



MAKE A DIFFERENCE

Begynn å klone repoet på:
<https://github.com/Itera/ReactVR-kurs>



Storytelling

Hvis du har kjøpt reiseforsikring hos **Gjensidige**, streamet Game of Thrones fra **RiksTV** på nett, opprettet aksjesparekonto hos **Storebrand**, hentet medisiner fra **Boots** eller **Apotek1**, betalt med bankkort i en betalingsterminal fra **Nets**, fått inkasso fra **Kredinor**, kjøpt nye sko hos **Eurosko**, ringt kundeservice hos **Santander**, meldt tyveri av mobil til **If**, betalt **EuroPark**-parkering ved hjelp av skiltgjenkjenning...

da har du brukt tjenester som Itera har vært med på å utvikle!

Litt fakta om oss

- Itera er et kommunikasjons- og teknologiselskap.
- Tverrfaglige team: rådgivning, UX, test og utvikling.
- Underkant av 250 ansatte i Norge.
- Kontorer i Bratislava og Kiev.



KOMPETENT

Vi er stolte av faget vårt

NYSKAPENDE

Vi har et trent blikk for trender

LIDENSKAPELIG

Vi har et ønske om å utgjøre en forskjell





React VR

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<https://github.com/Itera/ReactVR-kurs>





VR = Virtual Reality

Hva kan det brukes til?

ReactVR

Hvorfor skal vi bry oss?



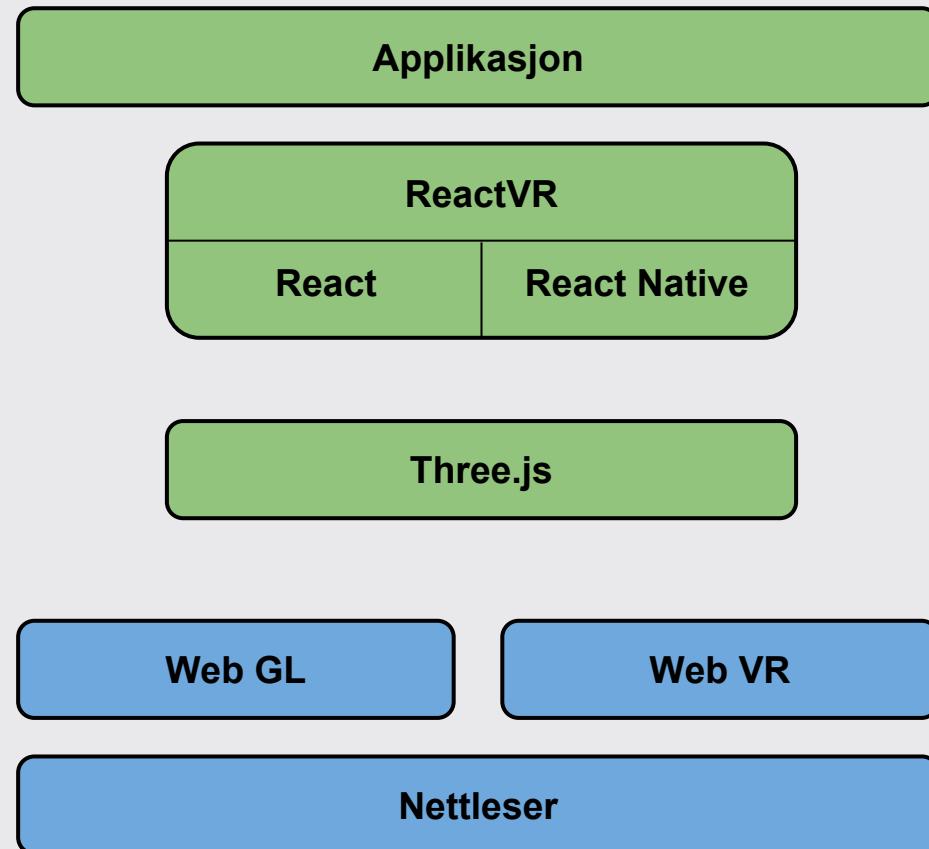
Tech stack



Javascript

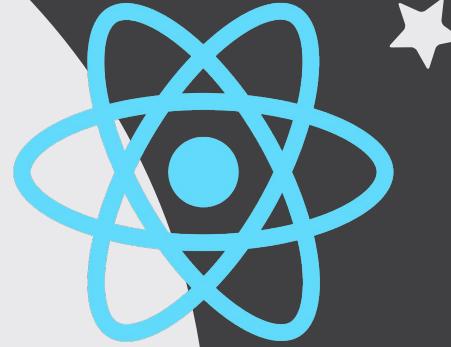


Nettleser API



React?

Vi starter med en
kort introduksjon





Hva er spesielt med React?

- React er et Javascript-bibliotek for å lage brukergrensesnitt.



ENKELT OG EFFEKTIVT

- Deklarativt: sier *hva* som skal gjøres, ikke *hvordan*
- Oppdaterer kun de delene som trengs



KOMPONENTBASERT

- Deler inn i komponenter
Lettere å gjenbruke kode
- En komponent har en *tilstand*: state + props
- Render() sier hvordan komponenten skal vises



