

How to:

Buy Less

Create More

And feel great about it

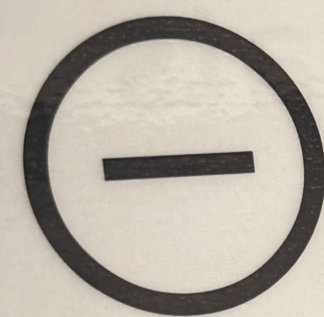


Welcome
FOSDEM 2026





FreeSewing.eu



Sorry, this room is full!



Watch the live stream on
fosdem.org/schedule/streaming/

Find other rooms on
nav.fosdem.org.

H2.213
107485

ROMAN
TE BELGE
EN PHILOSOPHIE



Don't Panic



How it started



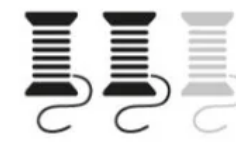


This is
(the cover of)
a sewing
pattern

burda
style

6933

Hose
Pantalon
Pants
Pantalón



mittel
moyens facile
average
difficultad media

Größen Tailles Sizes Tallas

EUR 44-54
US 34-44

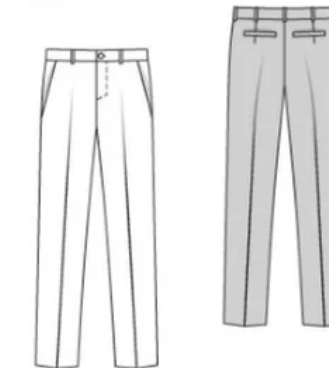


A

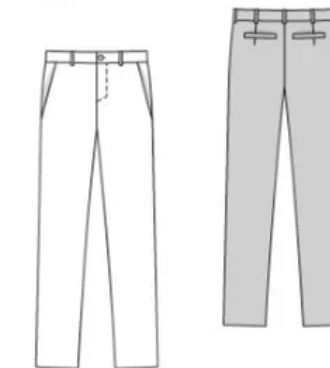


B

A



B



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*I made these
(2 years later)*



New Year's resolution 2011:
**I will stop buying clothes
and instead
make everything* myself**
** not everything*



The honeymoon



Not me



Craft

**Sewing
as a
hobby**

Fashion

Style

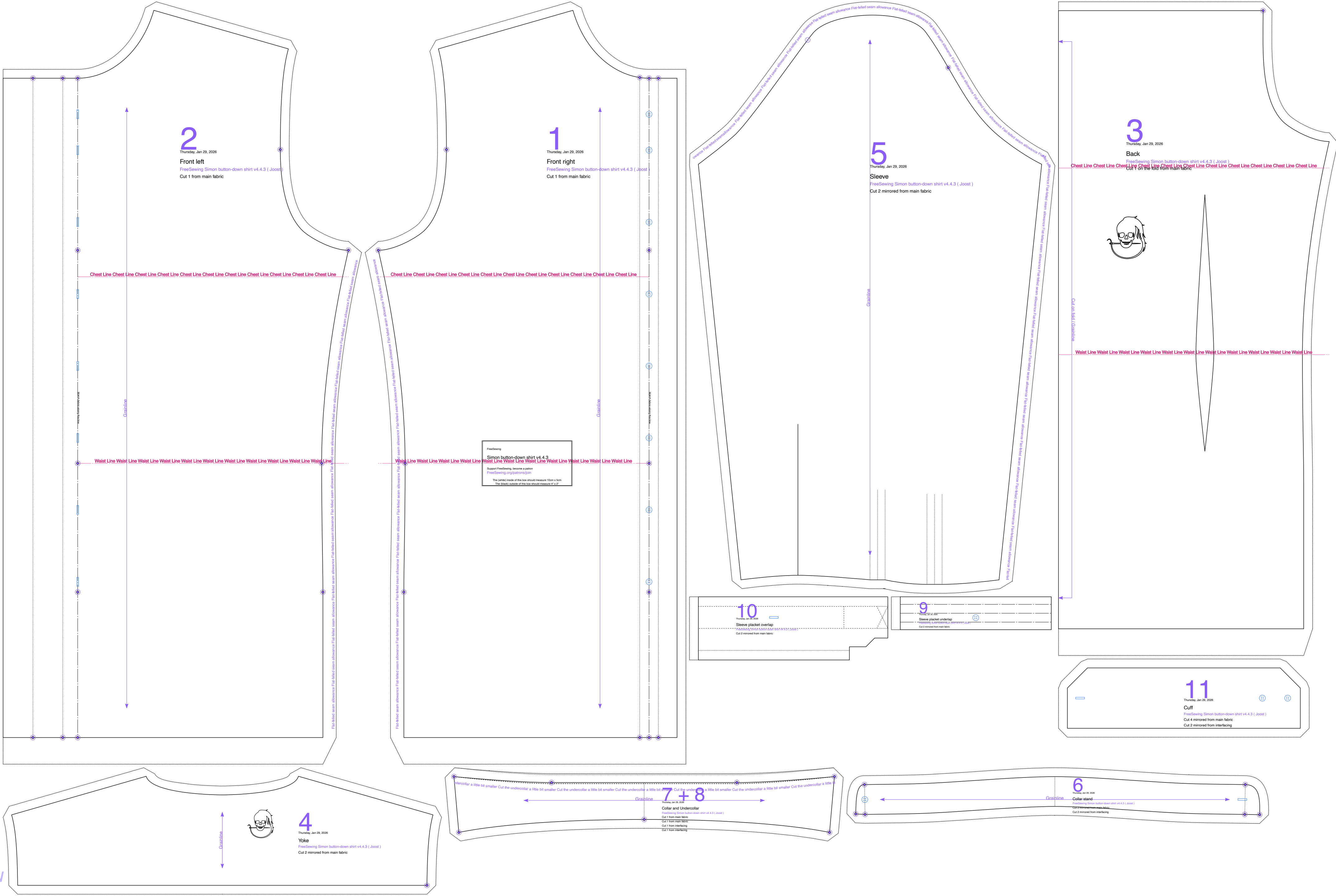


Sewing Pitch over



About Sewing Patterns





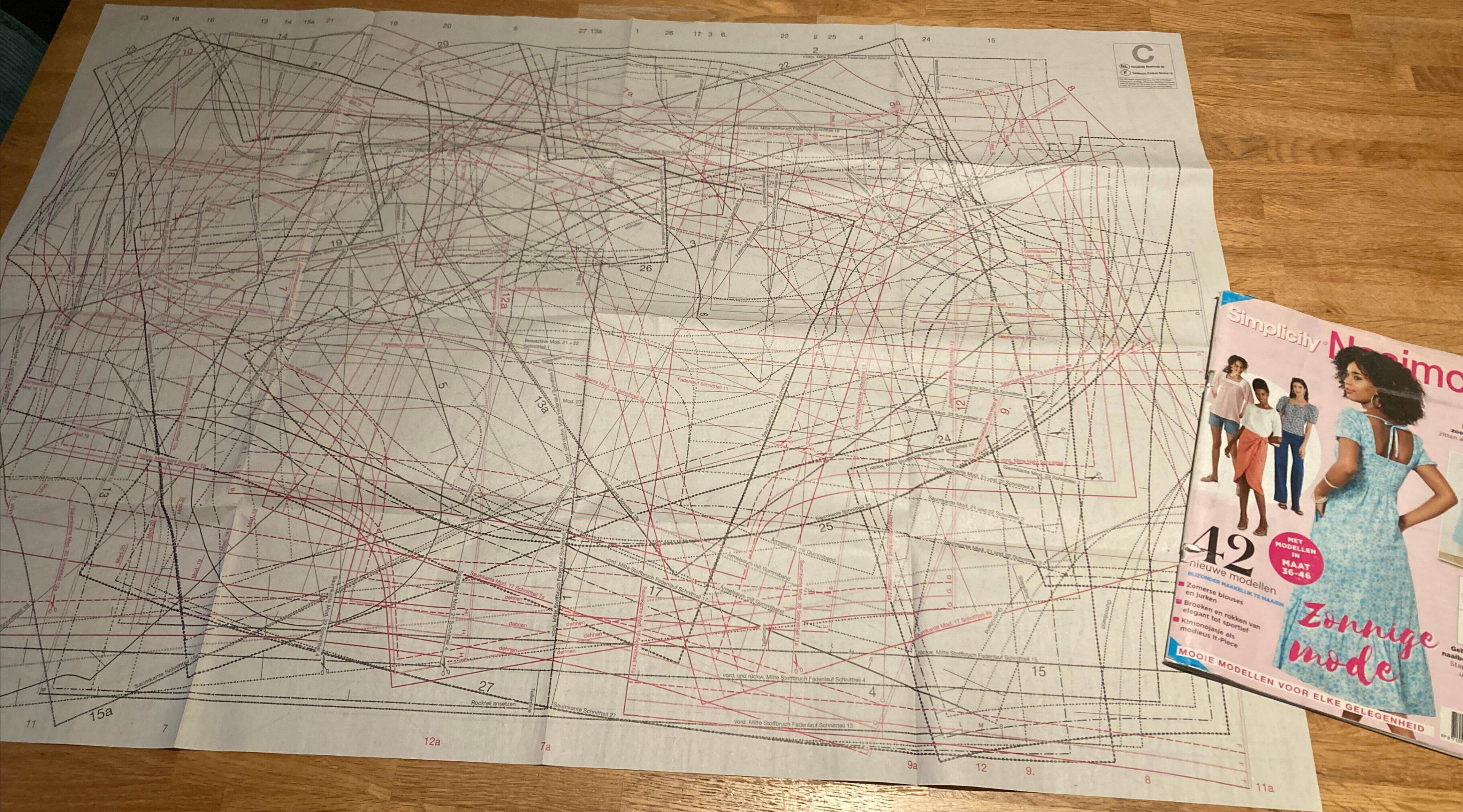




Photo by Dang Hong



Tailor & Cutter



The Tailor

AND CUTTER,

A TRADE JOURNAL AND INDEX OF FASHION.

VOL. III. No 69.]

SATURDAY, FEBRUARY 1.

[PRICE THREE-HALFPENCE.

IMPORTANT TO COUNTRY TAILORS.

ASHBY, DARK, & Co.

61 & 62, HIGH ST., BOROUGH, LONDON.

Are determined, in order to secure an increase in their Country Trade, to offer greater inducement to cash buyers. Their Stock consists of all the new and fashionable patterns for Winter, both in Overcoatings, Fancy Coatings and Trouserings, also Black Cloths and Doeskins, especially suited for Country Trades to select from, where extra strength is required. Trimmings of every description. Their Warehouse being so near all the principal booking-offices enables them to forward parcels without delay. Patterns free. Terms, two and a half per cent.

Also Woollen, Bedford. and Cotton Cords.

PANTHEON WOOLLEN WAREHOUSE.

Tailors who buy with Ready Money, will

at all times find the best Value in BLACK CLOTHS, DOESKINS, New FANCY GOODS, WOOLLEN and COTTON CORDS, TRIMMINGS, &c., at the above House, Established 1833, on Ready Money System.

40s. Parcels Carriage paid to any Ry. Station.

JAMES KELL & CO.

357, OXFORD STREET, W. LONDON.

IMPORTANT NOTICE TO TAILORS.

ENTERED AT STATIONERS' HALL.

"The Tailors' Infallible Guide." Con-

taining Original Systems for Cutting every Garment now worn, applicable to every form and position. No division of the Breast measure or Trying-on required. Complete, £1 2s. 6d. First Part, 31 stamps. Eighty references and Circular, Post Free.

Address.—HANGER and CO., Practical Tailors, Weymouth.

TESTIMONIAL.

Sirs,—I have thoroughly perused your Work, and I have no hesitation in stating that it is the simplest and most correct method that I have met with in my experience of thirty years practice.

I remain, sirs, yours truly.

14th January, 1868.

Master Tailor, Duke of York School, Chelsea.

WILLIAM CHRISTIE.

TO TAILORS,

The best System extant and Cutting

taught, including every garment as now worn. Style defined, with instructions how to produce it. Pupils thoroughly prepared for the Cutting Room. Terms, Five Guineas, evening tuition. Day Pupils, Ten Guineas.

By James Cocks, 189, Regent Street.

(Late) Cornhill and St. James's Street.

N.B.—Patterns cut for the Trade. Coat, 1s. 6d.; Trousers, 1s. 3d.; Vests, 1s. Stamps received.

THE BEST SEWING MACHINES.

FOR TAILORS,

FOR DRESSMAKERS,

FOR FAMILIES.

