RWD : RESPONSIVE WEB DESIGN

NF ACADEMY
DIGITAL TRAINING SOLUTIONS
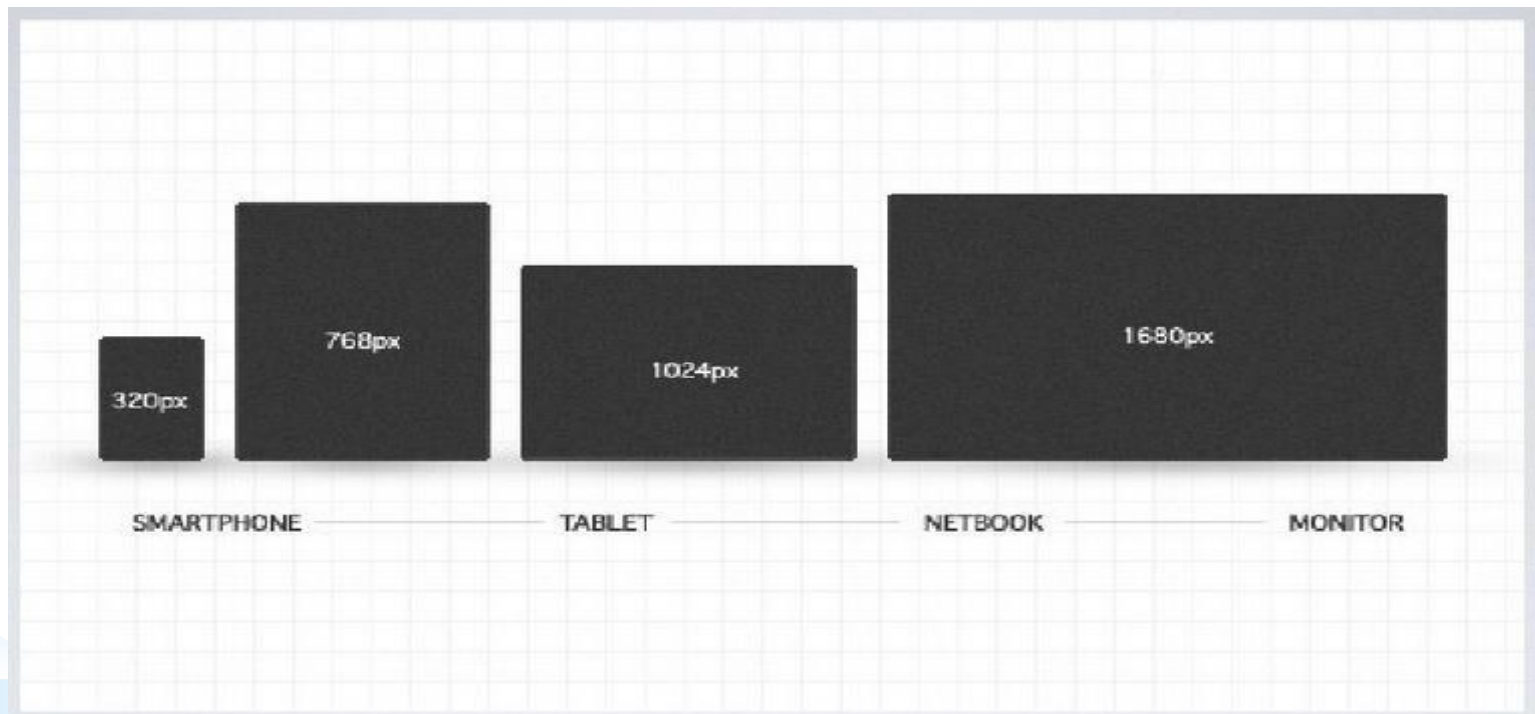
AGENDA

- Apa itu responsive web design (RWD)
- Teknik responsive web design
  - CSS Media Queries
  - Fluid Grid
  - Fluid Image
- Proses desain web responsive
- Responsive frameworks
- Responsive frameworks : Bootstrap
- Let's Design !!!

APA ITU RWD ?