ENKELT

- Deklarativt: sier *hva* som skal gjøres, ikke *hvordan*



EFFEKTIVT

- Oppdaterer kun de delene som trengs



KOMPONENTBASERT

- Deler inn i komponenter
- Lettere å gjenbruke kode

En React-komponent

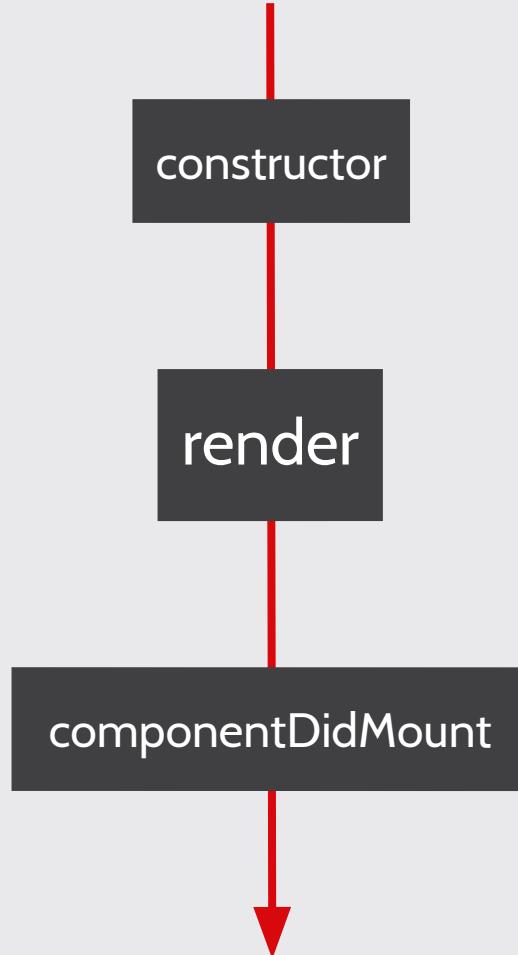
State →

Props →

Tilstand = **state + props**

Render-metoden sier hva
som skal vises

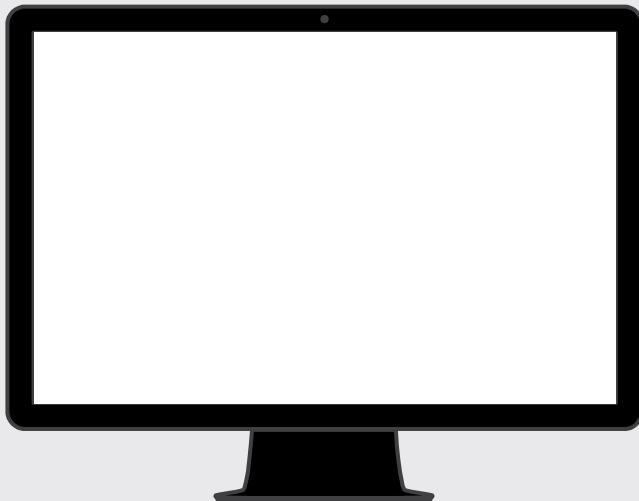
Render() →



En
komponenten
“lifecycle”



Et lite kodeeksempel



```
class Counter extends React.Component {  
  constructor(props) {  
    super(props);  
    this.state = { count: props.initialCount };  
  }  
  
  handleCount() {  
    this.setState(prevState => ({  
      count: prevState.count + 1  
    }));  
  }  
  
  render() {  
    return ( Current count: {this.state.count} );  
  }  
}
```



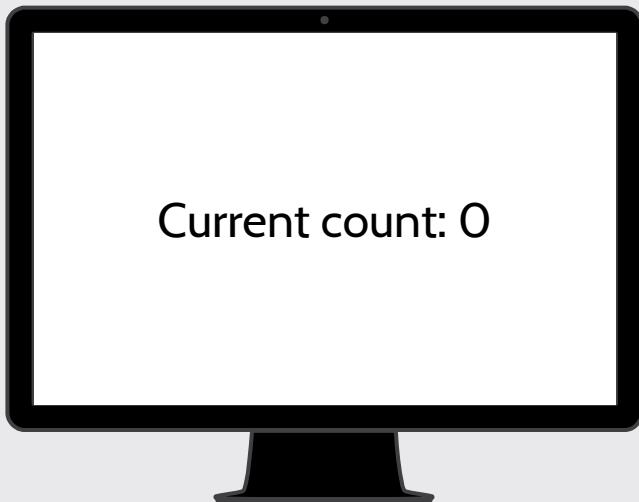
Et lite kodeeksempel



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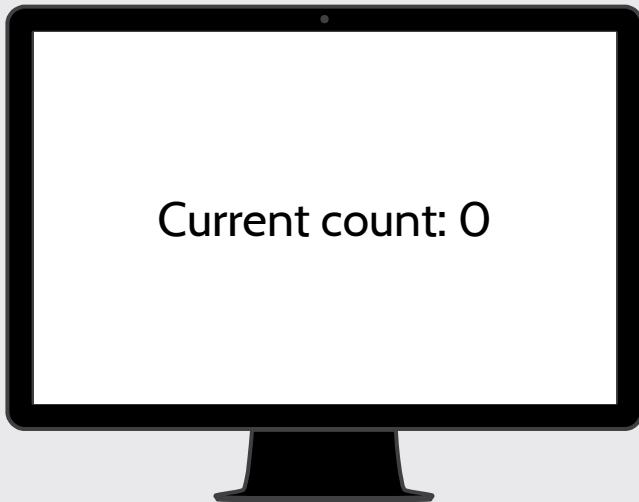
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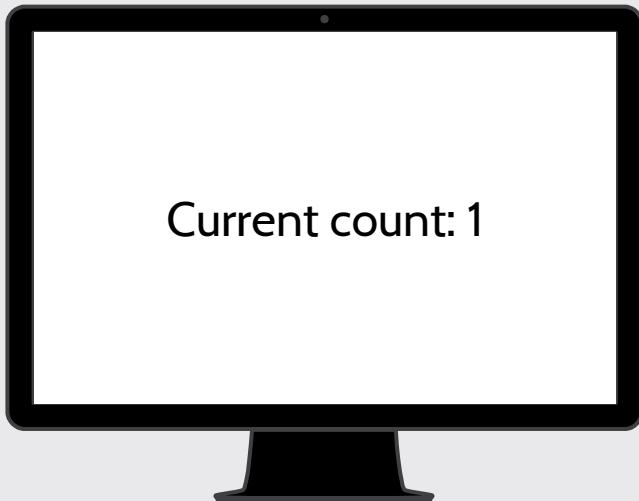
Et lite kodeeksempel



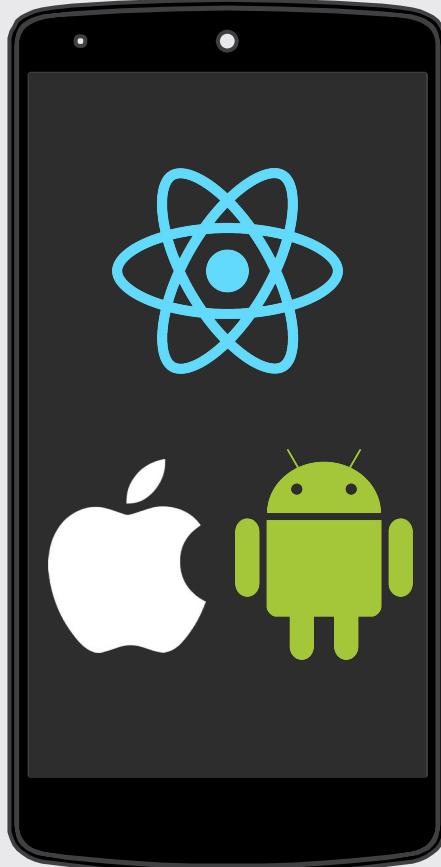
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```