GROVER & BAKER,

SEWING MACHINE COMPANY,

150, REGENT STREET, London, W.

59, BOLD STREET, Liverpool.



At the Grand Trial of Sewing Machines of 1865, (the only one ever held at which Thorough Practical Tests of the capabilities of the competing machines were made) the jury awarded the WILCOX & GIBBS the precedence in thirty-five distinct particulars.

In regard to the decisions of the judges upon the several points, it may be remarked that during the entire trial there was scarcely an instance of difference of opinion—as, indeed, it was hardly possible there could be, for the plan adopted was itself a surety both of unanimity and a just decision; the latter being, in such a plan, neither more nor less than the practical solution of a mathematical problem. For, by separating the respective merits of each machine into elements, or "points," and subjecting each point separately to the test of practical work done on each machine in presence of the judges, their decision upon each point was reduced to the simple act of recording the facts developed.

For instance, each contestant claims the most elastic stitch. Then each is required to sew a seam, side by side, on the "bias" of a piece of elastic goods; and the judge takes the piece, and stretches it lengthwise of the seams, till one seam breaks; he still continues the stretching, but the other seam refuses to break at all. However disappointed his expectations, the judge will hardly enter on the record that the broken seam is the more elastic.

Such were the tests and such the inevitable decisions. After a contest of nearly seven hours the WILCOX AND GIBBS was declared to be the best Sewing Machine.—
From the Report of the Grand Trial.

SAMPLES OF WORK and price list sent free.

UNLIMITED INSTRUCTION FREE TO ALL, whether buyers or not, and every facility afforded for judging of the machine before purchase.

ALL ARE INVITED to come and try our machine.

The public are cautioned against imitations of our machine in the form of the letter G, our Trade Mark.

Willcox and Gibbs Sewing Machine Company.

135, REGENT STREET, LONDON, W.

1 February
1868
(158 years ago)



THE
TAILOR'S PRECEPTOR;

OR, THE

ART OF CUTTING

GARMENTS

TO FIT THE HUMAN FORM WITH EASE

AND

With Elegance.

ILLUSTRATED WITH

TWELVE COPPER-PLATE ENGRAVINGS,

CONTAINING

Upwards of THIRTY Models of different GARMENTS.

TO WHICH IS ADDED,

TWENTY-SIX TABLES,

SHOWING THE NECESSARY QUANTITY OF CLOTH REQUIRED FOR
EACH GARMENT;

AND

A RECEIPT

FOR MAKING A COMPOUND TO MARK BRAIDING DESIGNS ON
CLOTH.

—••••—
BY H. HADFIELD.
—••••—

London:

SOLD BY LONGMAN AND CO. PATERNOSTER-ROW; AND IN
MANCHESTER BY T. SOWLER, ST. ANN'S SQUARE.

Also may be had of the Author, No. 130, Deansgate, Knott-Mill, Manchester.

1826.

Price 12s. and 6d.

1826
(200 years ago)





PATTERNMAKING FOR MENSWEAR

Gareth Kershaw

2013



Draw a vertical line, mark the top as point A

From point A, square out to the right measuring
one quarter of the circumference of the chest

Add 2 inches

Mark this point as point B

*Typical drafting
instructions*







Timeline



started
sewing

registered
makemypattern.com

launched
makemypattern.com
(not FOSS)