Cara praktis membuat konten web anda agar tampil optimal dan sama baiknya ketika diakses oleh bermacam-macam *devices*
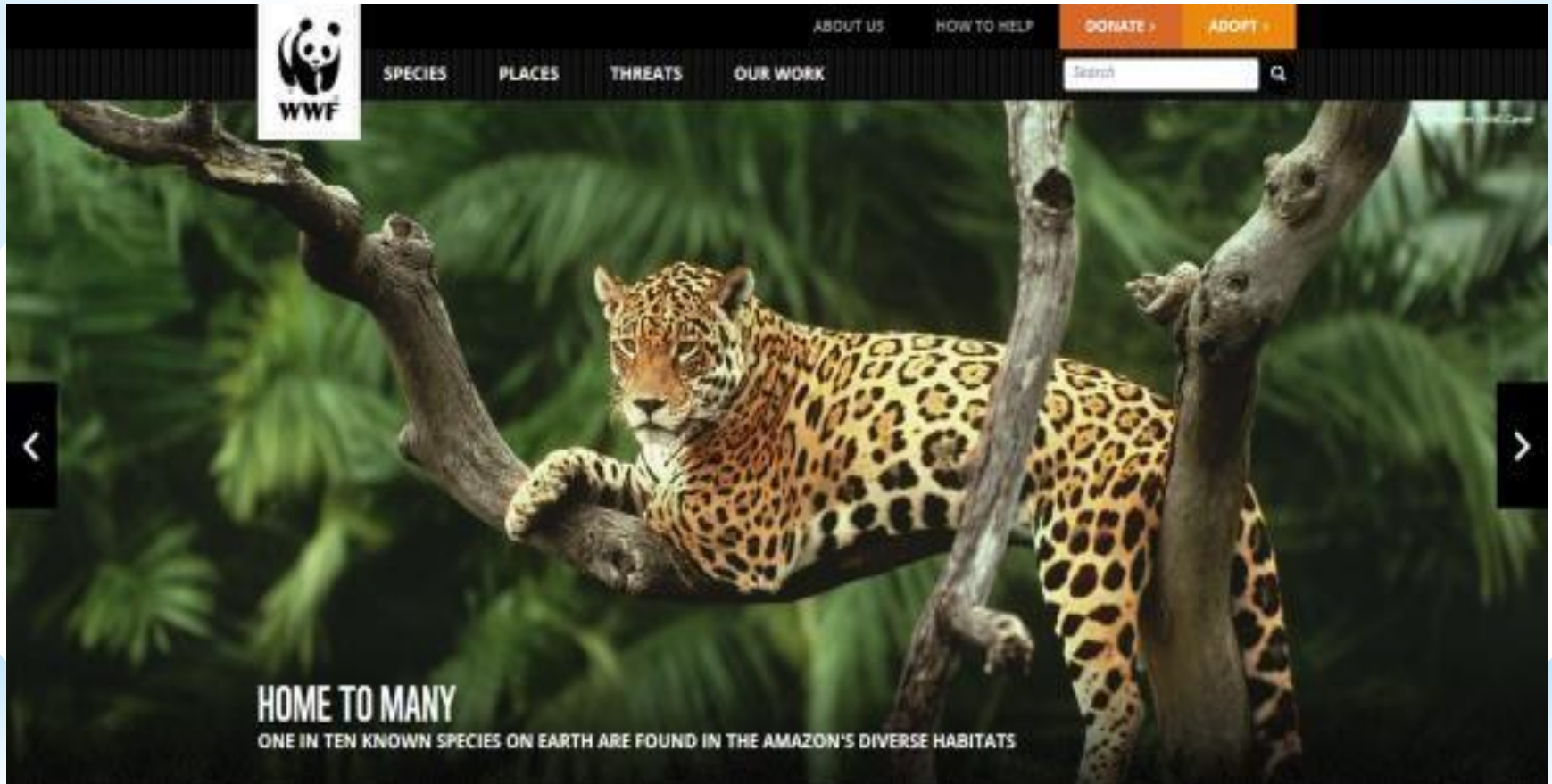
Responsive Web Design

Desain dan *coding* website yang *responsive* terhadap:

- Smartphone
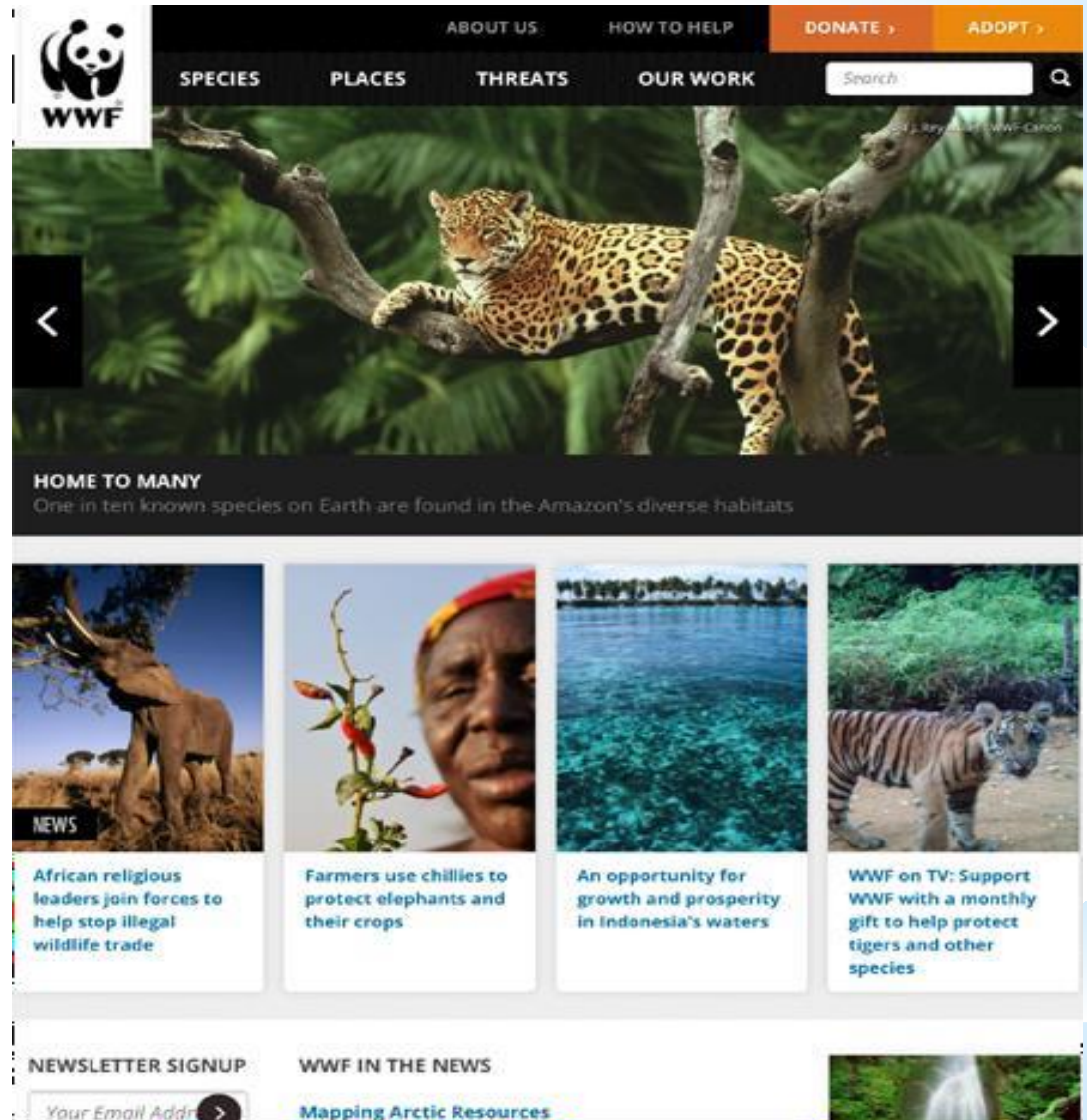- Tablet
- Notebook
- Netbook
- Monitor
- TV
- Web glasses