Et lite kodeeksempel



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```

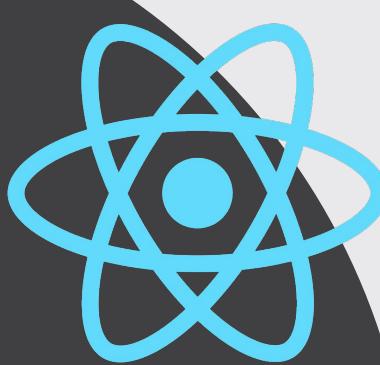


React Native

Native apps på Iphone
og Android med React

ReactVR

En intro til
rammeverket

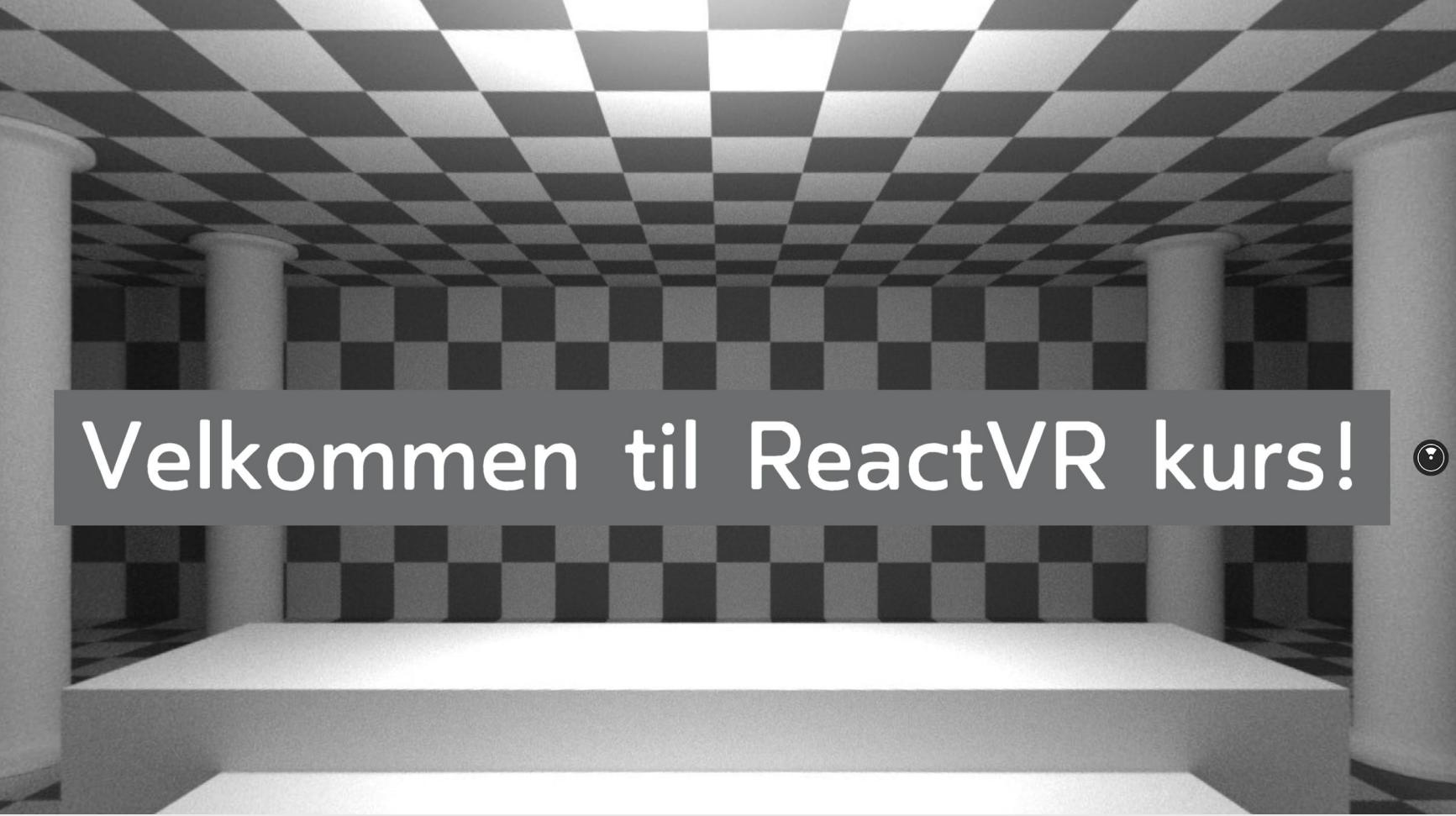


Eksempel

```
import React from 'react';
import {AppRegistry, asset, Pano, View} from 'react-vr';

export default class IteraGame extends React.Component {
  render() {
    return (
      <View>
        <Pano source={asset('chess-world.jpg')}/>
        <Text
          style={{
            backgroundColor: '#777879',
            fontSize: 0.8,
            fontWeight: '400',
            layoutOrigin: [0.5, 0.5],
            transform: [{translate: [0, 0, -3]}],
          }}>
          Velkommen til ReactVR kurs!
        </Text>
      </View>
    );
  }
}

AppRegistry.registerComponent('IteraGame', () => IteraGame);
```



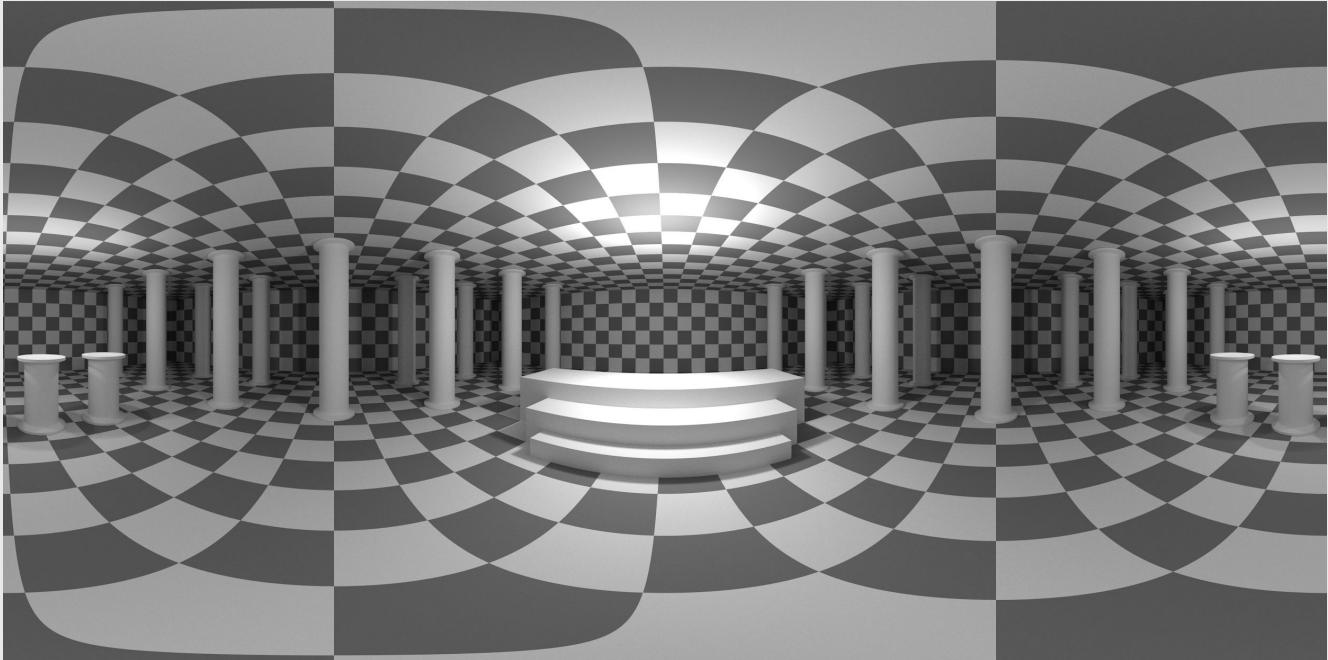
Velkommen til ReactVR kurs!