December 2010

February 2012

September 2012

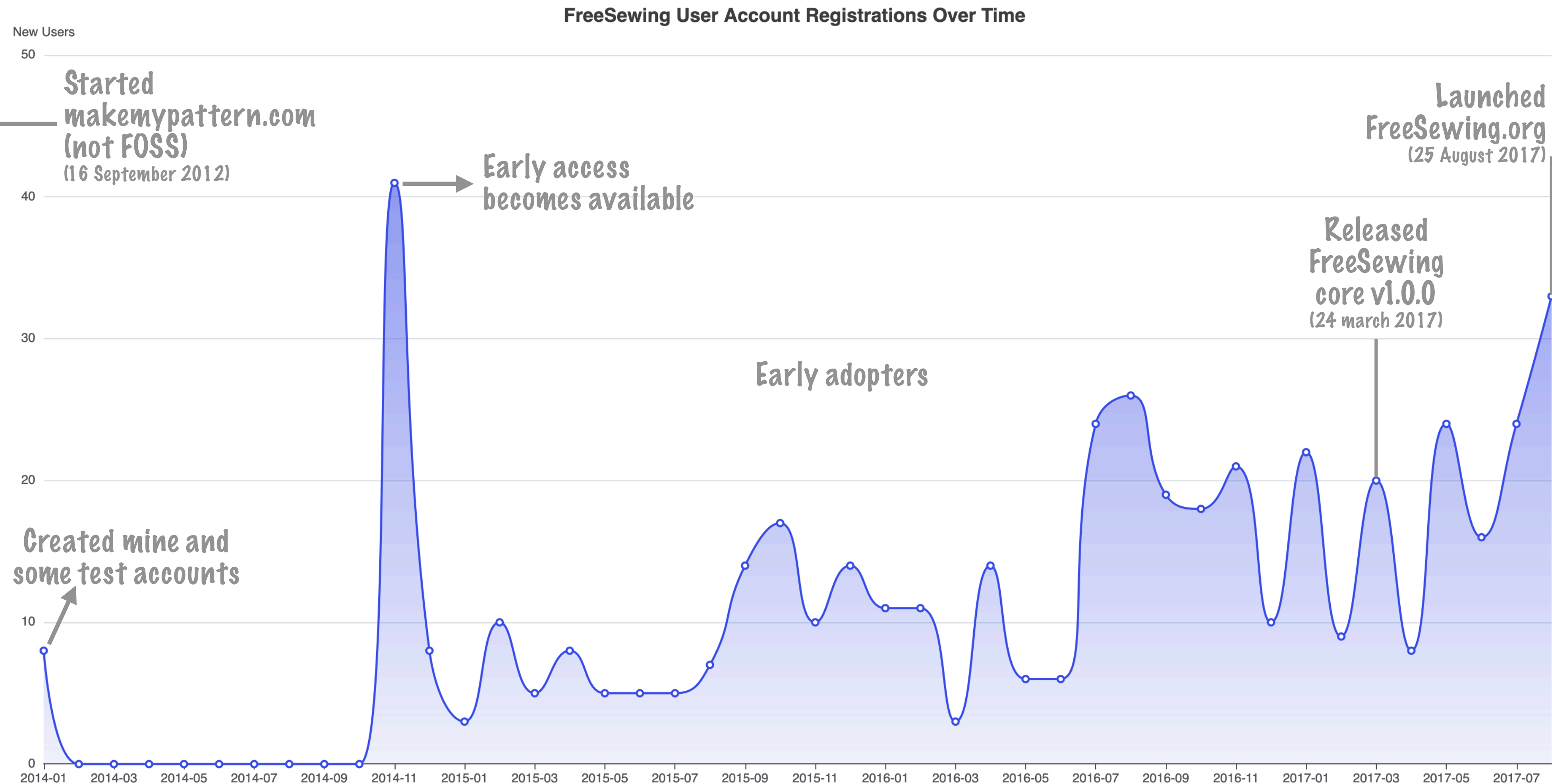
Pre-FOSS



January 2014

August 2017

September 2012

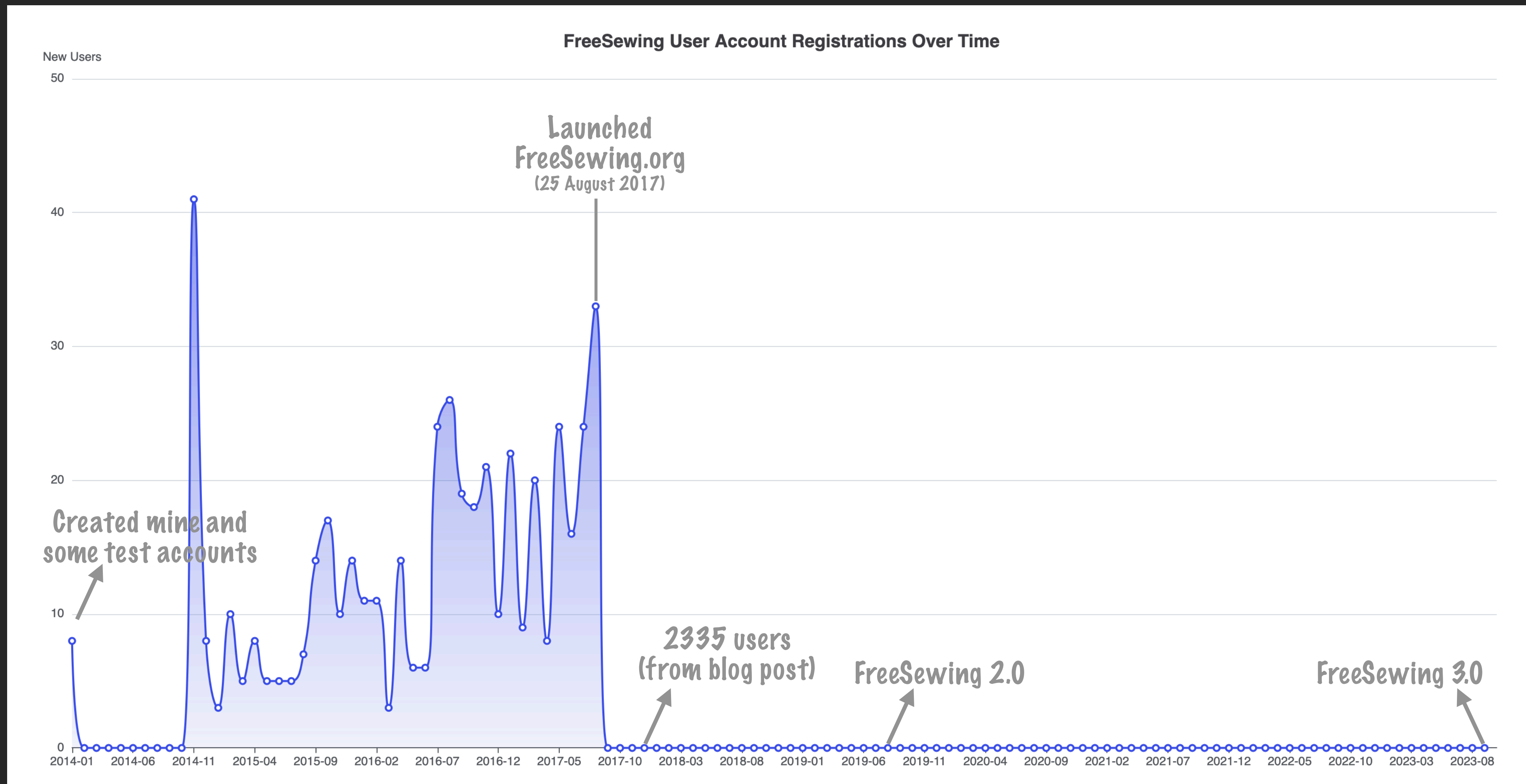


485 users 🦾



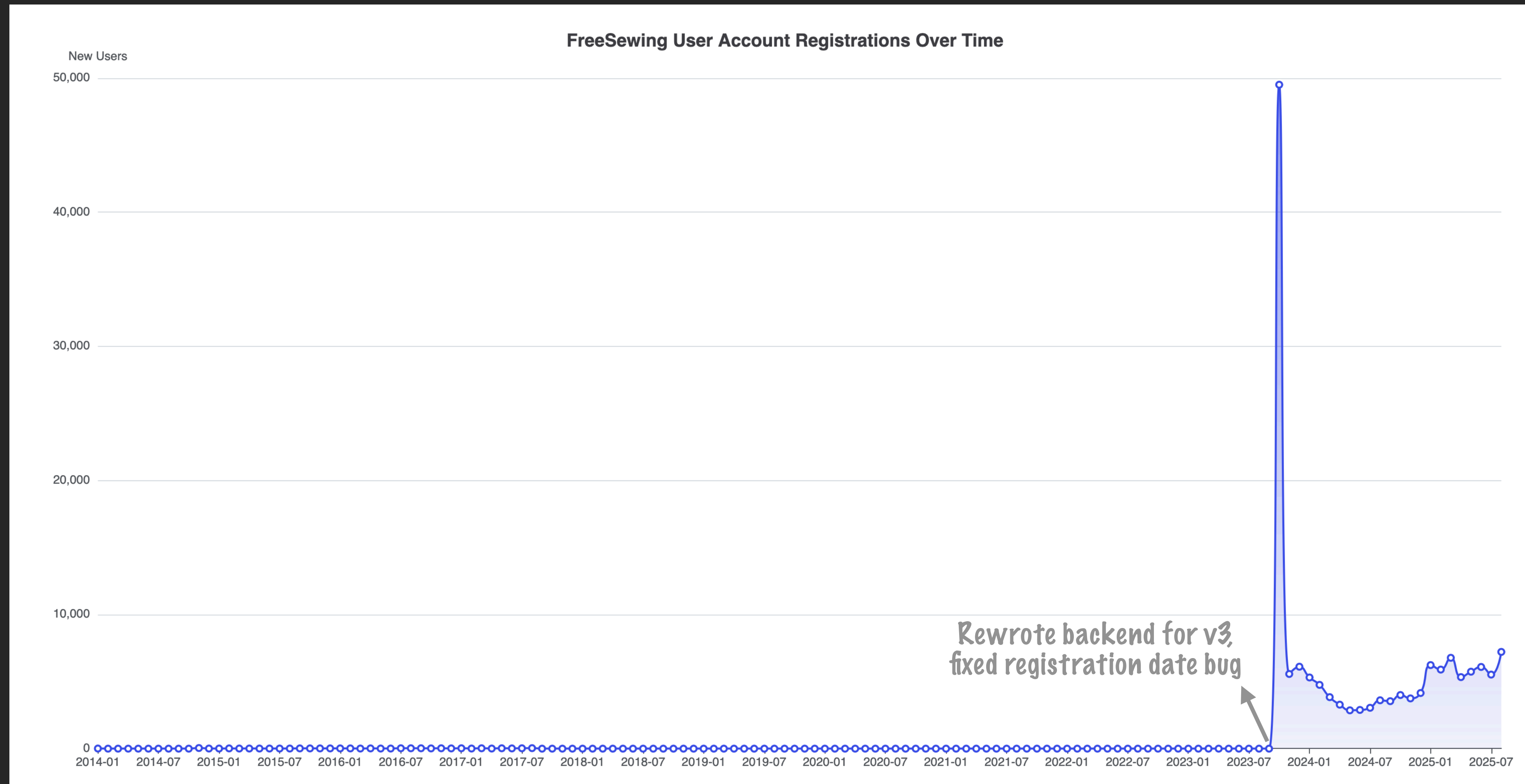
January 2014

September 2023



January 2014

August 2025

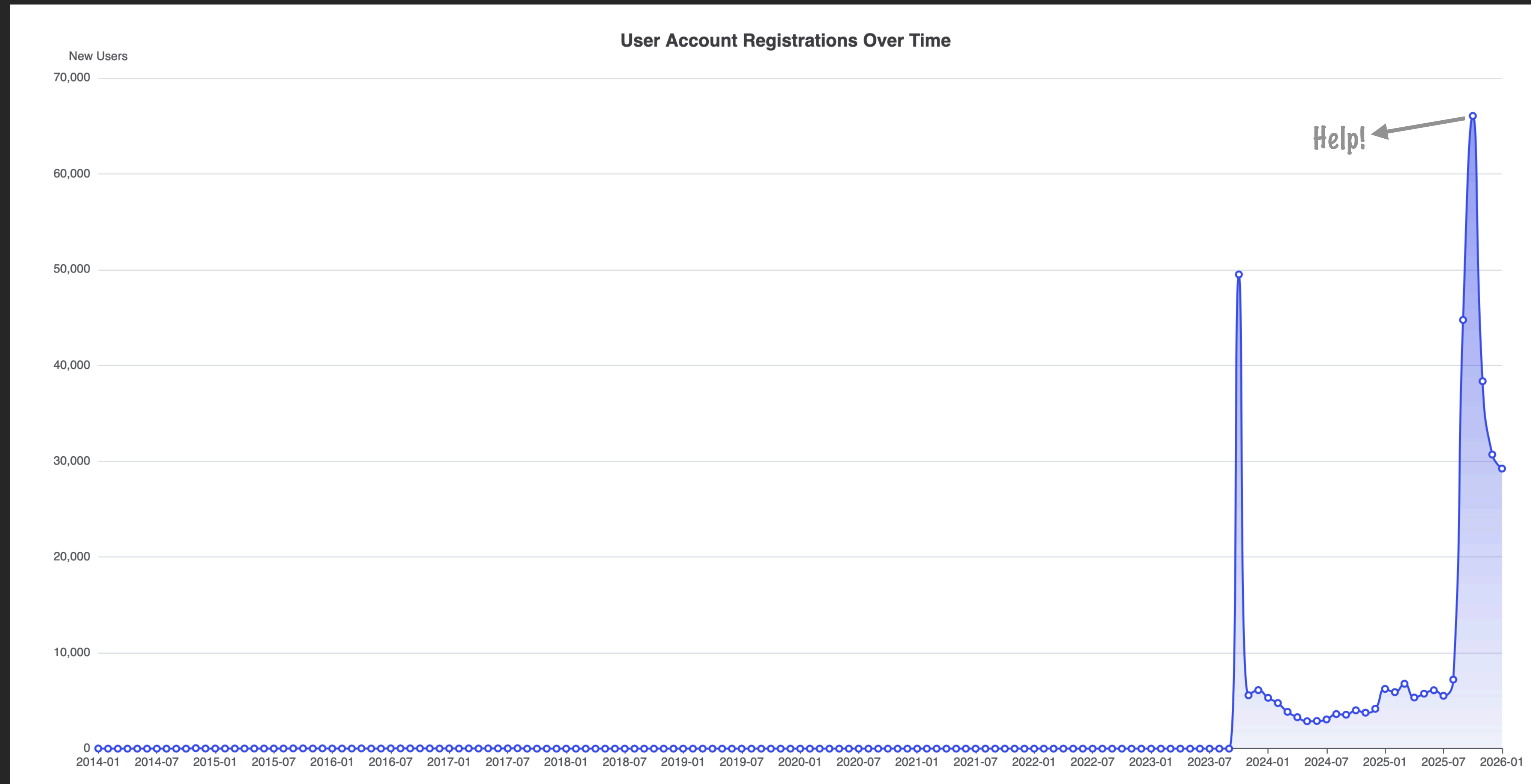


148222 users 🤖



January 2014

January 2026

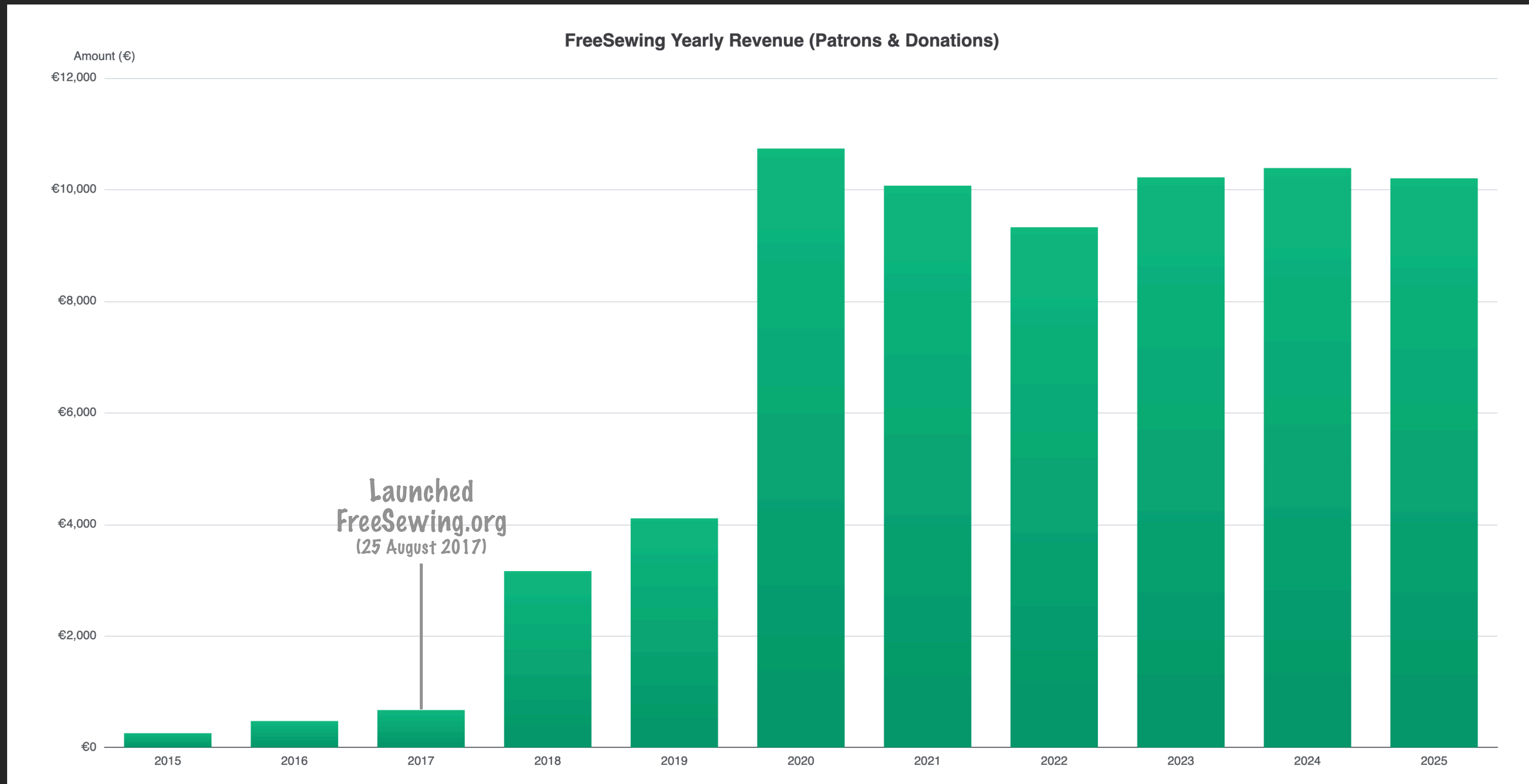


364562 users 🤖



2015

2025



Live Demo?

What could go wrong?



What is Parametric Design



Draw a vertical line, mark the top as point A

From point A, square out to the right measuring
one quarter of the circumference of the chest

Add 2 inches

Mark this point as point B

*We're not hard-coding
that, right?*





```
// Static design
const pattern = {
  // A digital representation of
  // a sewing pattern
}

// Parametric design
function pattern(parameters) {
  return {
    // A digital representation of a
    // sewing pattern that takes our
    // input into account
  }
}
```

