

FRONTEND MODUL 4 - BOOTSTRAP

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VAD ÄR RESPONSIV WEBBDESIGN? RESPONSIVE WEB DESIGN, RWD

"Responsiv webbdesign innebär webbdesign som tillåter layouten att förändras beroende på vilken skärmstorlek och skärmupplösning som besökaren har, och beroende på vilka funktioner som webbläsaren stödjer."

Källa: https://sv.wikipedia.org/wiki/Responsiv_webbdesign

VAD ÄR BOOTSTRAP?

Bootstrap

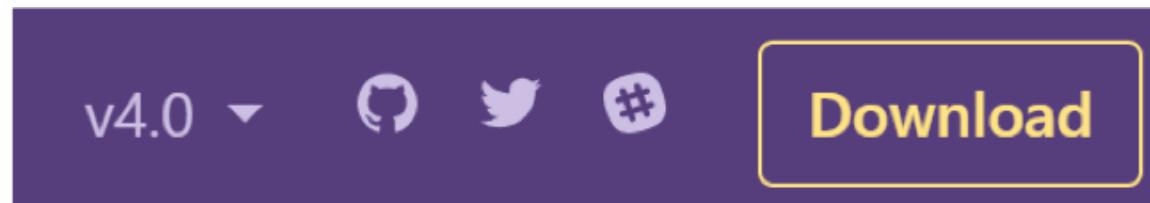
Build responsive, mobile-first projects on the web with the world's most popular front-end component library.

Källa: <http://getbootstrap.com>



LADDA NER BOOTSTRAP

1. Gå till <http://getbootstrap.com/>
2. Klicka på knappen "Download"
3. CSS-Biblioteket ligger i mappen dist → css



MIN FÖRSTA BOOTSTRAP-SIDA

```
<!DOCTYPE html>
<html lang="sv">
<head>

    <meta charset="utf-8">

    <title>Bootstrap Exempel 1</title>

    <link rel="stylesheet" href="bootstrap.css">

</head>

<body>
    <h1>Min första Bootstrap-sida</h1>
    <p>Lite text och annat smått och gott.</p>
</body>
</html>
```

METATAGGEN VIEWPORT

Viewport är enhetens visuella area av en webbsida.

Viewport är olika på olika enheter.

Med hjälp av metataggen viewport kan vi kontrollera hur en webbsida ska skalas (zoomas).

```
<meta name="viewport"  
      content="width=device-width, initial-scale=1">
```

`width=device-width` anger att bredden på sidan ska följa enhetens bredd.

`initial-scale=1` anger om sidan ska skalas upp/ner (1 = 100%).

Bra att läsa:

https://www.w3schools.com/css/css_rwd_viewport.asp

BOOTSTRAP CDN CONTENT DELIVERY NETWORK

```
<link rel="stylesheet"  
      href="https://maxcdn.bootstrapcdn.com/  
bootstrap/4.0.0/css/bootstrap.min.css">
```

One advantage of using the Bootstrap CDN:

Many users already have downloaded Bootstrap from MaxCDN when visiting another site. As a result, it will be loaded from cache when they visit your site, which leads to faster loading time. Also, most CDN's will make sure that once a user requests a file from it, it will be served from the server closest to them, which also leads to faster loading time.

ATT LÄNKA TILL BOOTSTRAP CDN

```
<!DOCTYPE html>
<html lang="sv">
<head>
    <title>Bootstrap Exempel 2</title>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <link rel="stylesheet"
        href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0
        /css/bootstrap.min.css">
</head>
<body>
    <div>
        <h1>Bootstrap CDN</h1>
        <p>Lite text och annat smått och gott.</p>
    </div>
</body>
</html>
```

BOOTSTRAP JAVASCRIPT

Vissa Bootstrap-komponenter kräver ett antal JavaScript plugins och bibliotek.

Dessa är

1. jQuery <http://jquery.com>
2. Popper <https://popper.js.org>
3. Bootstrap eget bibliotek
<https://getbootstrap.com/docs/4.0/getting-started/javascript>

EN BÄTTRE GRUNDMALL (STARTER TEMPLATE)

<https://getbootstrap.com/docs/4.0/getting-started/introduction>

The screenshot shows a web browser displaying the Bootstrap documentation at <https://getbootstrap.com/docs/4.0/getting-started/introduction>. The page title is "Introduction · Bootstrap". The navigation bar includes links for Home, Documentation (which is active), Examples, Themes, Jobs, Expo, Blog, and a Download button. A search bar is also present. The main content area features a large heading "Starter template" and a paragraph explaining the requirements for responsive pages. Below the paragraph is a code block showing the HTML structure for a starter template, with a "Copy" link next to it.