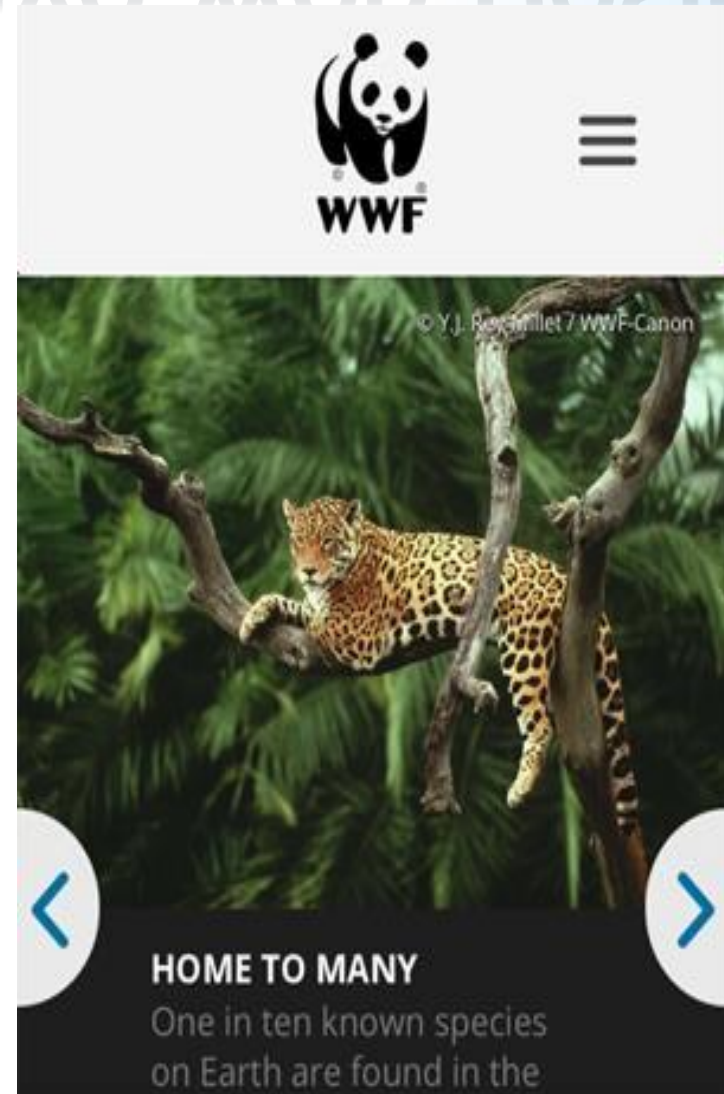# Responsive Web Design

worlwildlife.org : desktop

Responsive Web Design

Tablet:
worlwildlife.org

Responsive Web Design

worlwildlife.org :
 smartphone