Komponenter - kjerne

- **View:** Tom komponent, tilsvarende div i html
- **Pano:** Et 360° bilde eller en kombinasjon av flere bilder som omringer 3d.
- **Image:** Visning av bilde
- **Text:** Visning av tekst

Komponenter - kjerne



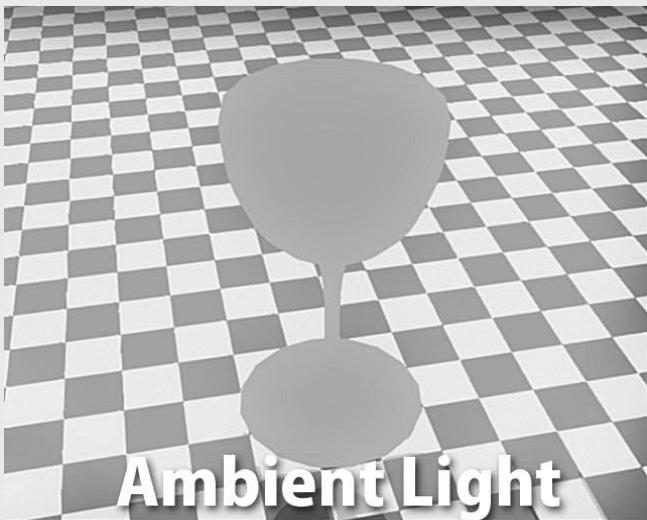
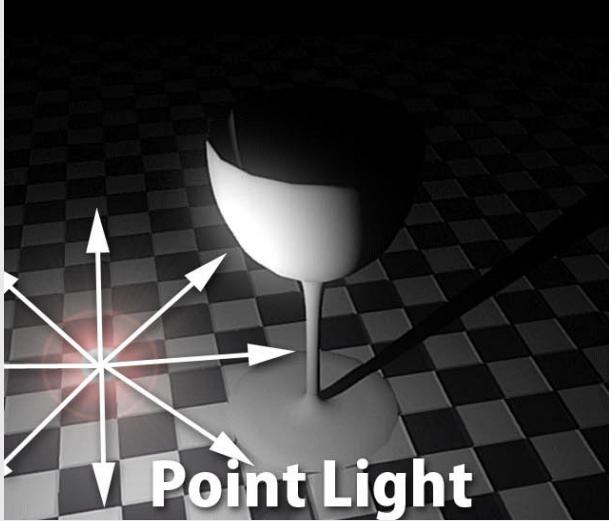
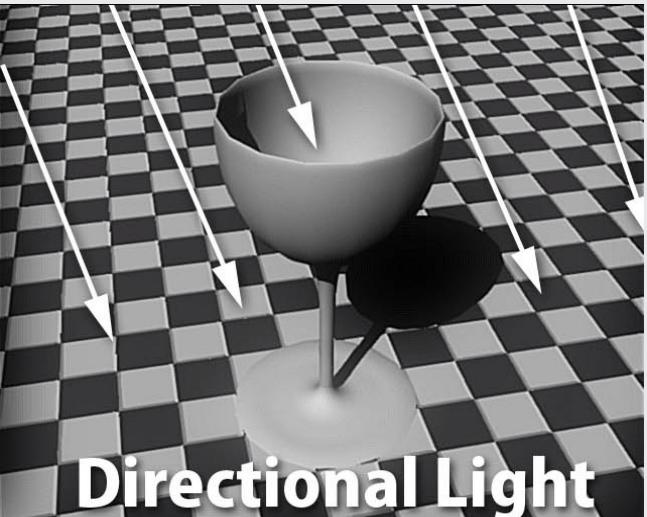
Pano eksempel

Komponenter - lys

- **AmbientLight**
- **DirectionalLight**
- **PointLight**
- **SpotLight**

```
render() {
  return (
    <View>
      <Pano source={asset('chess-world.jpg')}/>
      <AmbientLight intensity={0.5} />
      <PointLight
        style={{color:'white', transform:[{translate:[0, 0, 0]}] }}/>
    </View>
  );
}
```

Komponenter - lys



Komponenter - 3D modeller

- Box
- Cylinder
- Sphere
- Plane
- Model



Komponenter - diverse

- Sound
- Video
- VrButton

```
<VrButton onClick={()=>this._handleClick()}>  
    <Image style={{height: 2.0, width: 2.0}} source={{uri: "..."} }>  
        <Sound source={{ mp3: asset('waterfall.mp3') }} />  
    </Image>  
</VrButton>
```

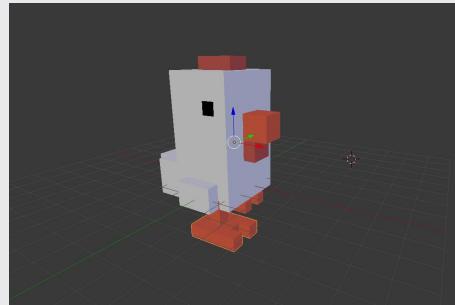


Styling

Hvordan designe
komponenter i 3D?

Veldig likt som
i css, med
noen unntak:

- Avstander måles i meter
- **Transforms** bestemmer posisjon og rotasjon til komponenten. Vi bruker [x,y,z] koordinater



Animasjoner

Legg til bevegelser
på dine komponenter

Animated from react-vr

- Animated er brukt for å lage enkle animasjoner i ReactVR
- Animated bruker .start() og .stop() med tidsintervall
- Animated støtter blant annet:
 - Timing, spring ++

Eksempel

```
componentDidMount() {
    this.spinAnimation();
}

spinAnimation() {
    this.state.spin.setValue(0);
    Animated.timing(
        this.state.spin,
        {
            toValue: 1,
            duration: 10000
        }
    ).start( () => this.spinAnimation());
}

render() {
    return (
        <AnimatedModel
            style={[
                {rotateY: this.state.spin}
            ]}
        );
}
```



Takk for oss!

Nå er det deres tur,
oppgaver finner dere på:

<https://github.com/Itera/ReactVR-kurs>

Si ifra dersom dere trenger hjelp! 😊



Takk for oss!

Rekker du ikke å bli ferdig?

Sjekk ut den ferdige oppgaven her:

<http://363dddeb.ngrok.io/vr/>

Anbefaler også å laste ned Google Cardboard appen for mange kule VR-eksempler! 😊



Instructions for use

EDIT IN GOOGLE SLIDES

Click on the button under the presentation preview that says "Use as Google Slides Theme".

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You have to be signed in to your Google account.

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Remember to download and install the fonts used in this presentation (you'll find the links to the font files needed in the Presentation design slide)

More info on how to use this template at www.slidescarnival.com/help-use-presentation-template

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Hello!