Search...

Getting started

Introduction

Download

Contents

Browsers & devices

JavaScript

Options

Build tools

Webpack

Accessibility

Layout

Starter template

Be sure to have your pages set up with the latest design and development standards. That means using an HTML5 doctype and including a viewport meta tag for proper responsive behaviors. Put it all together and your pages should look like this:

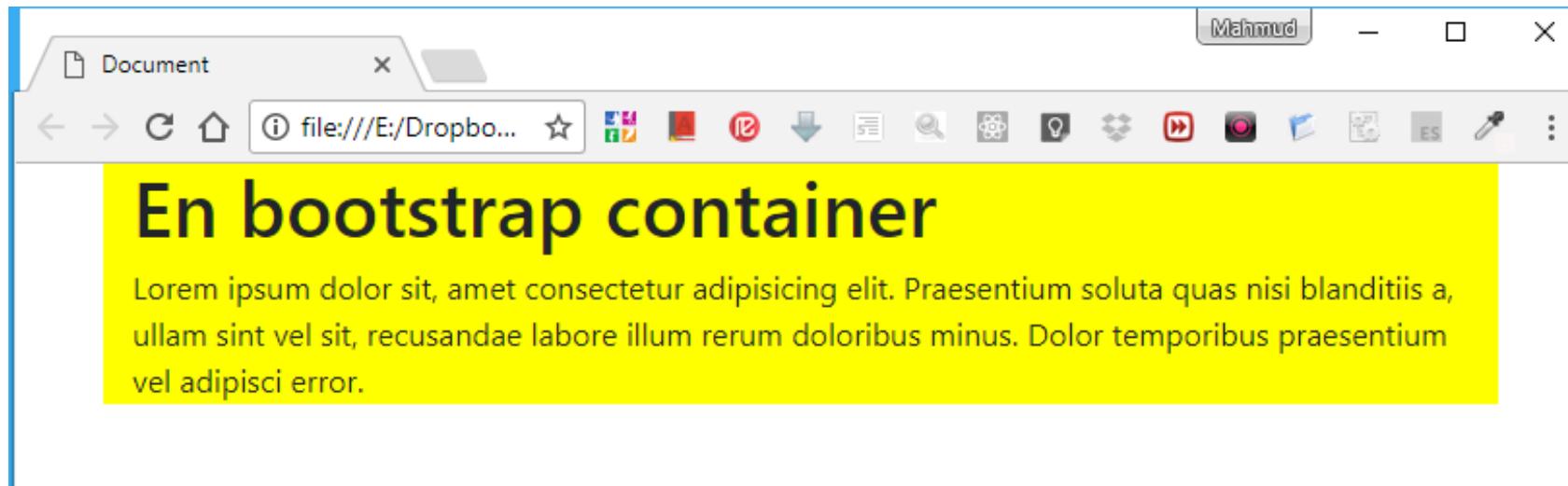
```
<!DOCTYPE html>
<html lang="en">
  <head>
    <!-- Required meta tags -->
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1, shrink-to-fit=no"

    <!-- Bootstrap CSS -->
    <link rel="stylesheet" href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0-beta/css/bootstrap.min.css">
  </head>
  <body>
    <h1>Hello, world!</h1>
```

Copy

CONTAINER

```
<div class="container" style="background-color: yellow;">  
<h1>En bootstrap container</h1>  
</div>
```



BOOTSTRAP GRID SYSTEM

Bootstrap använder rader och kolumner för placering av innehåll.

Bootstrap tillåter upp till 12 kolumner på en sida.

Dessa 12 kolumner kan grupperas för att få bredare kolumner.

span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1	span 1				
span 4				span 4				span 4							
span 4				span 8											
span 6						span 6									
span 12															

Bildkälla: https://www.w3schools.com/bootstrap/bootstrap_grid_basic.asp

OLIKA BRYTPUNKTER

Följande förkortningar används:

xs för mobiltelefoner < 576px

sm för mindre surfplattor >= 576px

md för medelstora skärmar >= 768px

lg för stora skärmar >= 992px

xl för extra stora skärmar >= 1200px

Källa

<https://getbootstrap.com/docs/4.0/layout/grid/>

BOOTSTRAP GRID SYSTEM – EXEMPEL 1

3 kolumner med automatisk bredd på alla enheter

```
<div class="container">  
  <div class="row">  
    <div class="col">Kolumn 1</div>  
    <div class="col">Kolumn 2</div>  
    <div class="col">Kolumn 3</div>  
  </div>  
</div>
```

BOOTSTRAP GRID SYSTEM – EXEMPEL 2

Kolumn 2 reserverar 6 av 12 (halva sidans bredd)

Kolumn 1 och 3 med automatiska bredder

```
<div class="container">  
  <div class="row">  
    <div class="col">Kolumn 1</div>  
    <div class="col-6">Kolumn 2</div>  
    <div class="col">Kolumn 3</div>  
  </div>  
</div>
```

BOOTSTRAP GRID SYSTEM – EXEMPEL 3

3 kolumner på surfplattor och uppåt.