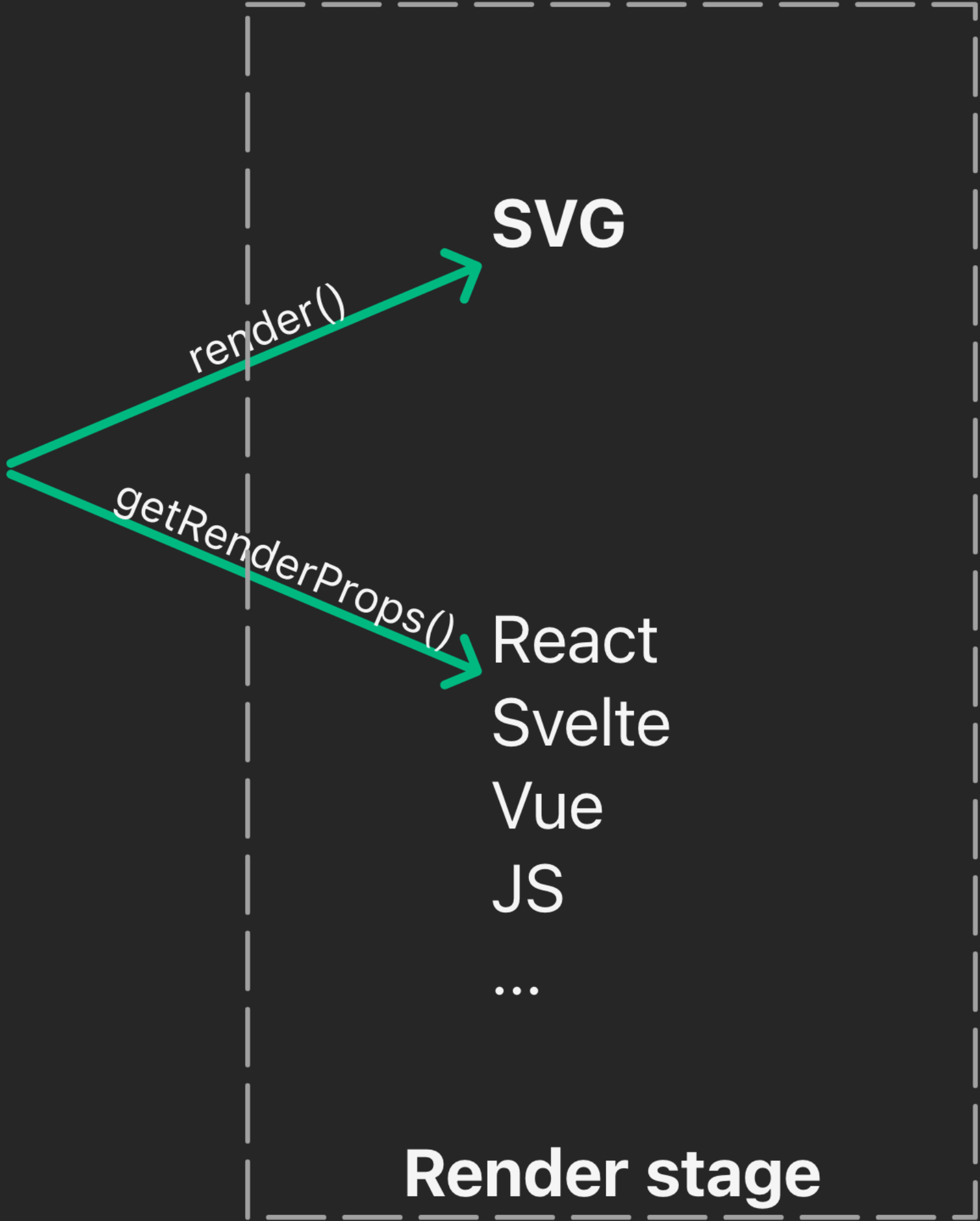
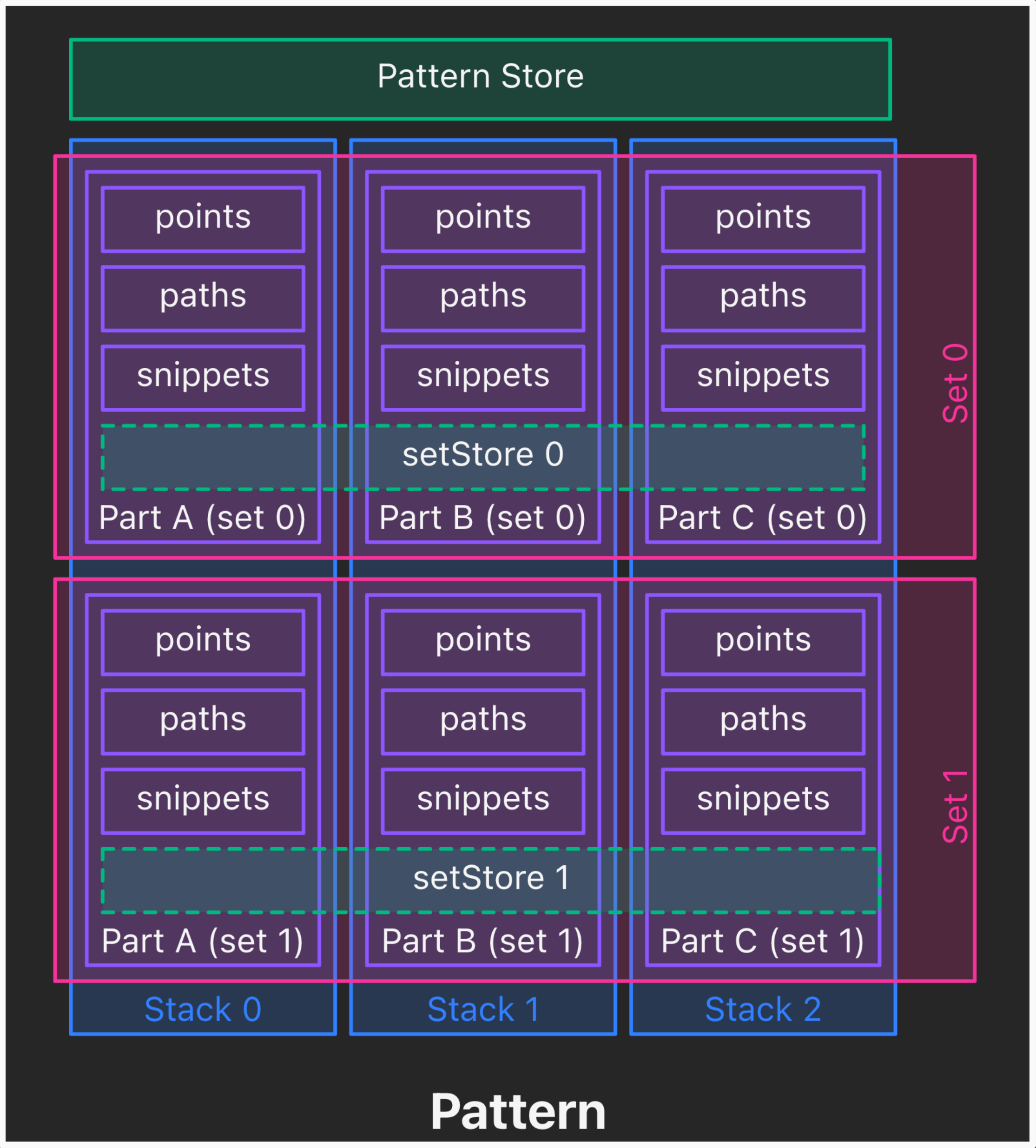


Parametric Sewing Patterns



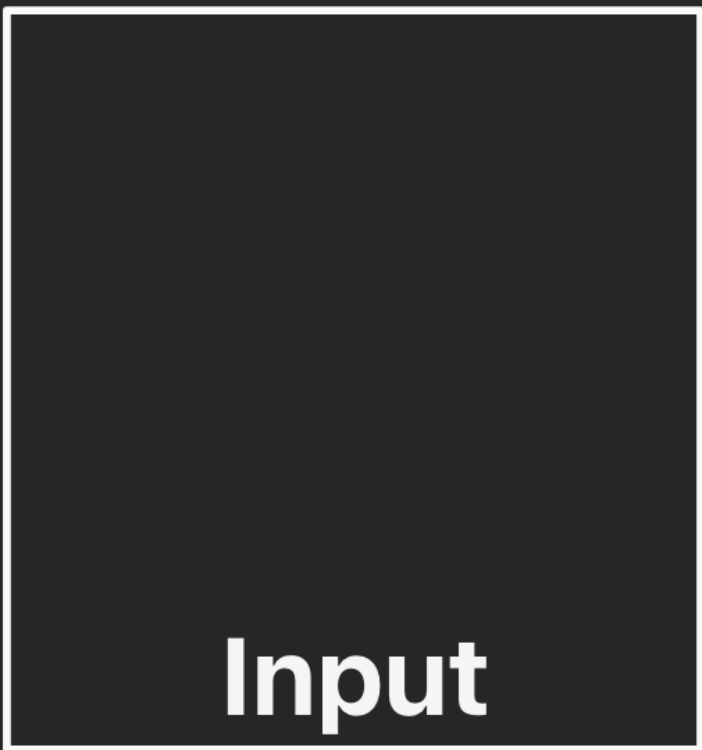


draft()

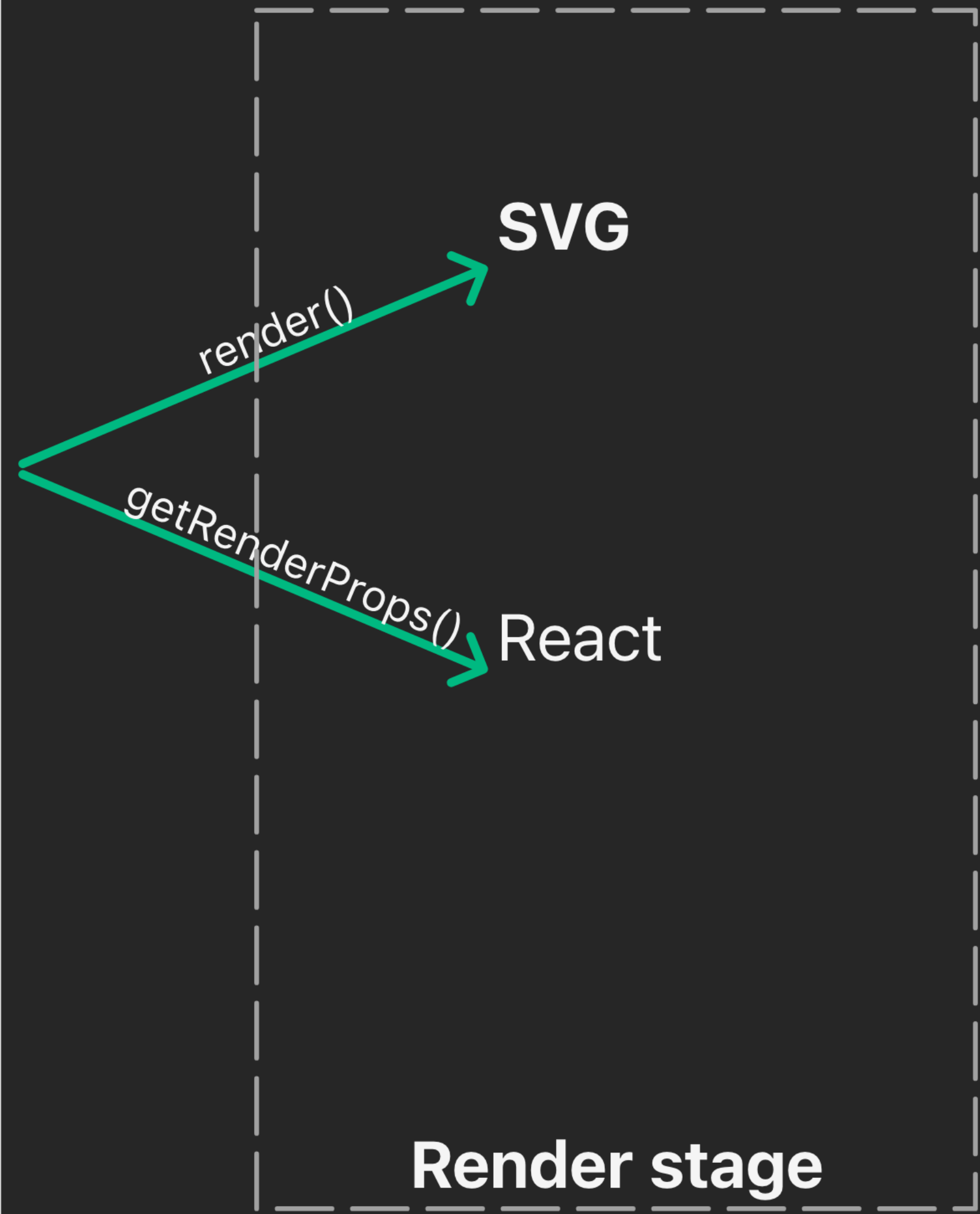
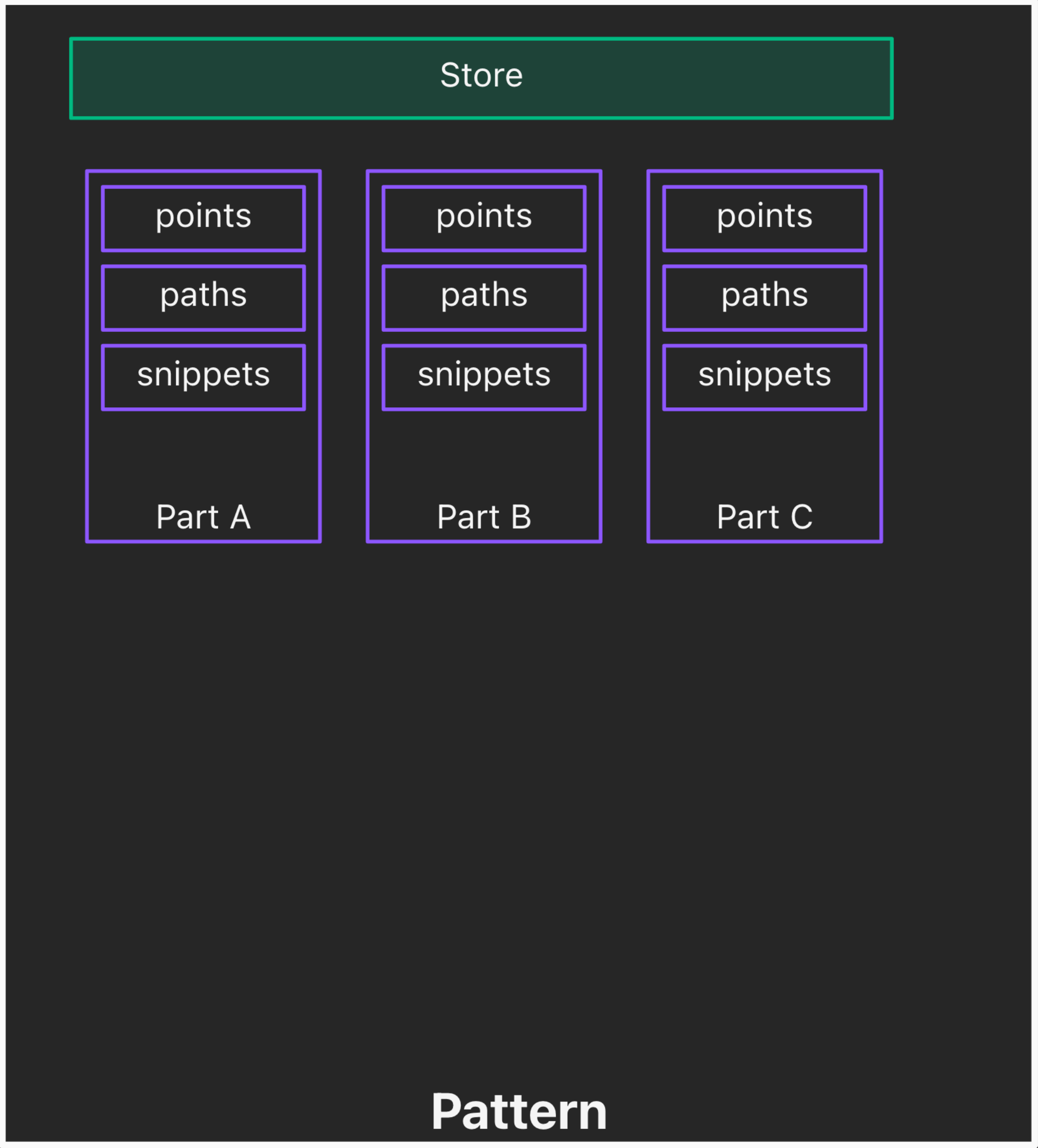