I am Jayden Smith

I am here because I love to
give presentations. You can
find me at @username



1

Transition headline

Let's start with the
first set of slides

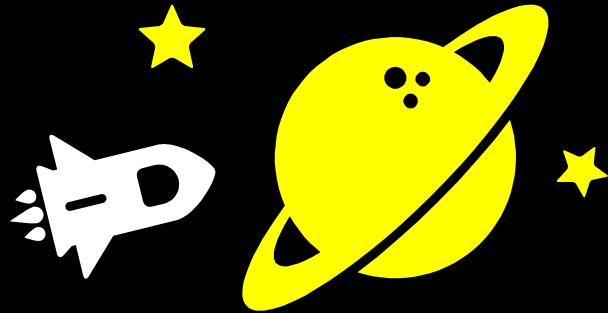
Quotations are commonly
printed as a means of
inspiration and to invoke
philosophical thoughts from
the reader.



This is a slide title

- Here you have a list of items
- And some text
- But remember not to overload your slides with content

Your audience will listen to you or read the content, but won't do both.



BIG CONCEPT

Bring the attention of your audience over a key concept using icons or illustrations



You can also
split your
content

White

Is the color of milk and fresh snow, the color produced by the combination of all the colors of the visible spectrum.

Black

Is the color of coal, ebony, and of outer space. It is the darkest color, the result of the absence of or complete absorption of light.



In two or three columns

Yellow

Is the color of gold, butter and ripe lemons. In the spectrum of visible light, yellow is found between green and orange.

Blue

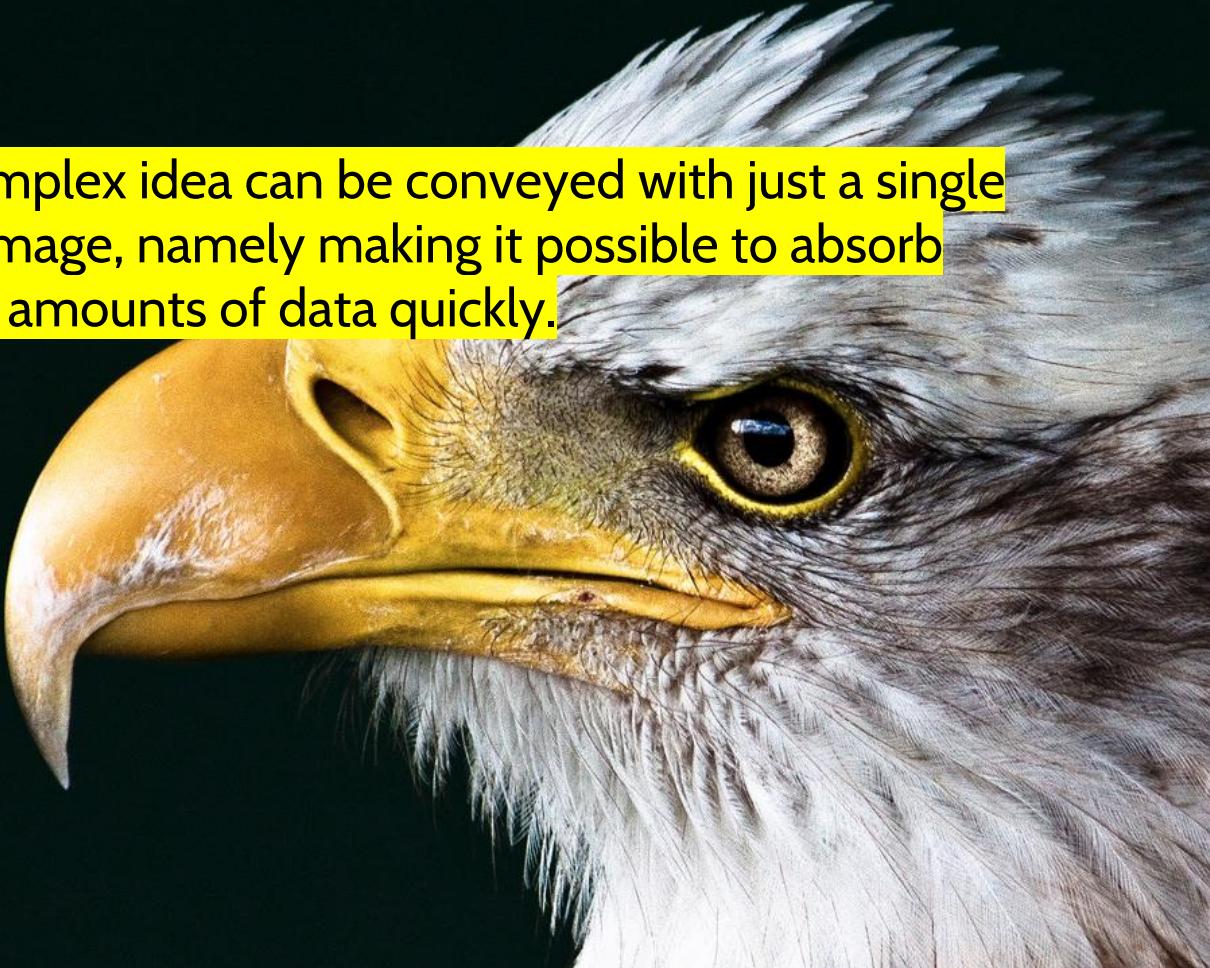
Is the colour of the clear sky and the deep sea. It is located between violet and green on the optical spectrum.

Red

Is the color of blood, and because of this it has historically been associated with sacrifice, danger and courage.

A picture is
worth a
thousand
words

A complex idea can be conveyed with just a single still image, namely making it possible to absorb large amounts of data quickly.

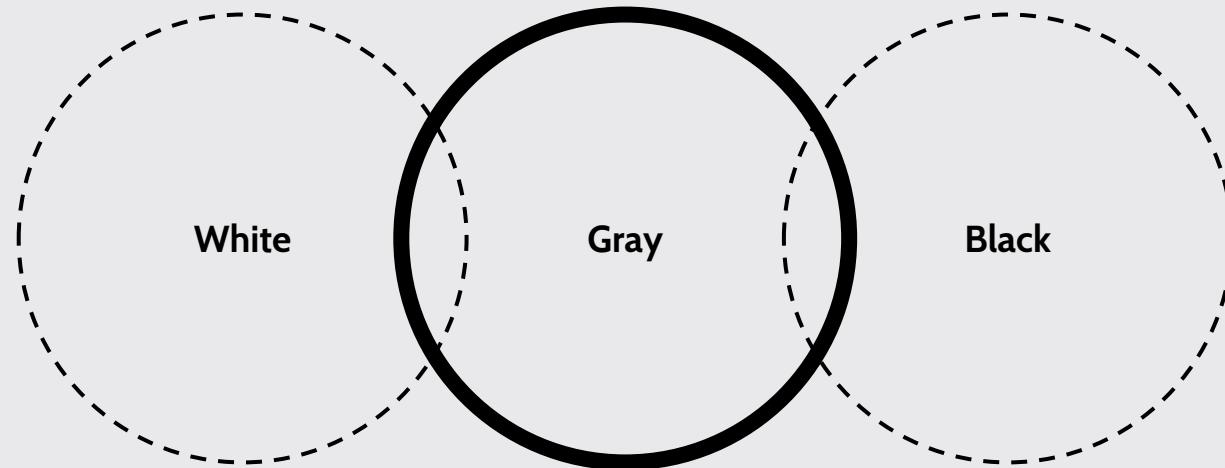


A photograph of two seagulls in flight against a clear, light blue sky. The bird in the foreground is captured from a low angle, its wings spread wide, showing white feathers with dark brown tips. Its red legs and feet are visible at the bottom. Another seagull is flying higher and to the right. The lighting suggests a bright day.