På mobiltelefoner staplas kolumnerna under varandra automatiskt.

```
<div class="container">  
  <div class="row">  
    <div class="col-sm">Kolumn 1</div>  
    <div class="col-sm">Kolumn 2</div>  
    <div class="col-sm">Kolumn 3</div>  
  </div>  
</div>
```

BOOTSTRAP GRID SYSTEM – EXEMPEL 4

2 kolumner med olika bredder visas bredvid varandra på medelstora skärmar och uppåt.

På mobiltelefoner staplas kolumnerna under varandra automatiskt.

```
<div class="row">  
    <div class="col-md-4">Kolumn 1</div>  
    <div class="col-md-8">Kolumn 2</div>  
</div>
```

BOOTSTRAP GRID SYSTEM – EXEMPEL 5

4 kolumner på medelstora skärmar och uppåt.

2 kolumner på alla andra enheter.

```
<div class="row">  
    <div class="col-6 col-md-3">Kolumn 1</div>  
    <div class="col-6 col-md-3">Kolumn 2</div>  
    <div class="col-6 col-md-3">Kolumn 3</div>  
    <div class="col-6 col-md-3">Kolumn 4</div>  
</div>
```

Flera exempel finns här

<https://getbootstrap.com/docs/4.0/layout/grid/>

JUMBOTRON

```
<body>  
  <div class="container">  
    <div class="jumbotron">  
      <h1>Hello, world!</h1>  
      <p class="lead">  
        This is a simple hero unit, a simple jumbotron-style  
        component for calling extra attention to featured  
        content or information.</p>  
    </div>  
  </div>  
</body>
```

Hello, world!

This is a simple hero unit, a simple jumbotron-style component for calling extra attention to featured content or information.

KONTEXTUELLA FÄRGER

Följande klasser används för att visa färger som har olika kontextuella betydelser!

```
<p class="text-primary">.text-primary</p> .text-primary  
<p class="text-secondary">.text-secondary</p> .text-secondary  
<p class="text-success">.text-success</p> .text-success  
<p class="text-danger">.text-danger</p> .text-danger  
<p class="text-warning">.text-warning</p> .text-warning  
<p class="text-info">.text-info</p> .text-info  
<p class="text-light">.text-light</p> .text-light  
<p class="text-dark">.text-dark</p> .text-dark
```

KONTEXTUELLA LÄNKAR

```
<p><a href="#" class="text-primary">Primary link</a></p>
<p><a href="#" class="text-secondary">Secondary link</a></p>
<p><a href="#" class="text-success">Success link</a></p>
<p><a href="#" class="text-danger">Danger link</a></p>
<p><a href="#" class="text-warning">Warning link</a></p>
<p><a href="#" class="text-info">Info link</a></p>
<p><a href="#" class="text-light">Light link</a></p>
<p><a href="#" class="text-dark">Dark link</a></p>
```

KONTEXTUELLA BAKGRUNDSFÄRGER

```
<p class="bg-primary text-white">.bg-primary</p>
<p class="bg-secondary text-white">.bg-secondary</p>
<p class="bg-success text-white">.bg-success</p>
<p class="bg-danger text-white">.bg-danger</p>
<p class="bg-warning text-white">.bg-warning</p>
<p class="bg-info text-white">.bg-info</p>
<p class="bg-dark text-white">.bg-dark</p>
<p class="bg-light">.bg-light</p>
<p class="bg-white">.bg-white</p>
```

TEXTJUSTERING

```
<p class="text-left">
```

Left aligned text on all viewport sizes.</p>

```
<p class="text-center">
```

Center aligned text on all viewport sizes.</p>

```
<p class="text-right">
```

Right aligned text on all viewport sizes.</p>

MARGIN OCH PADDING

Margin och padding anges i detta format **{property}{sides}-{size}**

Property är antingen **m** (margin) eller **p** (padding)

Sides är **t** (top), **b** (bottom), **l** (left), **r** (right), **x** (left och right), **y** (top och bottom)

Size är mellan 0 och 5 (OBS! 3 = 1rem *)