Under the hood



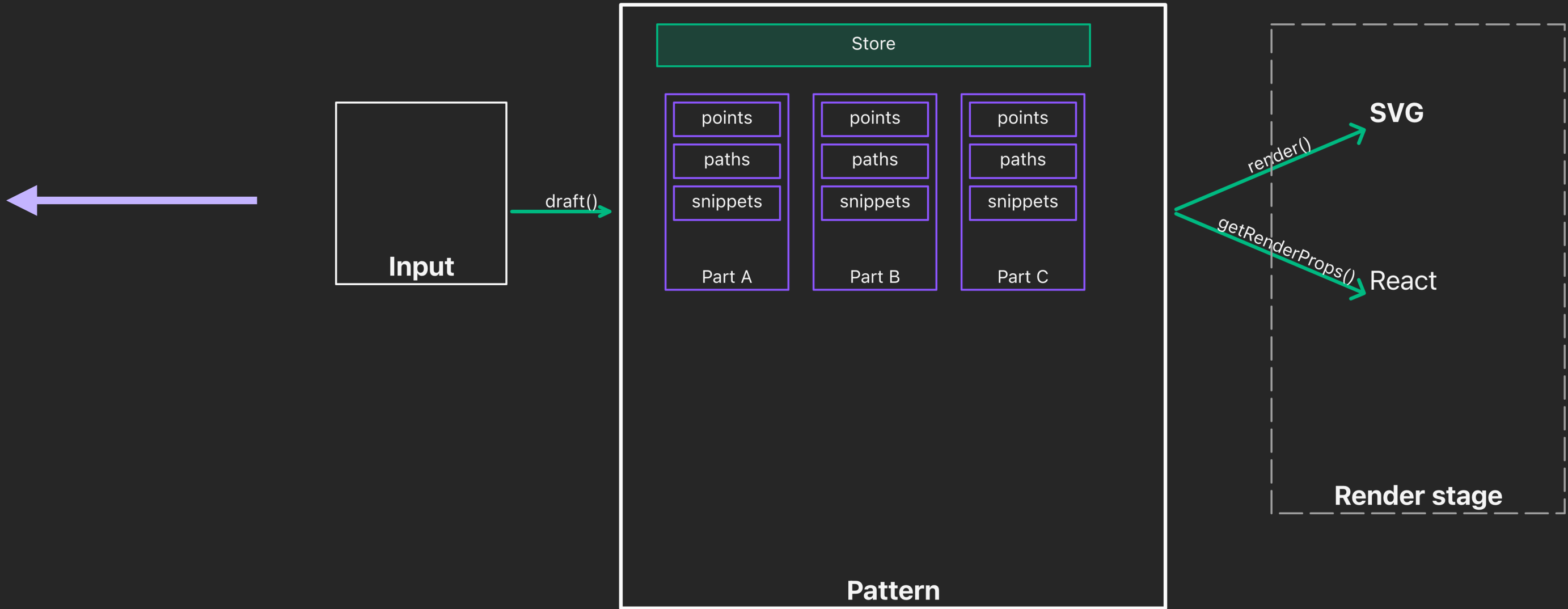
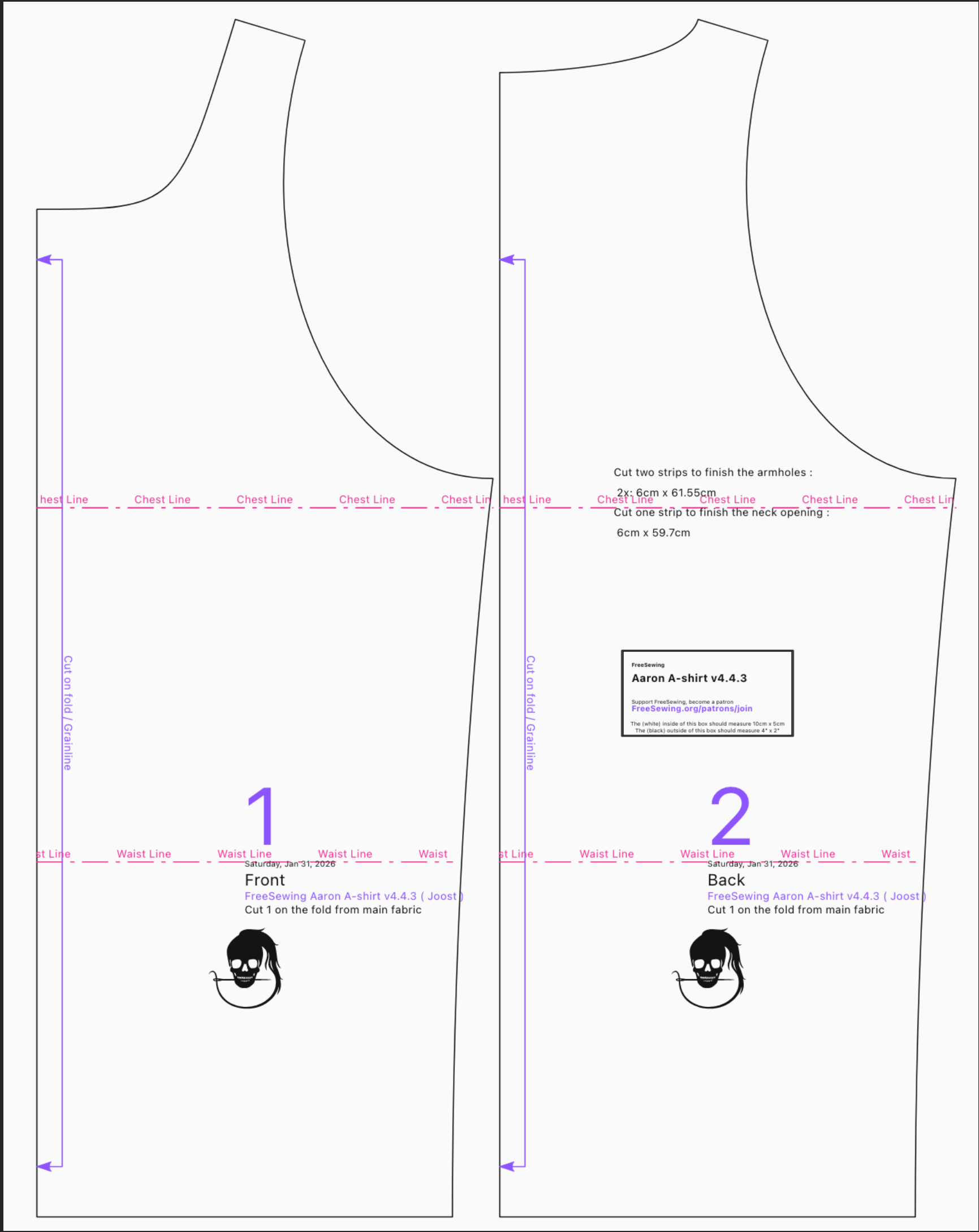


draft()