**Want big impact?
Use big image.**



Use charts to
explain your
ideas





And tables to
compare
data

	A	B	C
Yellow	10	20	7
Blue	30	15	10
Orange	5	24	16



Maps



89,526,124

Whoa! That's a big number,
aren't you proud?

89,526,124\$

That's a lot of money

185,244 users

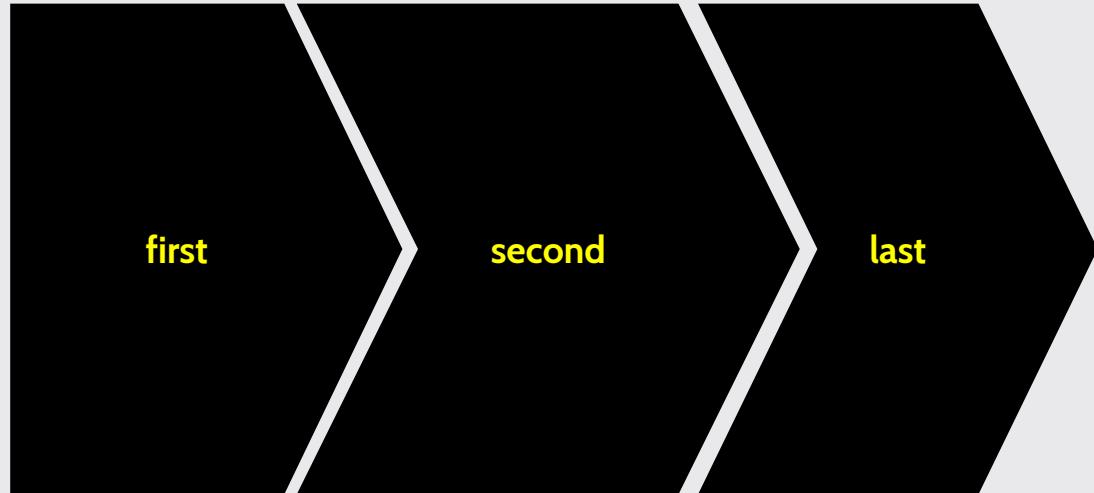
And a lot of users

100%

Total success!



Our process
is easy



Let's review some concepts



Yellow

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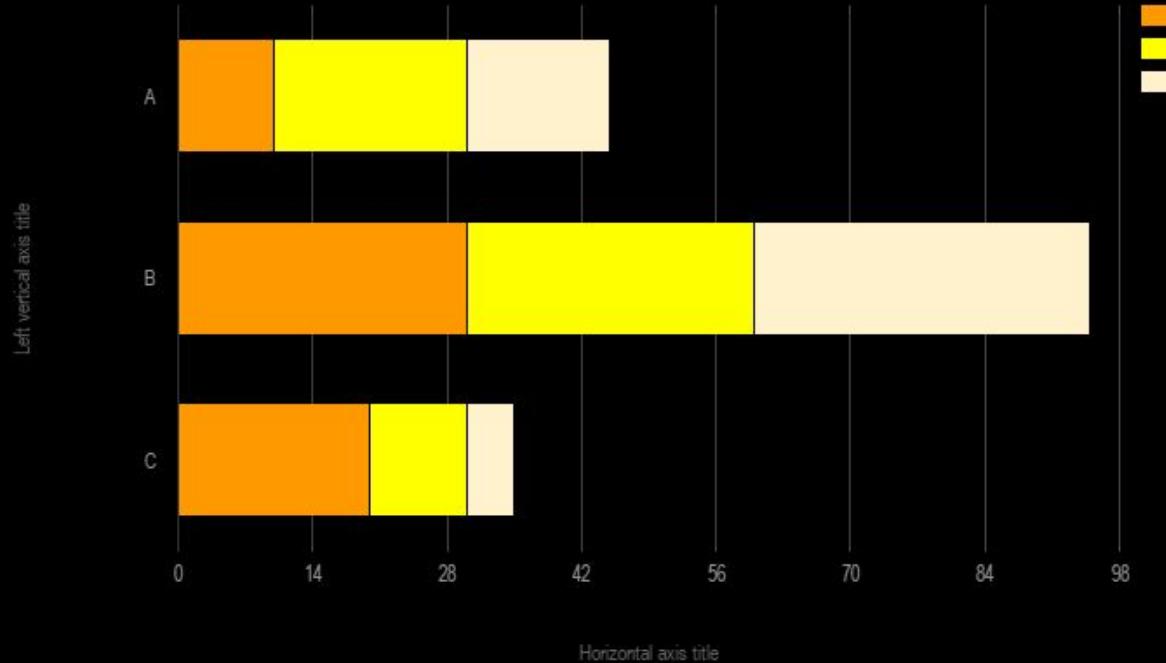
Red

Is the color of blood, and because of this it has historically been associated with sacrifice, danger and courage.

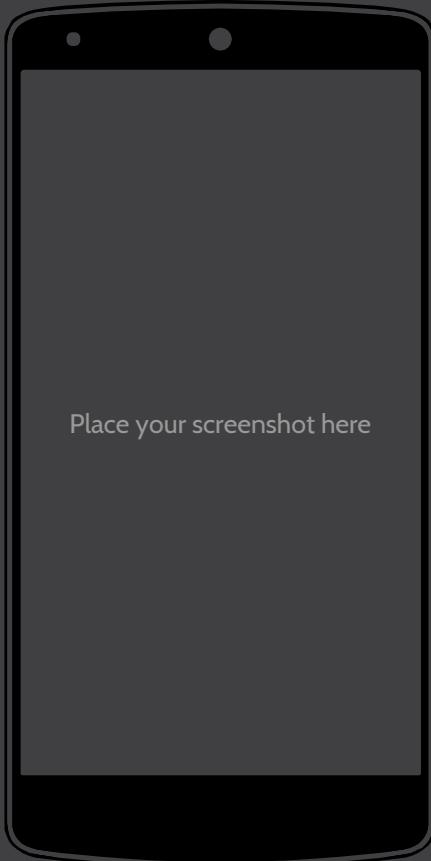


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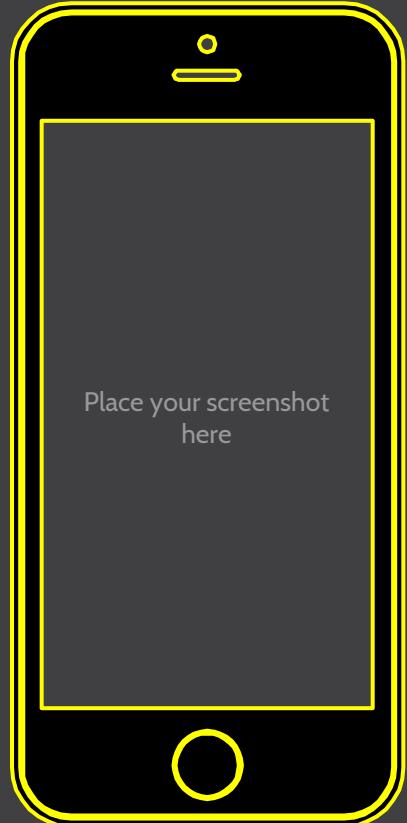