Bra att läsa om rem

<https://www.sitepoint.com/understanding-and-using-rem-units-in-css/>

MARGIN OCH PADDING – EXEMPEL

```
<div class="m-0 p-0">Margin 0 & Padding 0</div>
<div class="m-1 p-1">Margin 1 & Padding 1</div>
<div class="m-2 p-2">Margin 2 & Padding 2</div>
<div class="m-3 p-3">Margin 3 & Padding 3</div>
<div class="m-4 p-4">Margin 4 & Padding 4</div>
<div class="m-5 p-5">Margin 5 & Padding 5</div>
```

MARGIN – FLERA EXEMPEL

```
<p><span class="mr-5 bg-success">Margin Right 5</span> lorem ipsum,  
<span class="ml-3 bg-success">Margin Left 3 </span> dolor sit amet.</p>  
<p>Lorem ipsum<span class="bg-success mx-5">Margin Left & Right 5</span>  
dolor sit amet.</p>  
<p class="my-5 bg-success">Margin Top & Bottom 5</p>  
<p>Lorem ipsum dolor sit amet, consectetur elit. Voluptatum, optio.</p>
```

Margin Right 5 lorem ipsum, Margin Left 3 dolor sit amet.

 Lorem ipsum Margin Left & Right 5 dolor sit amet.

Margin Top & Bottom 5

 Lorem ipsum dolor sit amet, consectetur elit. Voluptatum, optio.

AUTOMATISKA MARGINALER

```
<div class="bg-warning my-0 mx-auto p-5"  
style="width: 200px;">  
Center Align  
</div>
```

```
.mx-auto {  
    margin-right: auto!important;  
    margin-left: auto!important;  
}  
  
.p-5 {  
    padding: ▶ 3rem!important;  
}  
  
.my-0 {  
    margin-top: 0!important;  
    margin-bottom: 0!important;  
}
```

```
<table class="table table-bordered table-hover">
<thead class="thead-inverse">
<tr>
<th>First Name</th>
<th>Last Name</th>
<th>Email</th>
</tr>
</thead>
<tr>
<td>John</td>
<td>Doe</td>
<td>jdoe@gmail.com</td>
</tr>
</table>
```

TABELLER

First Name	Last Name	Email
John	Doe	jdoe@gmail.com

TABELLER – KONTEXTUELLA KLASSER

```
<table class="table">  
  <tr>  
    <td class="table-active"></td>  
    <td class="table-primary"></td>  
    <td class="table-secondary"></td>  
    <td class="table-success"></td>  
    <td class="table-danger"></td>  
    <td class="table-warning"></td>  
    <td class="table-info"></td>  
    <td class="table-light"></td>  
    <td class="table-dark"></td>  
  </tr>  
</table>
```



RESPONSIVA BILDER

```

```

RUNDA HÖRN

```

```



THUMBNAILS

```

```



HÖGERJUSTERA BILDER

```

<p>Lorem ipsum dolor sit amet consectetur adipisicing
elit...</p>
```

Lorem ipsum dolor sit amet consectetur adipisicing elit. Quas itaque porro officia commodi animi fuga non soluta alias dolor nostrum. Iure rerum accusamus possimus architecto est eveniet beatae dicta debitis.



KNAPPAR

```
<button type="button" class="btn btn-primary">Primary</button>
<button type="button" class="btn btn-secondary">Secondary</button>
<button type="button" class="btn btn-success">Success</button>
<button type="button" class="btn btn-danger">Danger</button>
<button type="button" class="btn btn-warning">Warning</button>
<button type="button" class="btn btn-info">Info</button>
<button type="button" class="btn btn-light">Light</button>
<button type="button" class="btn btn-dark">Dark</button>
```



OUTLINE KNAPPAR

```
<button type="button"  
class="btn btn-outline-primary">Primary</button>  
<button type="button"  
class="btn btn-outline-secondary">Secondary</button>  
<button type="button"  
class="btn btn-outline-success">Success</button>
```

Primary

Secondary

Success

VISA LÄNKAR SOM KNAPPAR

```
<a href="#" class="btn btn-outline-danger">Danger</a>
<a href="#" class="btn btn-outline-warning">Warning</a>
<a href="#" class="btn btn-outline-info">Info</a>
```

Danger

Warning

Info

KNAPPAR – OLIKA STORLEKAR

```
<button type="button" class="btn btn-primary btn-lg">Large button</button>
<button type="button" class="btn btn-primary">Standard button</button>
<button type="button" class="btn btn-primary btn-sm">Small button</button>
<br><br>
<button type="button"
class="btn btn-primary btn-lg btn-block">Block level button</button>
```