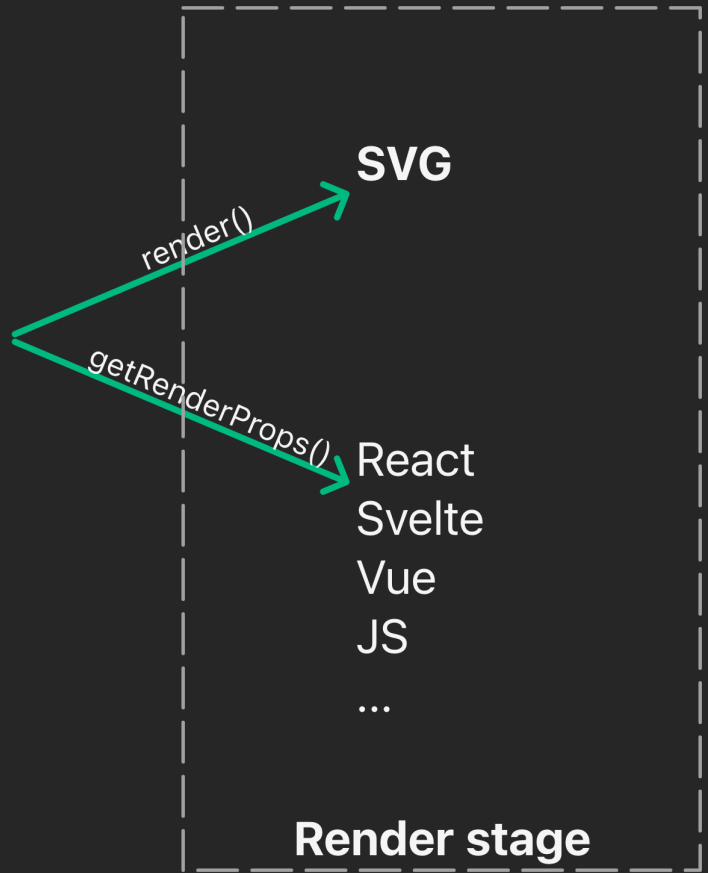
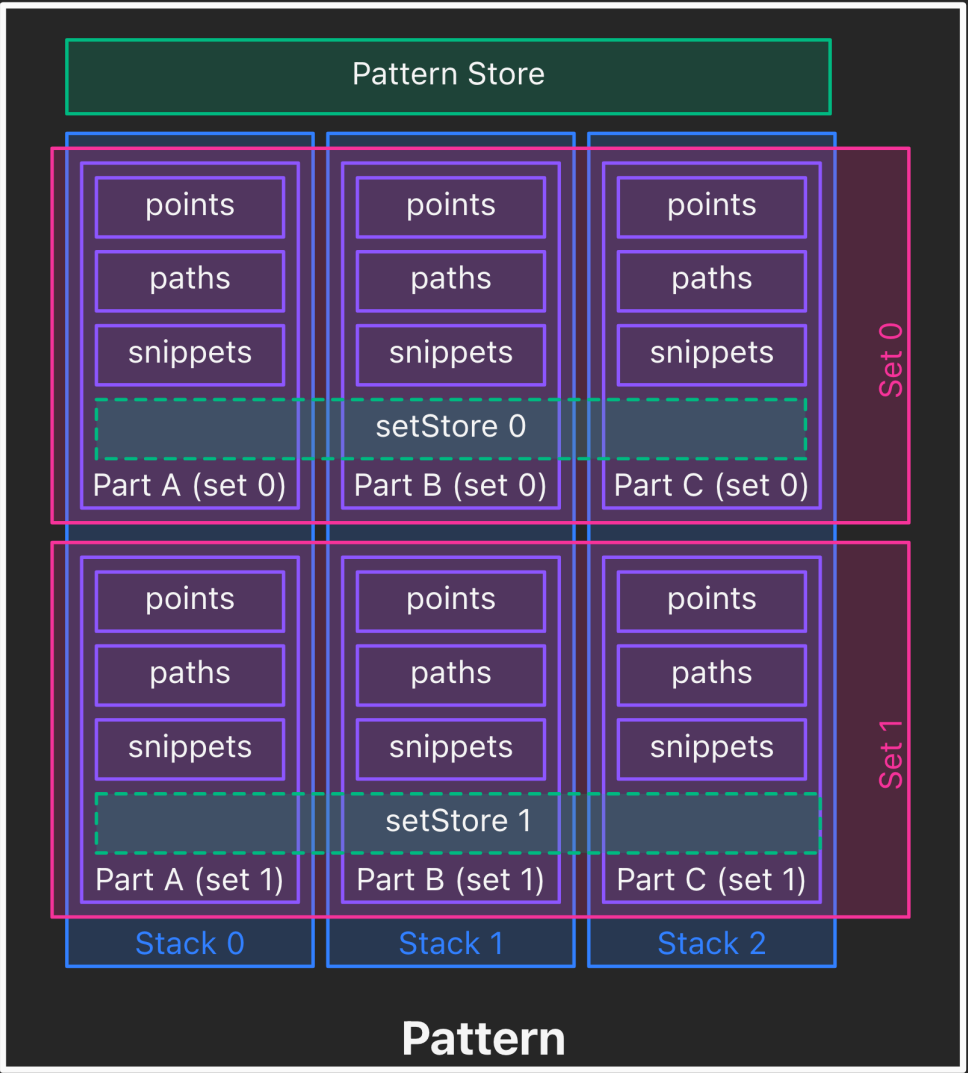
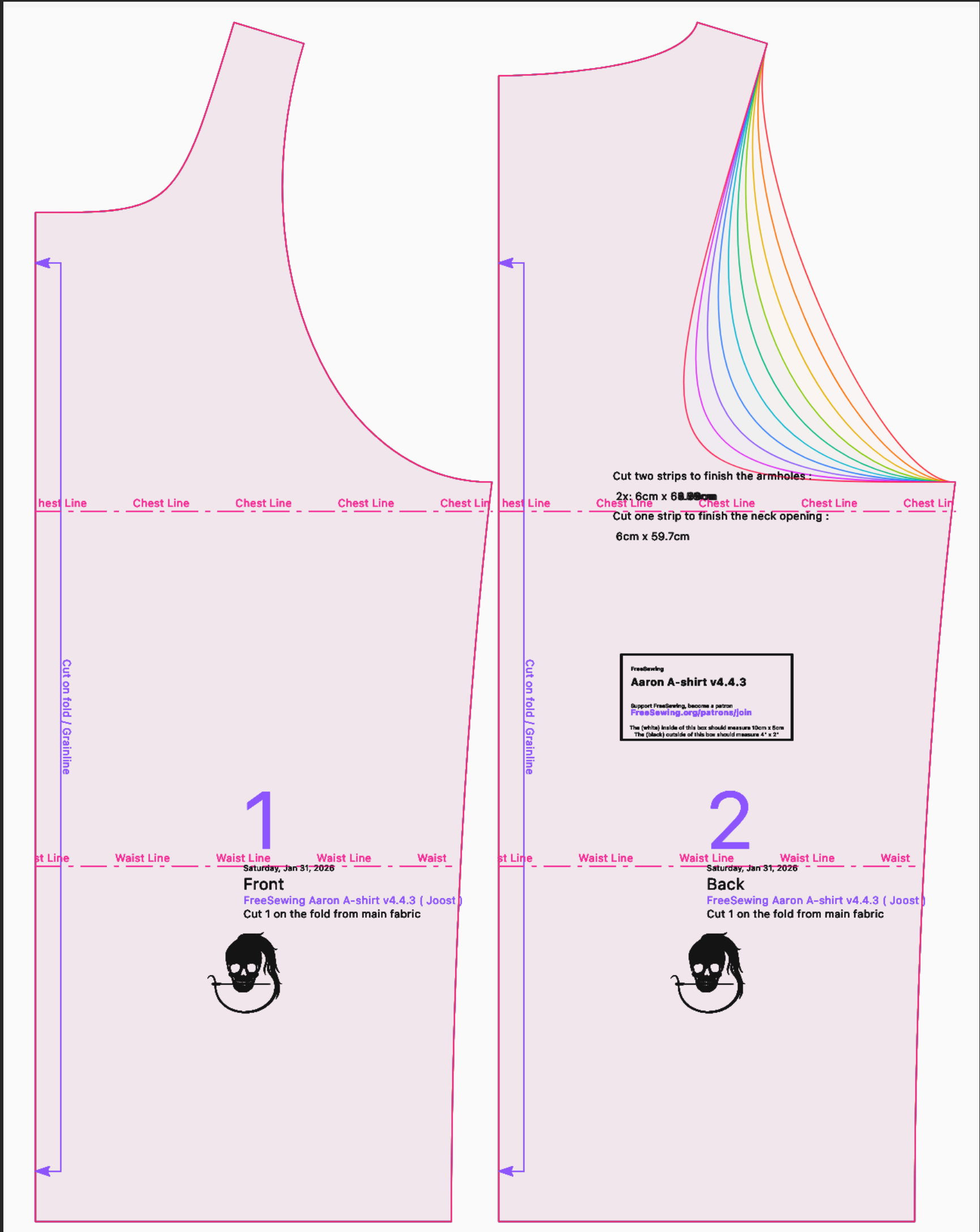
This will do for today





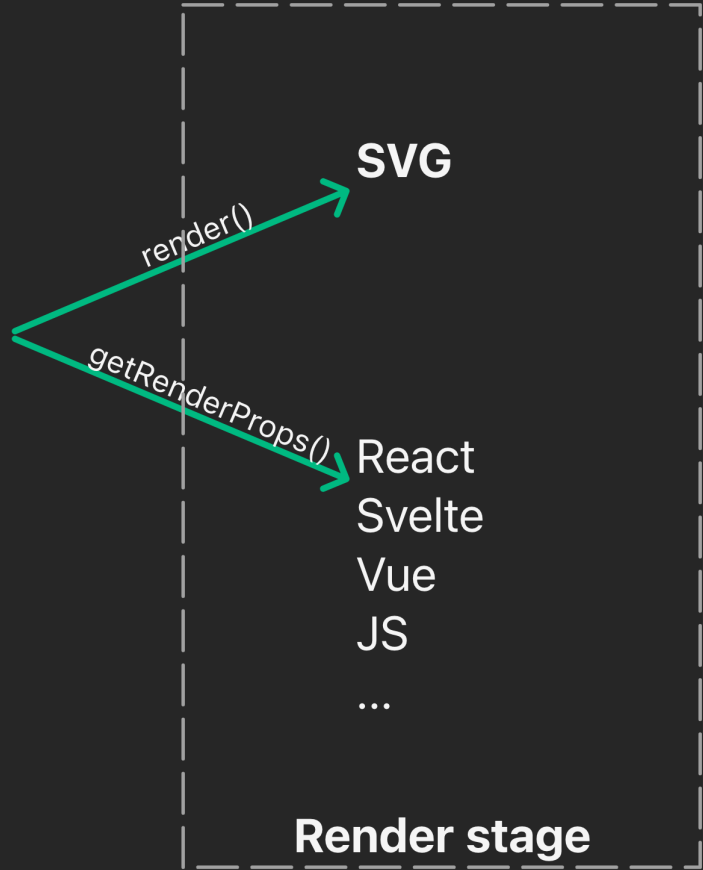
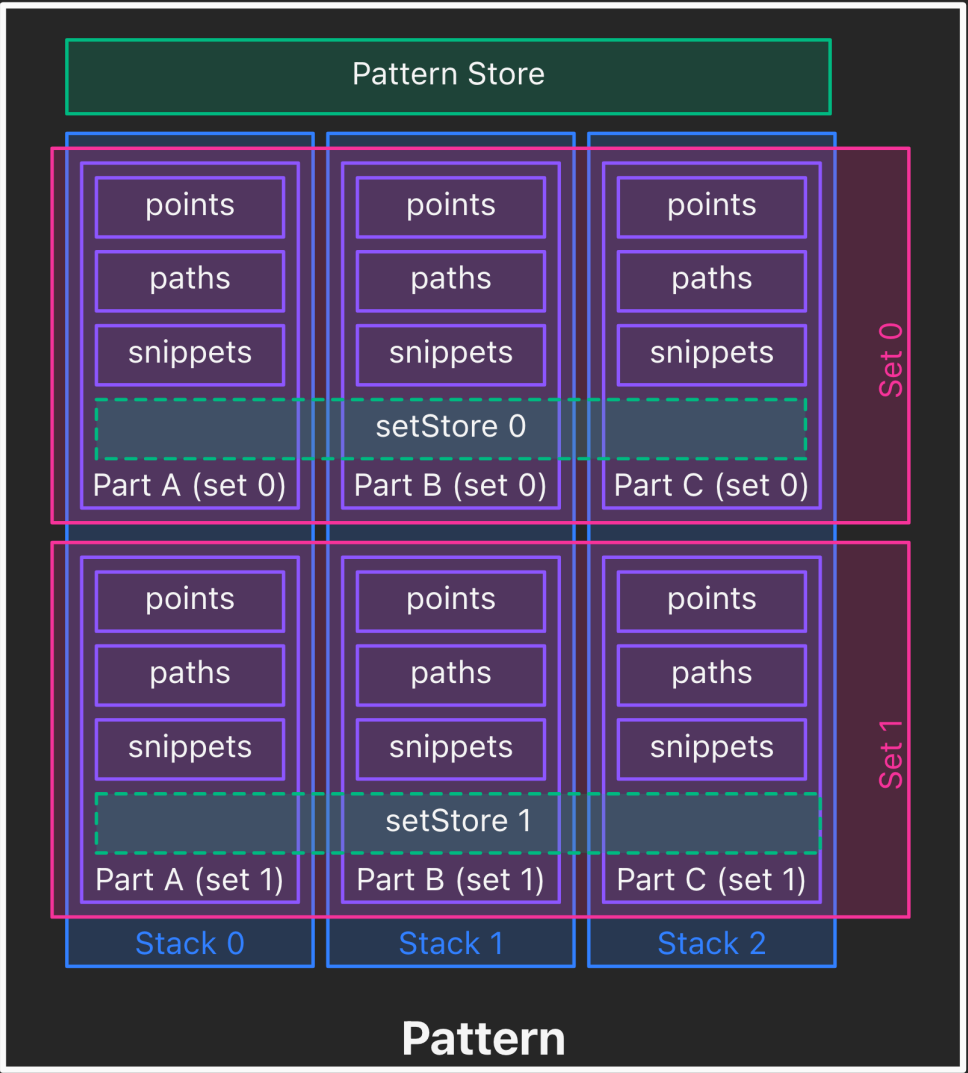
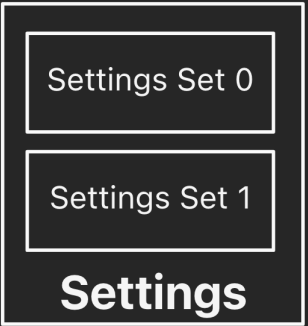
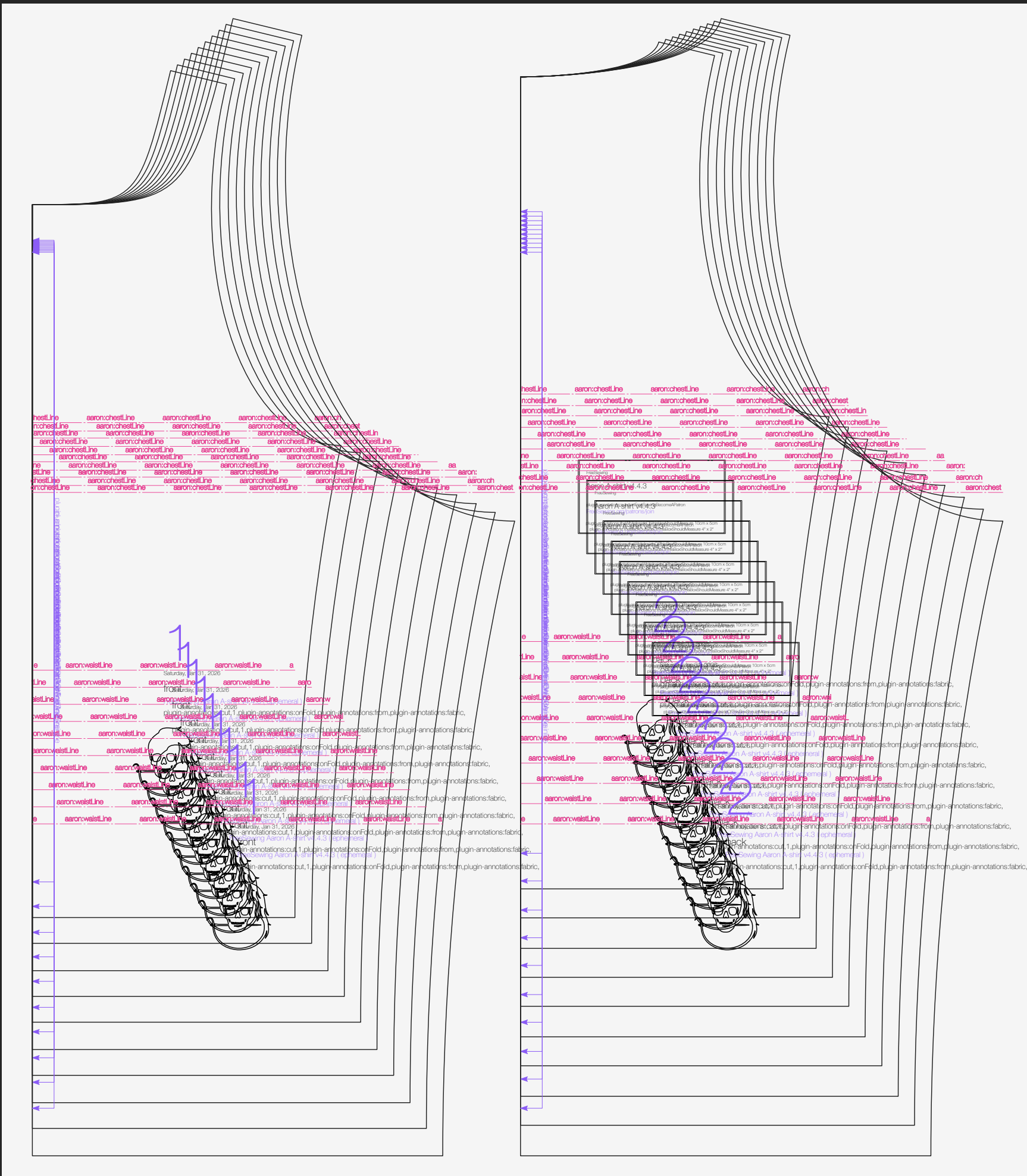
for 'just a pattern'
this is all we need





