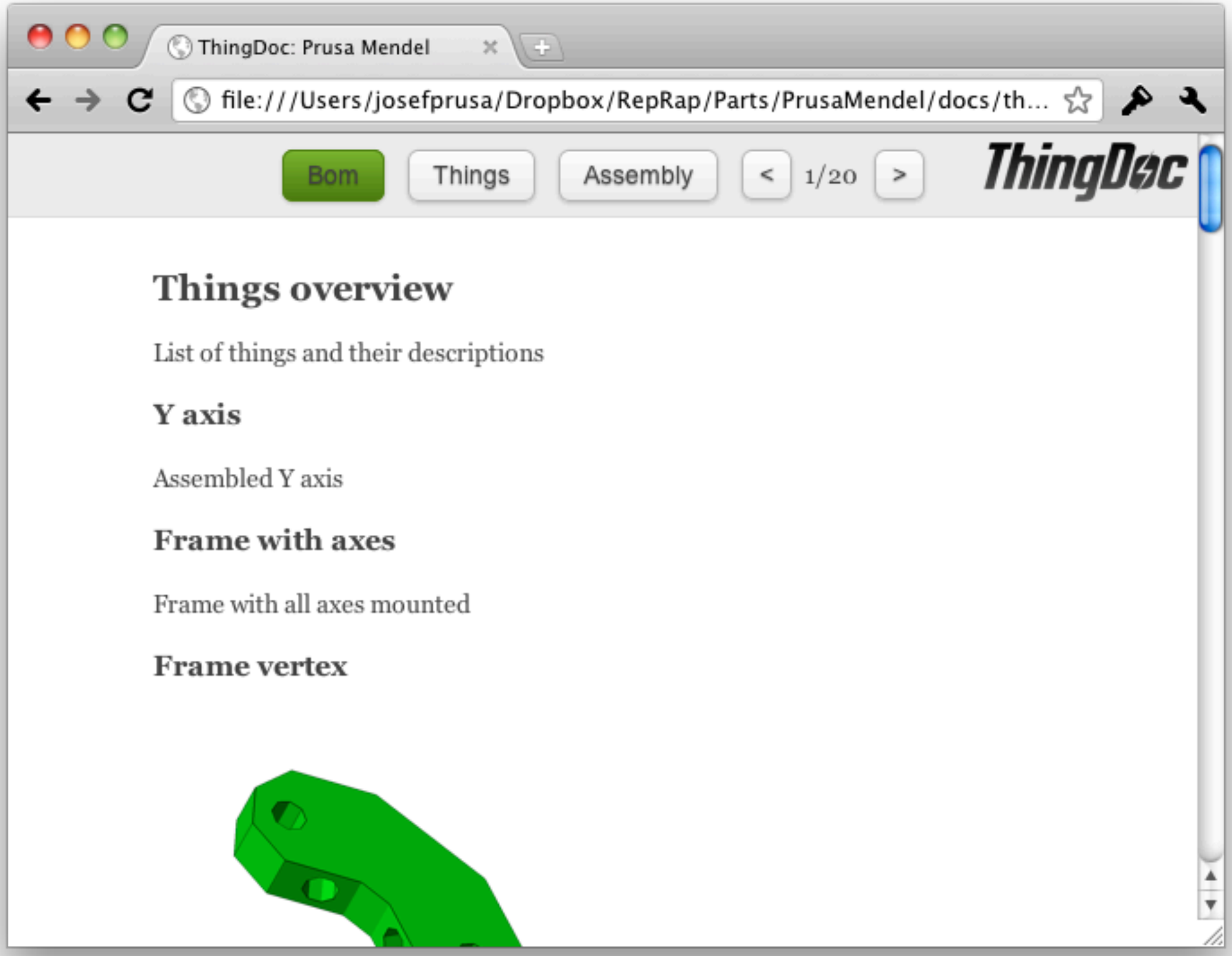
Interactive bill of materials



Interactive bill of materials



Things overview



Assembly instructions!