Large button

Standard button

Small button

Block level button

VISA OLIKA KNAPPAR VID OLIKA BRYTPUNKTER MED DISPLAY (T.EX. D-NONE OCH D-SM-BLOCK)

```
<button type="button"  
class="btn btn-info d-none d-sm-block">  
Standard button på större än sm  
</button>  
  
<button type="button"  
class="btn btn-dark btn-block d-block d-sm-none">  
Block-level-button på mobil  
</button>
```

<https://getbootstrap.com/docs/4.0/utilities/display>

COLLAPSE

```
<p>  
  <a class="btn btn-primary" data-toggle="collapse" aria-expanded="false"  
  aria-controls="collapseExample" href="#collapseExample" >  
    Mer info...  
  </a>  
  </p>  
  <div class="collapse" id="collapseExample">  
    Lorem ipsum dolor sit amet.  
  </div>
```



ALERTS

```
<div class="alert alert-primary" role="alert">
```

This is a primary alert.</div>

```
<div class="alert alert-success" role="alert">
```

This is a success alert.</div>

```
<div class="alert alert-danger" role="alert">
```

This is a danger alert.</div>

```
<div class="alert alert-warning" role="alert">
```

This is a warning alert.</div>

```
<div class="alert alert-info" role="alert">
```

This is a info alert.</div>

ALERTS – EXEMPEL

This is a primary alert.

This is a success alert.

This is a danger alert.

This is a warning alert.

This is a info alert.

DISMISSIBLE ALERT

```
<div class="alert alert-warning alert-dismissible fade show" role="alert">
  <button type="button" class="close" data-dismiss="alert" aria-label="Close">
    <span aria-hidden="true">&times;</span>
  </button>
  <strong>OBS!</strong> Denna sida använder cookies.
</div>
```

OBS! Denna sida använder cookies.



FORMULÄR

Anmälan till vårt nyhetsbrev!

Ange en giltig e-postadress

Ja, tack!

```
<form method="post" action="">  
  <h2>Anmälan till vårt nyhetsbrev!</h2>  
  <div class="form-group">  
    <input class="form-control" type="email" required  
          placeholder="Ange en giltig e-postadress">  
  </div>  
  <button type="submit" class="btn btn-primary">Ja, tack!</button>  
</form>
```

NAVIGERING – LISTOR

```
<ul class="nav justify-content-center">
<li class="nav-item">
    <a class="nav-link" href="#">Home</a>
</li>
<li class="nav-item">
    <a class="nav-link" href="#">About</a>
</li>
<li class="nav-item">
    <a class="nav-link" href="#">Contact</a>
</li>
</ul>
```

NAVIGERING – PILLS

Home

About

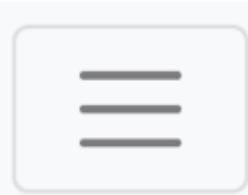
Contact

```
<ul class="nav justify-content-center nav-pills">
<li class="nav-item">
    <a class="nav-link active" href="#">Home</a>
</li>
<li class="nav-item">
    <a class="nav-link" href="#">About</a>
</li>
<li class="nav-item">
    <a class="nav-link" href="#">Contact</a>
</li>
</ul>
```

RESPONSIV NAVIGERING

```
<nav class="navbar navbar-expand-lg navbar-light bg-light">
  <a class="navbar-brand" href="#">Navbar</a>
  <button class="navbar-toggler" type="button" data-toggle="collapse"
    data-target="#nav">
    <span class="navbar-toggler-icon"></span>
  </button>
  <div class="collapse navbar-collapse" id="nav">
    <ul class="navbar-nav">
      <li class="nav-item active"><a class="nav-link" href="#">Home</a> </li>
      <li class="nav-item"><a class="nav-link" href="#">About</a> </li>
    </ul>
  </div>
</nav>
```