the rest is required
for advanced use-cases





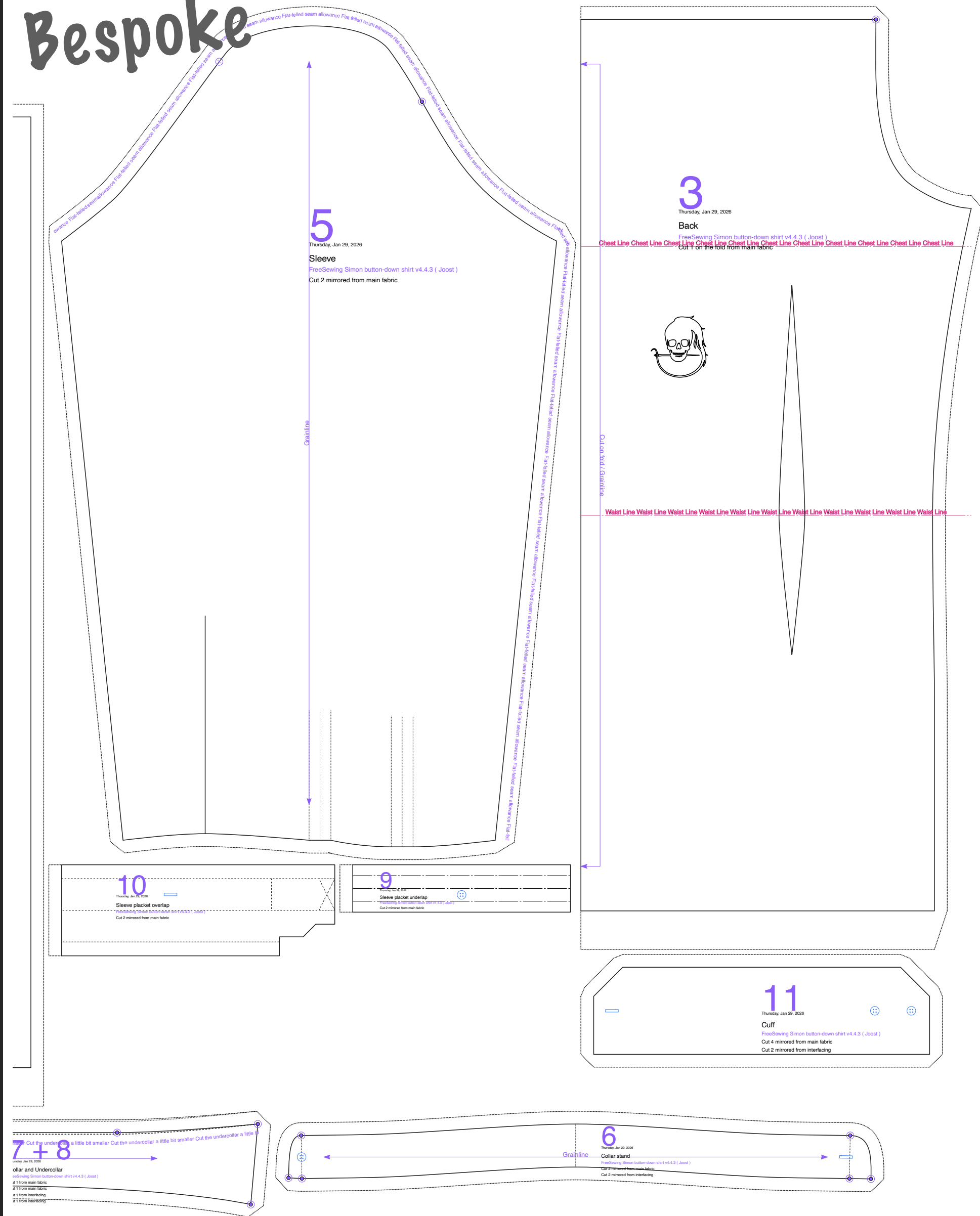
we use this
to test patterns



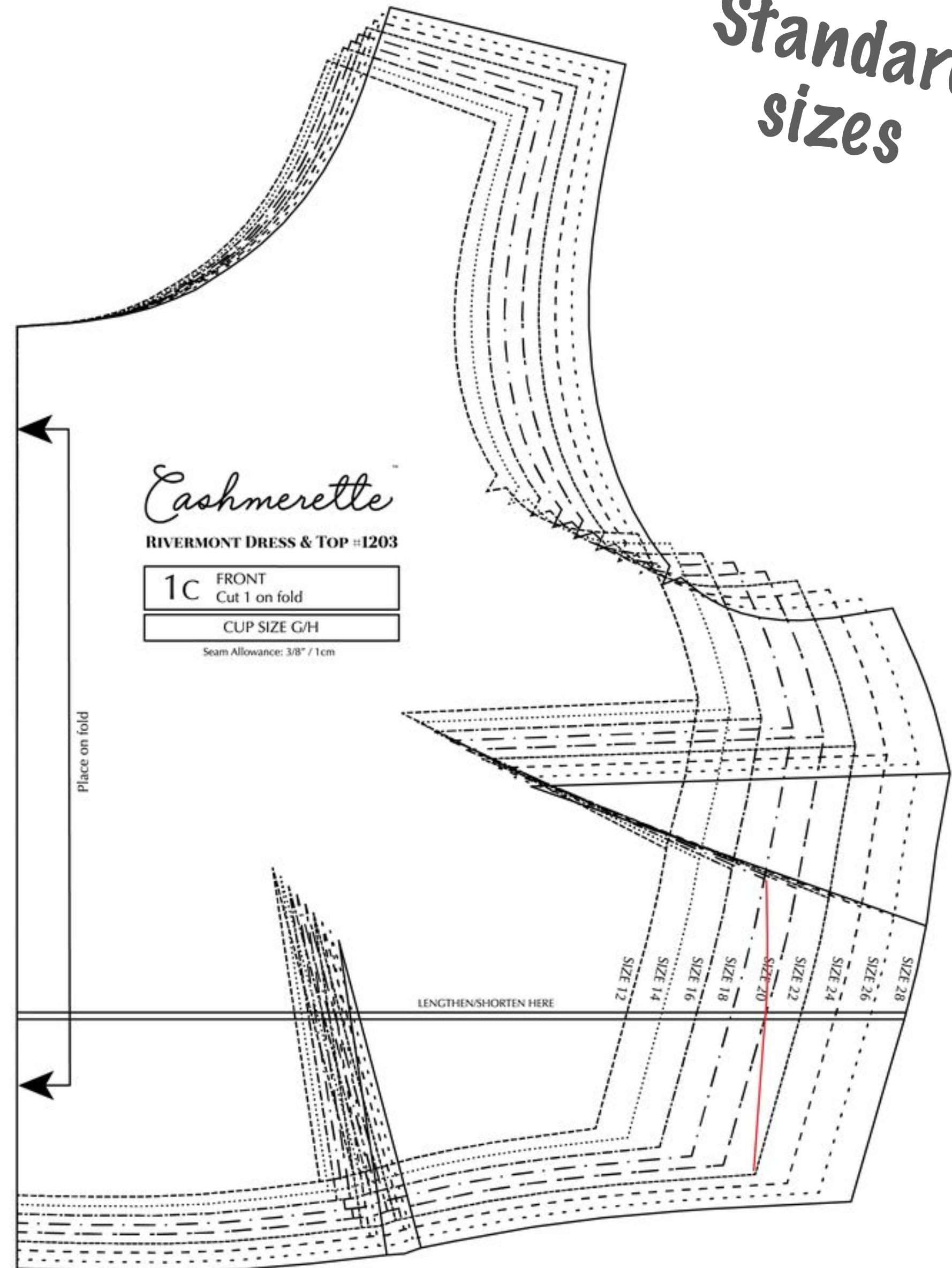
Drafting vs Grading



Bespoke



"Standard" sizes



Drafted (gigo)

2
Friday, Jan 30, 2020
Front left
FreeSewing Simon button-down shirt v4.4.3 (Joost)
Cut 1 from main fabric

1
Friday, Jan 30, 2020
Front right
FreeSewing Simon button-down shirt v4.4.3 (Joost)
Cut 1 from main fabric

4
Friday, Jan 30, 2020
Yoke
FreeSewing Simon button-down shirt v4.4.3 (Joost)
Cut 2 mirrored from main fabric

Simon button-down shirt v4.4.3
FreeSewing
FreeSewing.org/patterns/gigo

The yoke width of this kit should measure 100cm x 60cm
The body width of this kit should measure 64.2"

Remember a lap is smaller! Cut the undercollar a little bit smaller! Cut the undercollar a little bit smaller! Cut the undercollar a little bit smaller! Cut the undercollar a little bit smaller!