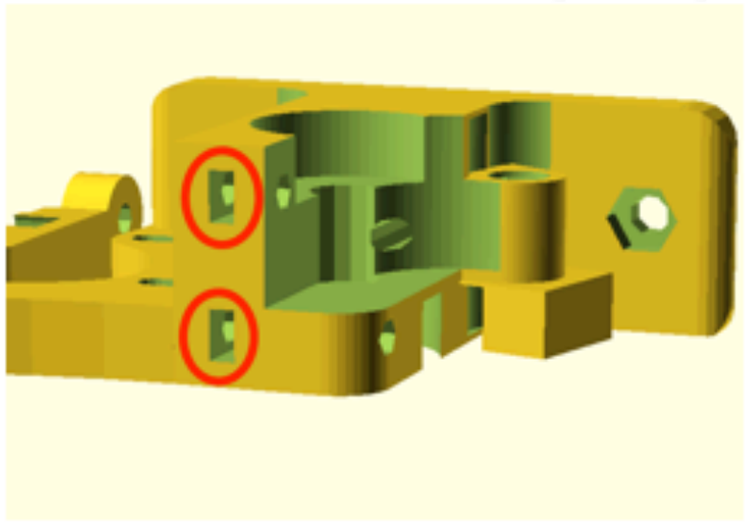
BEST!

ThingDoc: Prusa Mendel

file:///Users/josefprusa/Dropbox/RepRap/Parts/PrusaMendel/docs/th...

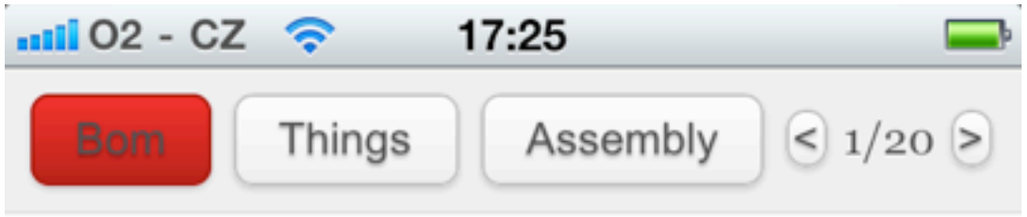
Bom | Things | Assembly | < 1/20 > | ThingDoc

8. Insert prepared large gear into the body with mounted bearings.
9. Check if the alignment of hobbed part with the filament path. Adjust it accordingly with adding or removing M8 washers.
10. After adjusting, we need to fix the bolt in. So we place washer at the end of hobbed bolt and with two M8 nuts we will do locknut by tightening them against each other.
11. Check if large gear turns freely.
12. Prepare two M3x40 screws with sandwitch of washer-spring-washer.
13. Insert two M3 nuts into nut traps on top of drive mechanism.



14. Insert prepared screws into the holes on idler. Close the idler and tighten the screws into the trapped nuts. More you tighten those screws, more

Works on mobile devices!



Bill of Materials

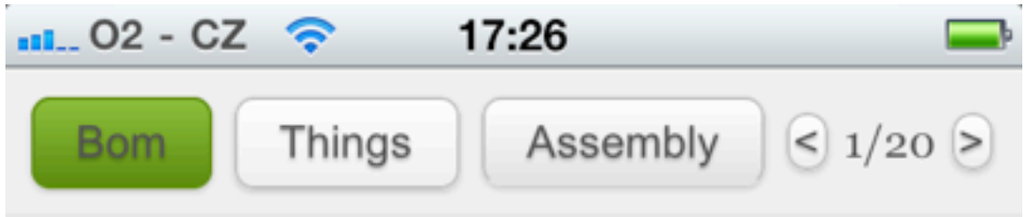
Check all parts to get green bom button in menu, then proceed to the assembly.

Rods and Bars

- ☐ **1x** Idler

Nuts&bolts

- ☑ **3x** 608 skate bearing
- ☑ **4x** M4 nut
- ☐ **3x** M3 10mm screw
- ☐ **2x** M4 25mm screw
- ☐ **1x** M8 hobbed bolt
- ☐ **2x** M3 15mm screw with HEX head



Assembly instructions

Assemble Small extruder gear

Things needed:

- 1x M3 nut
- 1x M3 grub screw

Steps:

1. Insert nut into cavity in printed gear.
2. Tighten the grub screw a bit, just to hold in place.

Assemble M8 hobbed bolt

Steps:

From what it generates this awesomness?

```
/**
 * @id large-gear
 * @name Large extruder gear
 * @category Printed
 * @using 1 hobbed-bolt
 * @step Insert hobbed bolt into main hole.
 * @step Add some M8 washers from other side, later with their count you
 adjust position of hobbed part in filament path.
 */

/**
 * @id small-gear
 * @name Small extruder gear
 * @category Printed
 * @using 1 m3nut
 * @using 1 m3xgrubscrew
 * @step Insert nut into cavity in printed gear.
 * @step Tighten the grub screw a bit, just to hold in place.
 */
```

Small comments like these!

Thanks!

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Pavol Rusnak