Navbar

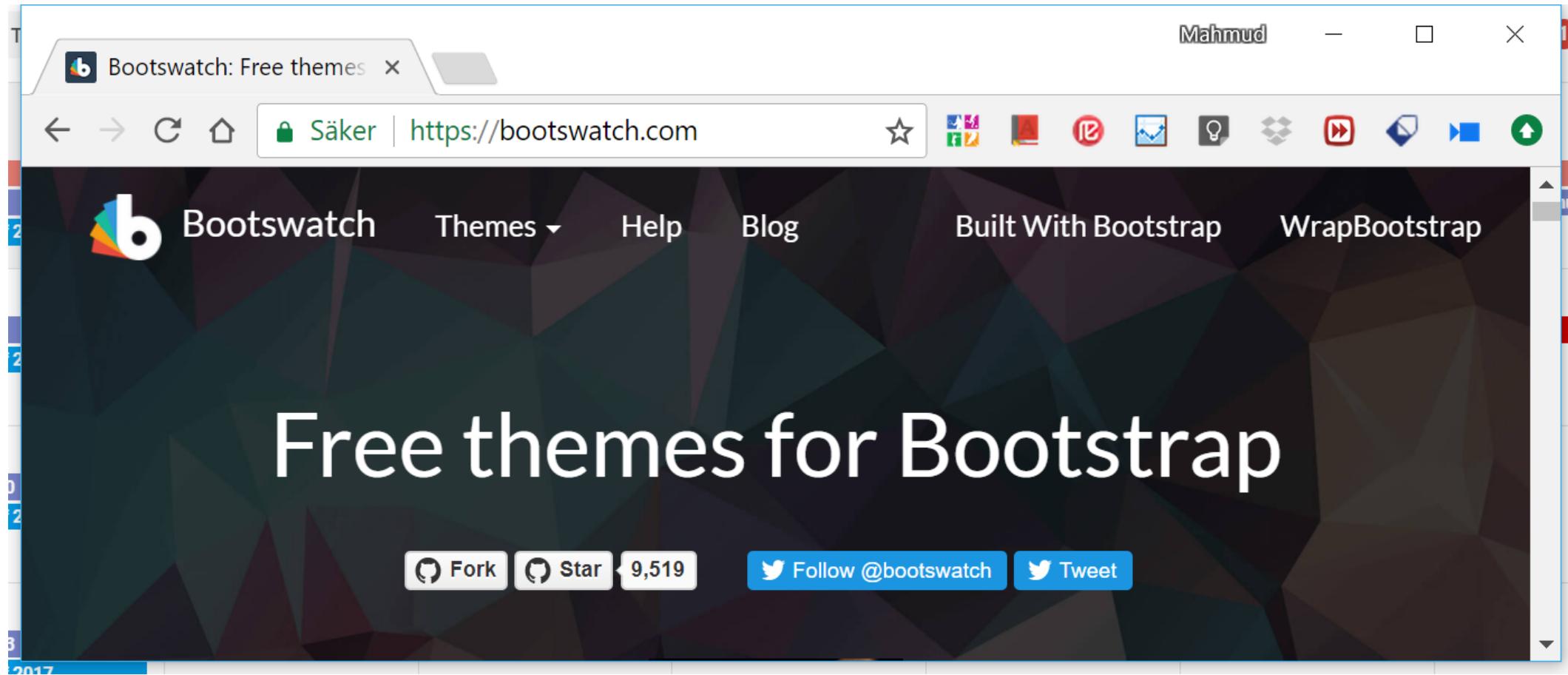


CAROUSEL

```
<div class="carousel slide" data-ride="carousel">  
  <div class="carousel-inner">  
    <div class="carousel-item active">  
        
    </div>  
    <div class="carousel-item">  
        
    </div>  
    <div class="carousel-item">  
        
    </div>  
  </div>  
</div>
```

<https://getbootstrap.com/docs/4.0/components/carousel/>

BOOTSWATCH.COM – GRATIS BS-TEMAN



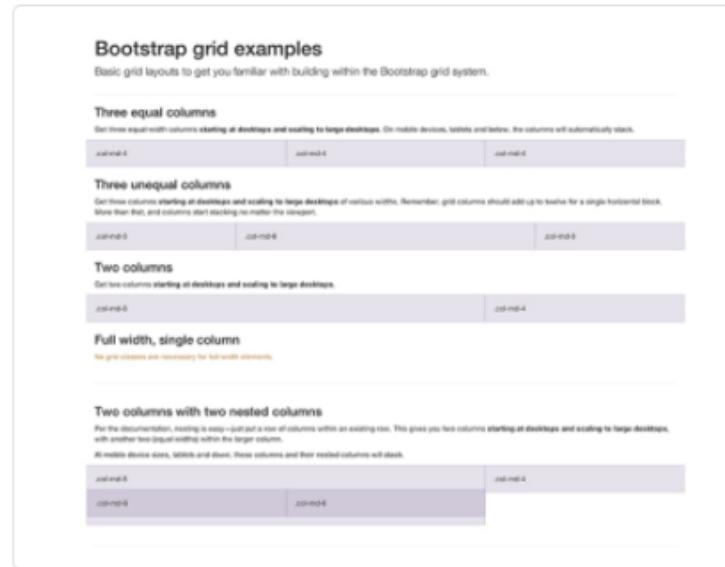
ÖVNING 1: LADDA NER BS-EXEMPEL FRÅN <https://getbootstrap.com/docs/4.0/examples>

