a solution using Scalable Vector Graphics
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Since 1998 Progress developer

PUG Netherlands board member 2002-2014

EMEA PUG board member 2011-2014

Flusso employee since 2007
outline

- Customer
- Assignment
- Order process
- First idea
- Available data
- SVG
- Demo
- Final solution
- Result
customer

Headoffice of optical retail chain for Benelux

Supplies more than 800 stores

6,000 orders per day
assignment

**Improve diameter calculation.**

- False negative order cancelation.
- False positive order cancelation.
- Discussion between head office and stores.
- Unsatisfied customers ... waiting too long.
order process

Frontend application with limited validation.

Backend application with extensive validation.

Supplier does final validation.
available data

- Frame scan
- Type of glasses
- Type of lens
- Customer recipe
types of glasses

- Multi-focal or bi-focal glasses
- Glasses for farsighted (reading a book)
- Glasses for nearsighted (driving a car)
- Office glasses
type of lens

• Singlefocal
• Multifocal (trifocal, officeview, etc.)
• Bifocal
recipe of the customer

- Sfere
- Cylinder (agstimatism)
- Addition
- Prism
- Pupil distance (reading and far away)
- Lens height (reading and far away, depends on frame)
first idea

"A picture is worth a thousand words"

Make the order visible

Make it interactive

HOW?!
SVG (Scalable Vector Graphics)

```
<svg width="150" height="130">
  <rect width="100%" height="100%" style="stroke: gray; fill: yellow; stroke-width: 1;"/>
  <circle stroke="blue" fill="orange" cx="50" cy="50" r="40"/>
  <g transform="translate(50,50)">
    <line stroke="green" stroke-width="2" x1="10" y1="10" x2="-10" y2="-10"/>
    <line stroke="green" stroke-width="2" x1="-10" y1="10" x2="10" y2="-10"/>
  </g>
  <text style="fill: black;" x="110" y="110"/>Text
</svg>
```

D3 javascript library.

https://d3js.org
demo
final solution

- Just an image not interactive
- Don’t draw a pupil but a cross instead
- Flip image horizontally
- Send realsize image as pdf by email
- After browser upgrade send a link
- Use d3.path instead of polygon
result

99.9 % reliable diameter calculation

Save 10 hours of work each week

80-90 % less rejections from supplier
questions?

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Links used during the demo’s:

http://www.kelters.nl/gga
https://jsfiddle.net/Ries/sw9qwe72
https://jsfiddle.net/Ries/v2xsdoLp
https://jsfiddle.net/Ries/s7puuyqf
https://www.flusso.nl/dagelijks-een-uur-tijdswinst-met-eenvoudige-svg-oplossing
https://d3js.org
http://wkhtmltopdf.org