You can copy&paste graphs from [Google Sheets](#)



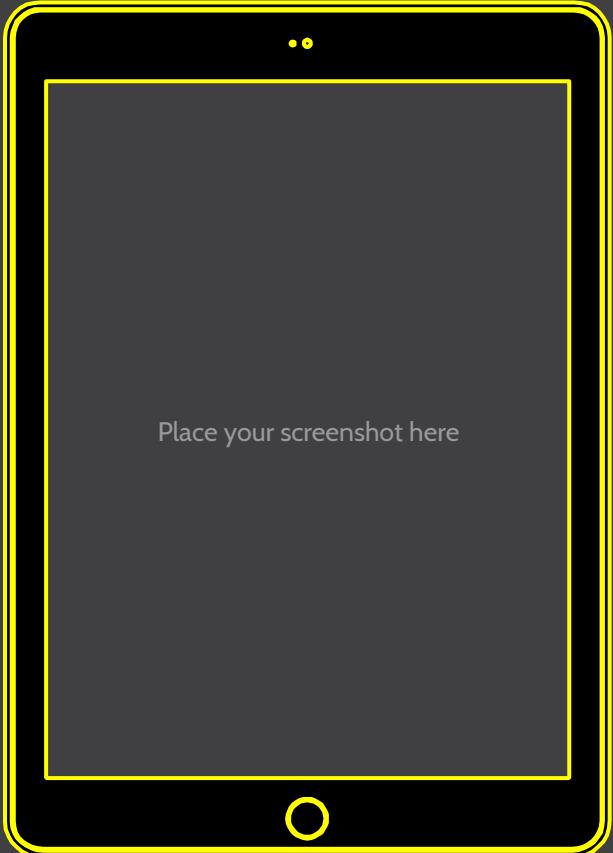
Android project

Show and explain your
web, app or software
projects using these
gadget templates.



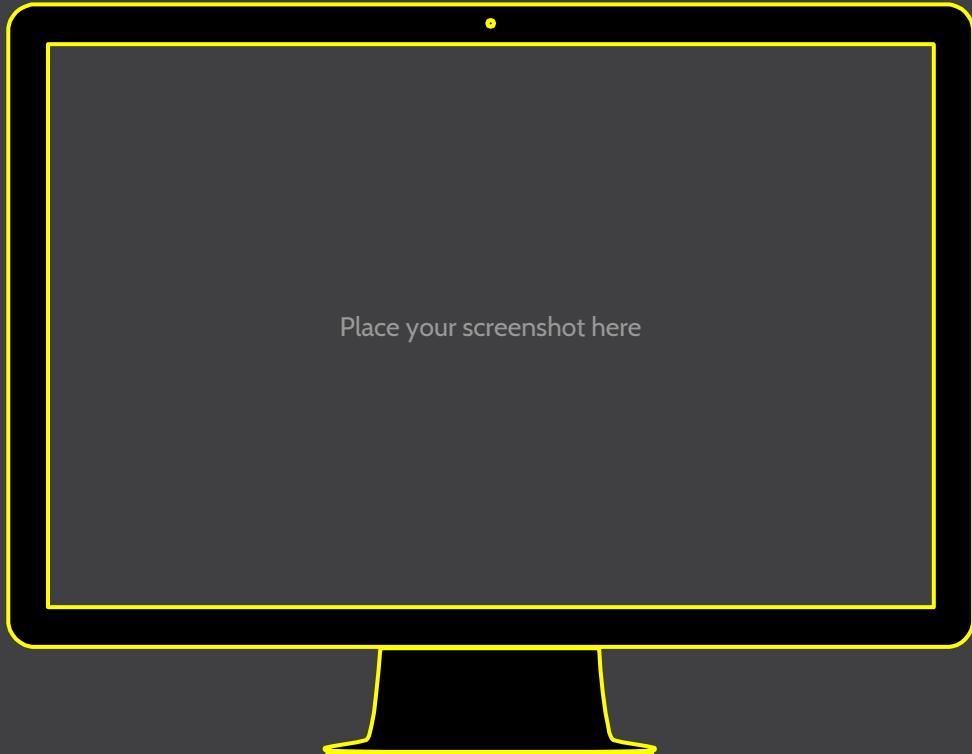
iPhone project

Show and explain your
web, app or software
projects using these
gadget templates.



Tablet project

Show and explain your web, app or software projects using these gadget templates.



Desktop project

Show and explain your web, app or software projects using these gadget templates.

Thanks!

Any questions?

You can find me at
@username & user@mail.me



Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs by [Unsplash](#)

Presentation design

This presentation uses the following typographies and colors:

- Titles: **Cabin condensed**
- Body copy: **Cabin**

You can download the fonts on this page:

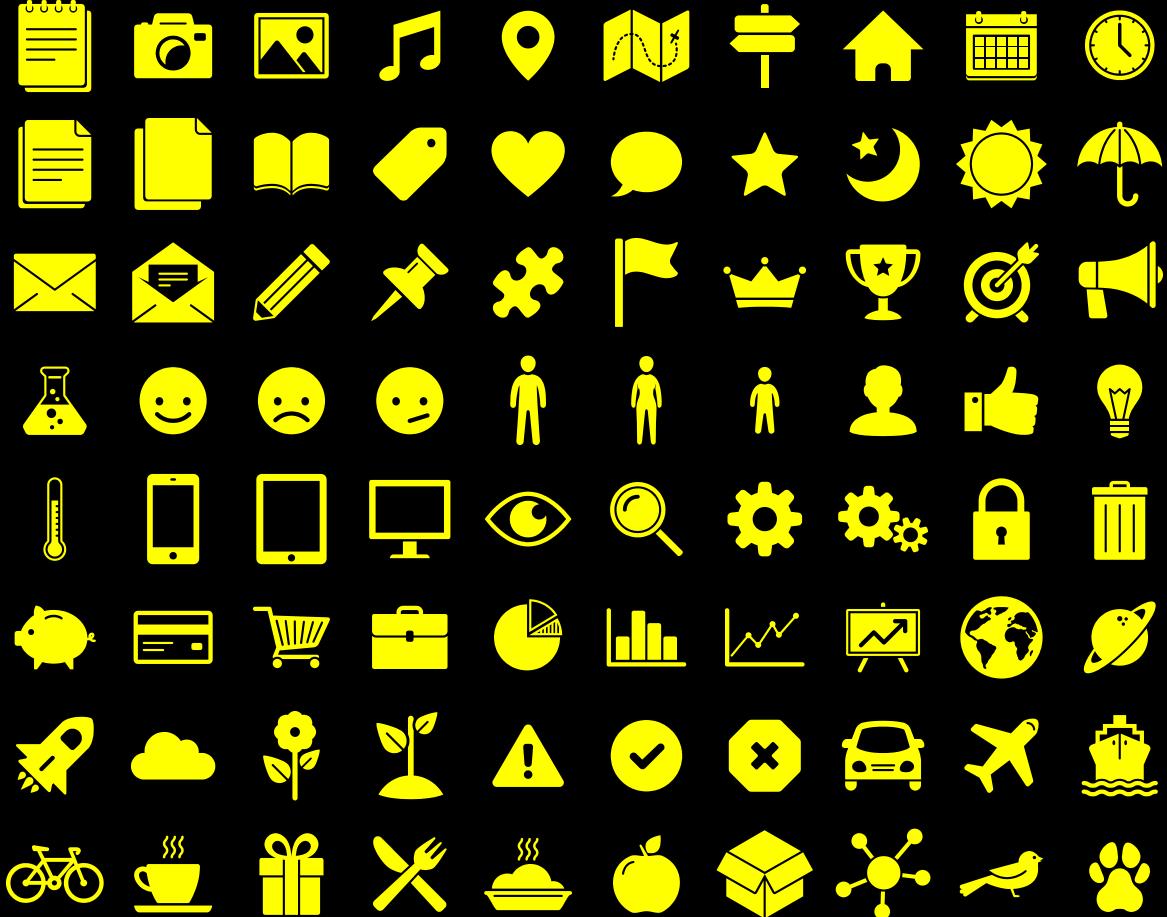
<https://www.google.com/fonts#UsePlace:use/Collection:Cabin:400,700,400italic,700italic|Cabin+Condensed:400,700>

Click on the “arrow button” that appears on the top right



- Black **#000000**
- Yellow **#ffff00**

You don't need to keep this slide in your presentation. It's only here to serve you as a design guide if you need to create new slides or download the fonts to edit the presentation in PowerPoint®



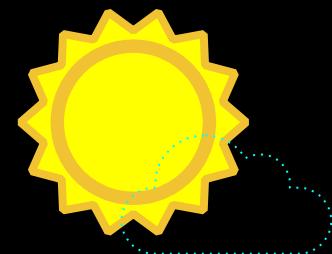
SlidesCarnival icons are **editable shapes**.

This means that you can:

- Resize them without losing quality.
- Change fill color and opacity.
- Change line color, width and style.

Isn't that nice? :)

Examples:





Now you can use any emoji as an icon!

And of course it resizes without losing quality and you can change the color.

How? Follow Google instructions

<https://twitter.com/googledocs/status/730087240156643328>

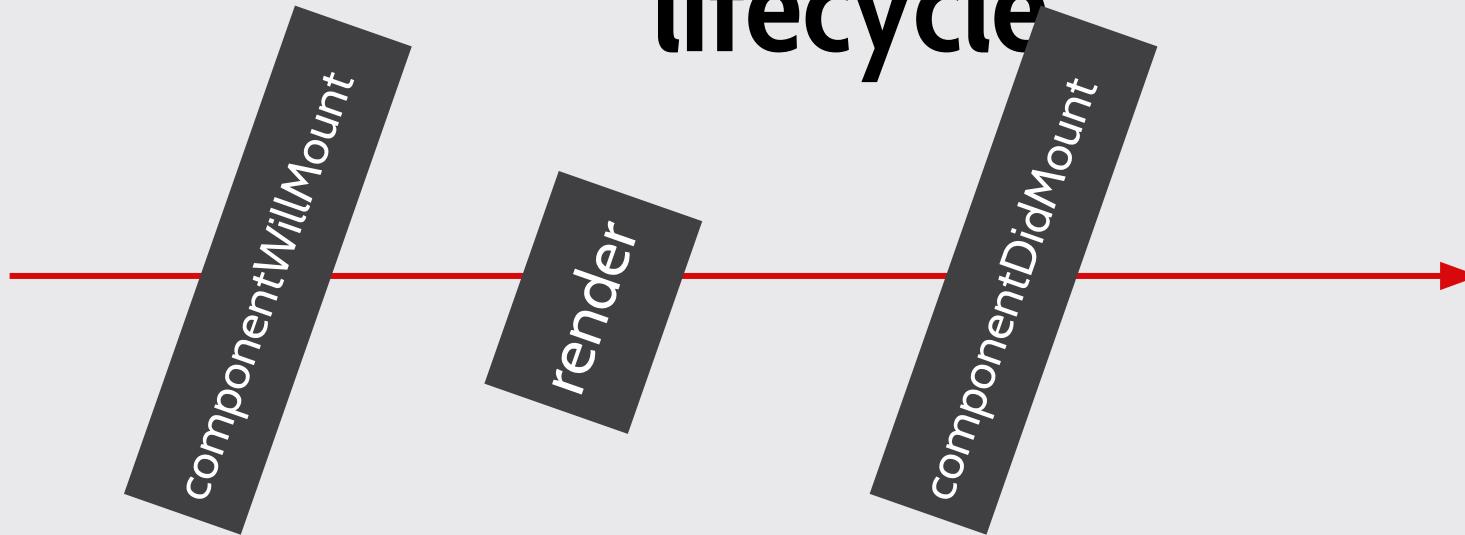


and many more...

Velkommen til
kurs med oss!

En

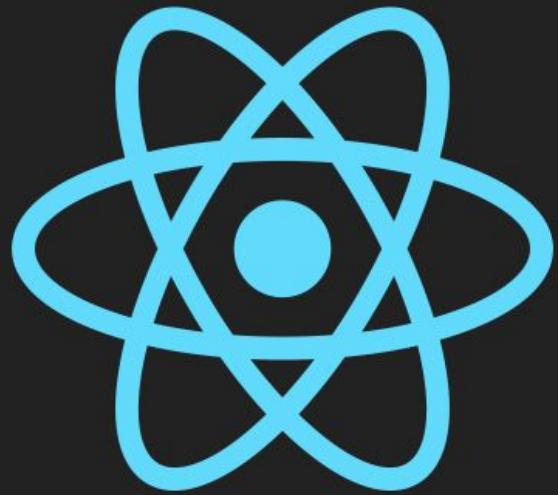
komponenten “lifecycle”



`render`

`componentDid
Mount`

En
komponents
“lifecycle”



ReactVR