Undersök källkoden och försök att förstå dessa mallar



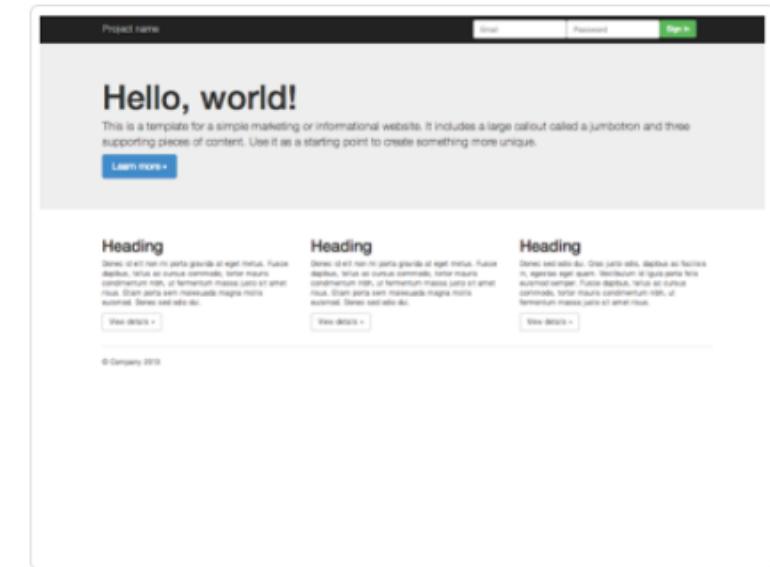
Starter template

Nothing but the basics: compiled CSS and JavaScript.



Grids

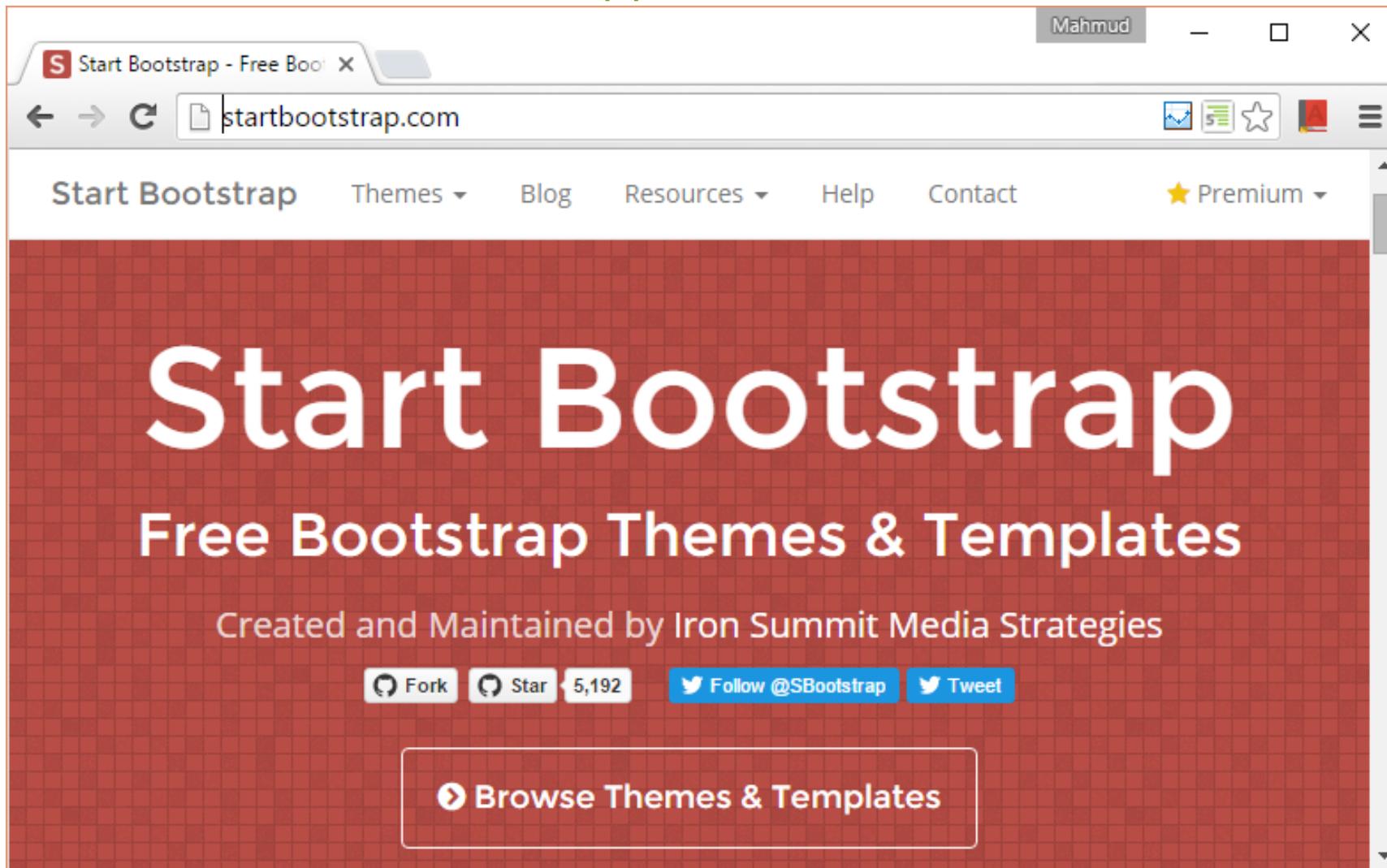
Multiple examples of grid layouts with all four tiers, nesting, and more.