7
FreeSewing
FreeSewing.org/patterns/gigo
Collar and
Waistband
Cut 1 from main
Cut 1 from main
Cut 1 from main

Patterns as code



Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

Mark this point as point B

Pattern code



```
// Parametric design
function pattern (parameters) {
  return {
    // A digital representation of a
    // sewing pattern that takes our
    // input into account
  }
}
```



Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

Mark this point as point B

Part code

```

function pattern (parameters) {
  return {
    // A digital representation of a
    // sewing part that takes our
    // input into account
  }
}
```



Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

Mark this point as point B

Part code

```

    ● ● ●
  /*
   * A FreeSewing pattern is a container
   * for FreeSewing parts that stand alone
   */
  const front = ({
    part // Destructure the input
  }) => {

    // Do design things here

    return part
  }

```



Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

Mark this point as point B

Part code



```
/*  
 * Your method gets a single object that you  
 * can destructure to access what you need  
 */  
const front = ({  
  part // We'll mutate this and return it  
}) => {  
  // Do design things  
  
  // Then return the part object  
  return part  
}
```



Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

Mark this point as point B

Part code



```
const front = ({  
  part,  
  points, // Holds all points of the part  
  Point, // Point constructor  
}) => {  
  // Points takes a X and Y coordinate  
  points.A = new Point(0,0)  
  
  return part  
}
```



Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

Mark this point as point B

Part code



```
const front = ({
  part,
  points,
  Point,
  measurements, // Holds measurements in mm
}) => {
  points.A = new Point(0,0)
  points.B = new Point(
    measurements.chest / 4,
    0
  )

  return part
}
```



Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

This is ease

Mark this point as point B

Part code



```
const front = ({
  part,
  points,
  Point,
  measurements,
  options, // Holds design options
}) => {
  points.A = new Point(0, 0)
  points.B = new Point(
    measurements.chest / 4 + 🤔,
    0
  )

  return part
}
```

How do we add ease?



What is Ease



Functional Ease



Design Ease



Negative Ease



Goooo Mathieu 🥰

Instructions

Draw a vertical line,
mark the top as point A

From point A, square out
to the right measuring
one quarter of the
circumference of the chest

Add 2 inches

Mark this point as point B

Part code

```
const front = ({
  part,
  points,
  Point,
  measurements,
  options, // Holds design options
}) => {
  points.A = new Point(0,0)
  points.B = new Point(
    measurements.chest * options.chestEase / 4,
    0
  )
  return part
}
```



Paths




```
● ● ●  
const front = ({  
  part,  
  points,  
  Point,  
  measurements,  
  paths, // Holds all paths of the part  
  Path, // Path constructor  
}) => {  
  points.A = new Point(0,0)  
  points.B = new Point(measurements.chest / 4, 0)  
  //...  
  paths.example = new Path()  
    .move(points.A)  
    .line(points.B)  
    .curve(points.Bcp, points.Ccp, points.C)  
  
  return part  
}
```





```
const front = ({
  part, points, Point, measurements, paths, Path
}) => {
  points.A = new Point(0,0)
  points.B = new Point(measurements.chest / 4, 0)
  points.C = points.A.shiftFractionTowards(
    points.B
    0.5
  )
  paths.example = new Path()
    .move(points.A)
    .line(points.B)
    .curve(points.Bcp, points.Ccp, points.C)
    .addText("Hello FOSDEM")
    .addClass("fabric")
  return part
}
```



Point API

Point.addCircle()
Point.addText()
Point.angle()
Point.asRenderProps()
Point.attr()
Point.clone()
Point.copy()
Point.dist()
Point.dx()
Point.dy()
Point.flipX()
Point.flipY()
Point.rotate()
Point.setCircle()
Point.setText()
Point.shift()
Point.shiftFractionTowards()
Point.shiftOutwards()
Point.shiftTowards()
Point.sitsOn()
Point.sitsRoughlyOn()
Point.slope()
Point.translate()

Path API

Path.addClass	Path.line
Path.addText	Path.move
Path.angleAt	Path.noop
Path.asPathString	Path.offset
Path.asRenderProps	Path.reverse
Path.attr	Path.rotate
Path.bbox	Path.roughLength
Path.circleSegment	Path.setClass
Path.clean	Path.setHidden
Path.clone	Path.setText
Path.close	Path.shiftAlong
Path.combine	Path.shiftFractionAlong
Path.curve	Path.smurve
Path.curve_	Path.smurve_
Path.divide	Path.split
Path.edge	Path.start
Path.end	Path.translate
Path.hide	Path.trim
Path.insop	Path._curve
Path.intersects	Path.unhide
Path.intersectsBeam	
Path.intersectsX	
Path.intersectsY	
Path.join	
Path.length	

API

free sewing.dev/reference/api



Complete Example





index.mjs

```
import { Design } from '@freesewing/core'
import { i18n } from '../i18n/index.mjs'
import about from '../about.json' with { type: 'json' }
import { front } from './front.mjs'

// Setup our new design
const Fosdem = new Design({
  data: about,
  parts: [ front ],
})

// Named exports
export { front, Fosdem, i18n, about }
```





il8n/index.mjs

```
export const i18n = {
  en: {
    t: "FOSDEM Example Design",
    d: "This is just an example design for FOSDEM 2026",
    p: {
      front: "Front"
    },
    s: {
      helloFosdem: "Hello FOSDEM"
    },
    o: {
      chestEase: {
        t: "Chest ease",
        d: "The amount of ease at your chest"
      }
    }
  }
}
```



about.json

```
{
  "id": "fosdem",
  "name": "Fosdem example",
  "code": "Joost De Cock",
  "description": "A complete FreeSewing example design",
  "design": "Joost De Cock",
  "difficulty": 2,
  "tags": [ "tops" ],
  "techniques": [ "flat-sleeve" ],
  "block": false,
  "version": "4.4.3",
  "pkg": "@freesewing/fosdem",
  "collection": true
}
```





```
export const front = {  
  name: "fosdem.front",  
  measurements: [ "chest" ],  
  options: {  
    chestEase: { pct: 8, min: 2, max: 20 }  
  },  
  draft: ({ part, points, Point, measurements, paths, Path }) => {  
    points.A = new Point(0,0)  
    points.B = new Point(measurements.chest / 4, 0)  
    // ... add other points  
    paths.example = new Path()  
      .move(points.A)  
      .line(points.B)  
      .curve(points.Bcp, points.Ccp, points.C)  
      .addText("helloFosdem").addClass("fabric")  
  
    return part  
  }  
}
```



aaron
albert
bee
bella
benjamin
bent
bibbi
bob
breanna
brian
bruce
carlita
carlton
cathrin
charlie
cornelius
devon
diana
florence
florent
fosdem
gozer
hi
holmes
hortensia

huey
hugo
jaeger
jane
jett
lily
lucy
lumina
lumira
lunetius
noble
octoplushy
onyx
opal
otis
paco
penelope
percy
sabrina
sandy
sarah
shelly
shin
simon
simone

skully
sophie
sunny
sven
tamiko
teagan
tiberius
titan
trayvon
tristan
uma
umbra
wahid
walburga
waralee
yuri

the
FreeSewing
collection

Design Done



**But how do I get a
Pattern**



```
// Load our FreeSewing Design
import { Fosdem } from '@freesewing/fosdem'
// Load the SVG theme
import { pluginTheme as theme } from '@freesewing/plugin-theme'

const pattern = new Fosdem({
  sa: 10, // This is an example of a Core setting
  options: {
    chestEase: 0.05, // This is our design option
  },
  measurements: {
    chest: 1050 // Measurements always in mm
  },
}).use(theme).draft()

const svg = pattern.render()
```

Or use
[FreeSewing.eu](https://freesewing.eu)



How do I Start





```
npx @freesewing/studio
```

stand-alone
development
environment



```
git clone ...  
cd freesewing  
npm run kickstart
```

(fork of our)
monorepo



Code vs Design





```
{
  "id": "carlton",
  "name": "Carlton coat",
  "code": "Joost De Cock",
  "description": "A FreeSewing pattern for...",
  "design": [
    "Anneke Caramin",
    "Joost De Cock",
  ],
  "difficulty": 5,
  "tags": [ "tops", "coats" ],
  // ... and so on
}
```

+ Code Design



Where can you use FreeSewing

NodeJS

Bun

Deno

On the backend

In the browser

Inside a serverless function

On [FreeSewing.eu](https://freesewing.eu)

...



Software Developers vs Website Users



Software developers (aka tech people)

NPM
SemVer
CHANGELOG
API docs
DX
Issues
...

Website users (aka sewing people)

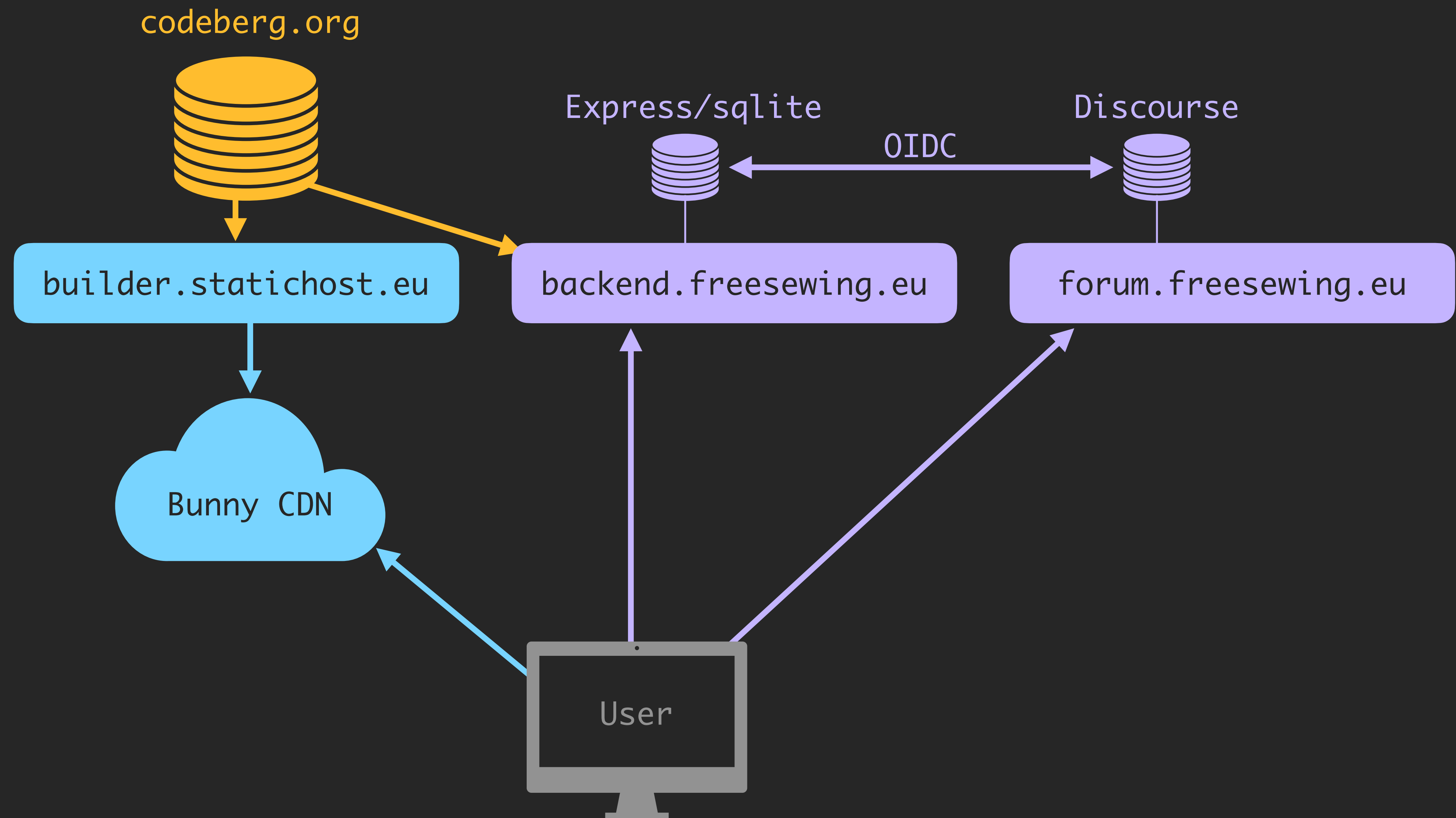
UX
PDF & Tiling
Layout
Backend
Sewing Instructions
Website Docs
Account stuff
Showcase, Blog, Forum
Support
...

Try to explain everything to people who don't know FOSS



Infrastructure





Lessons learned as a Maintainer

3 tips



Touch Grass



People Come & Go



Prepare to Retire



The life-changing magic of Interdisciplinary FOSS



Do you have any
Questions



Websites

[FreeSewing.eu](#)
[FreeSewing.dev](#)
[FreeSewing.social](#)
[forum.FreeSewing.eu](#)

FreeSewing

Codeberg: [freesewing](#)
Mastodon: [freesewing@freesewing.social](#)
Bluesky: [@freesewing.eu](#)
Email: support@freesewing.eu

Joost

Codeberg: [joostdecock](#)
Mastodon: [joost@freesewing.social](#)
Bluesky: [@joost.at](#)
Email: joost@joost.at

Thank you