Jumbotron

Build around the jumbotron with a navbar and some basic grid columns.

ÖVNING 2: LADDA NER OCH TESTA FLERA BOOTSTRAP MALLAR FRÅN [HTTP://STARTBOOTSTRAP.COM](http://startbootstrap.com)



ÖVNING 3: LADDA NER OCH TESTA FLERA BOOTSTRAP MALLAR FRÅN [HTTPS://BOOTSTRAPMADE.COM](https://bootstrapmade.com)

The screenshot shows a web browser window with the title "Free Bootstrap Themes" and the URL "https://bootstrapmade.com". The page features a dark background image of a keyboard and a smartphone displaying a website. The BootstrapMade logo is at the top left, and a navigation menu with links to Home, Themes, About, License, Support, Contact, and Login. The main heading "Free Bootstrap Themes" is prominently displayed in white. Below it, a paragraph describes the service: "We are specialized in designing and creating elegant, clean and beautiful free website templates using Bootstrap, the most popular HTML, CSS & JS framework". At the bottom, there are three preview cards: one for a theme featuring a city skyline, another for a theme featuring a person on a phone, and a search bar with the placeholder "Enter keyword...". The taskbar at the bottom shows various application icons.

ÖVNING 4: LADDA NER OCH TESTA FLERA BOOTSTRAP MALLAR FRÅN HTTPS://BOOTSTRAPTASTE.COM

The screenshot shows a web browser window titled "Bt Portfolio | BootstrapTaste". The address bar displays "Säker | https://bootstraptaste.com/tag/portfolio/". The page header features the "Bt BOOTSTRAPTASTE" logo and navigation links for Home, About, Features, Colors, Free Bootstrap Themes, and Contact. A banner at the top offers "READY TO USE GRAPHIC ASSETS" from Envato Elements, including categories like FREE ITEMS, TEMPLATES, MOCKUPS, ICONS, GRAPHICS, AND MORE!, with a "DOWNLOAD NOW" button. Below this, a section titled "Portfolio Bootstrap Themes" displays five preview cards:

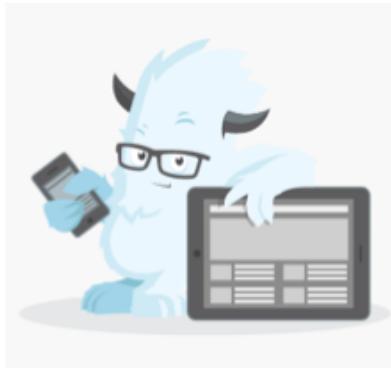
- Groovin**: A responsive portfolio theme featuring a large image of a street scene.
- MyResume**: A professional resume theme with a focus on a watch and a resume document.
- Personal**: A personal blog or portfolio theme featuring a close-up of a woman's face.
- Kelly**: A professional business theme featuring a woman in a suit.
- Lonely**: A minimalist travel or lifestyle theme featuring a woman in a hat.
- Bocor**: A clean, modern theme featuring a background of sand.

Each theme card includes a "Demo" and "Download" link. To the right of the theme cards is a sidebar with a search bar, a "Create Animated Banners" section with a "Get a Premium Membership & Start Creating Animated Banners that Grab Users Attention!" button, and a "Follow Us" section with social media icons for Facebook, Twitter, Google+, and RSS. At the bottom of the page is a cookie consent message: "This website uses cookies to improve your experience. We'll assume you're ok with this, but you can opt-out if you wish." with "Accept" and "Read More" buttons. The browser taskbar at the bottom shows various open tabs and system icons.

ÖVNING 5: TITTA PÅ NÅGRA ANDRA CSS-RAMVERK



<https://semantic-ui.com>



<https://foundation.zurb.com>



<http://materializecss.com>



<http://bulma.io>



<http://milligram.io>



<http://tachyons.io>



<https://getuikit.com>