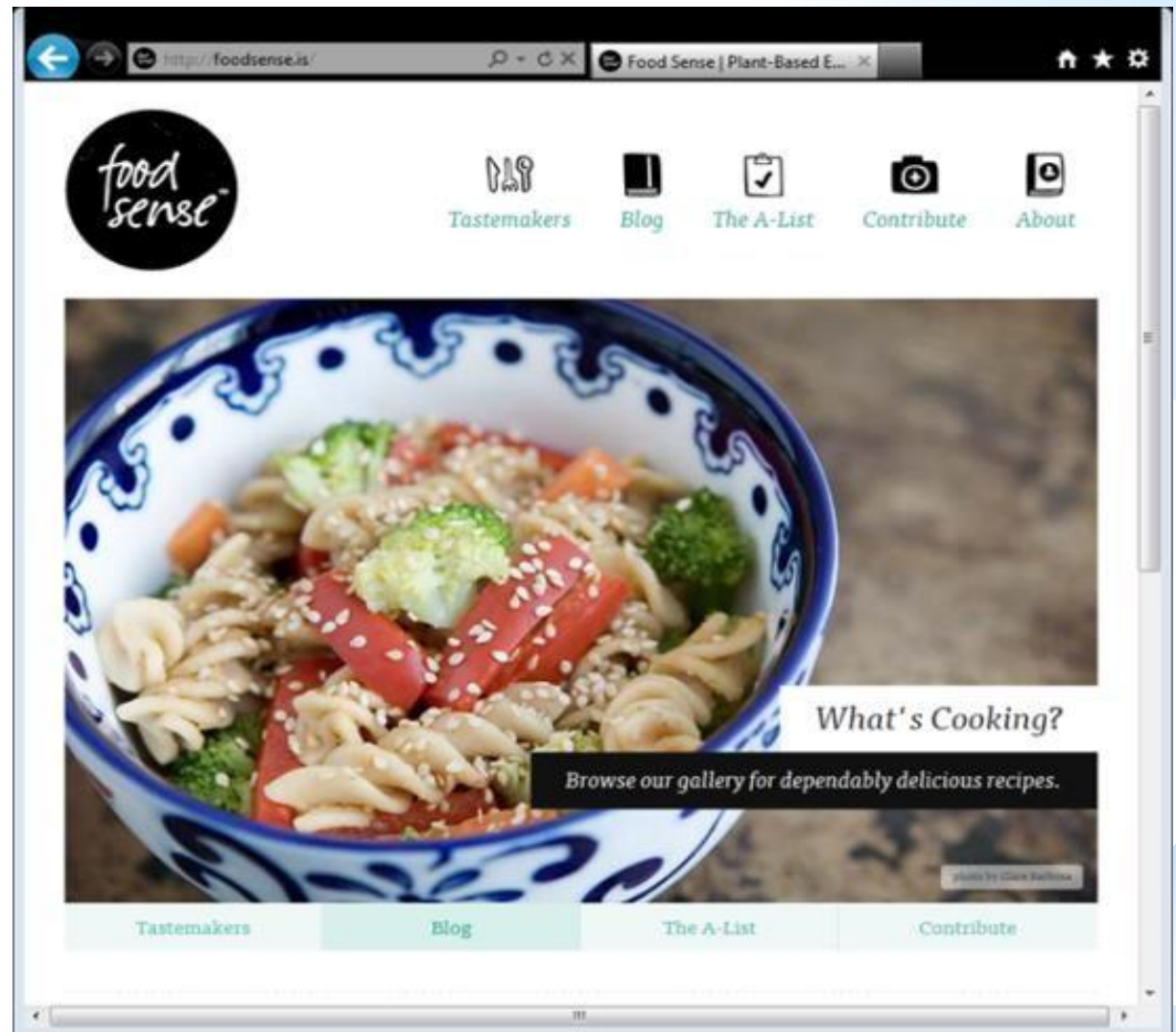# Responsive Web Design

Posisi Navigasi di kiri:
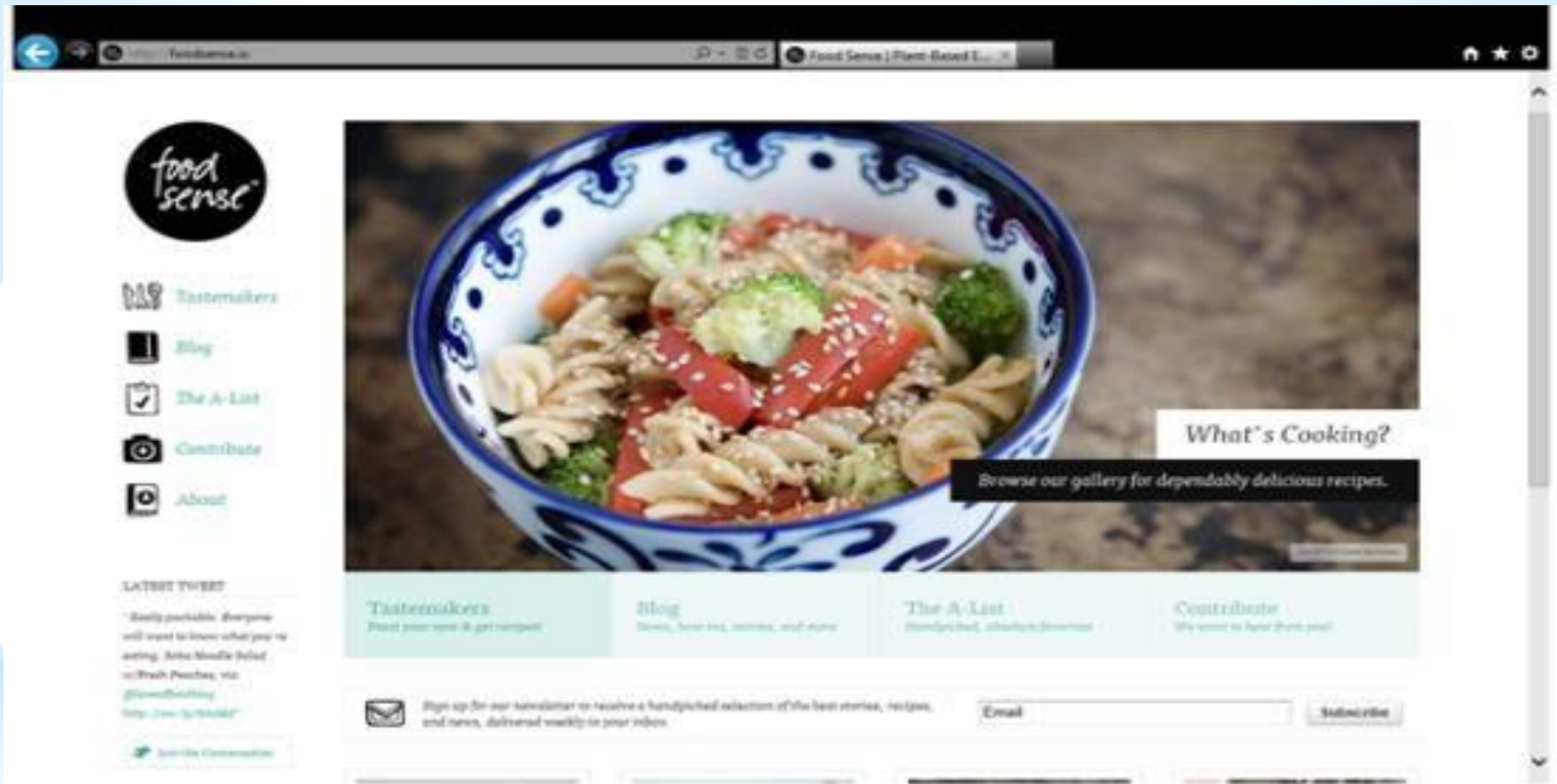
Responsive Web Design

Dilayar 800x600:
Navigasi pindah ke atas
(top)

RWD

Akses melalui smartphone
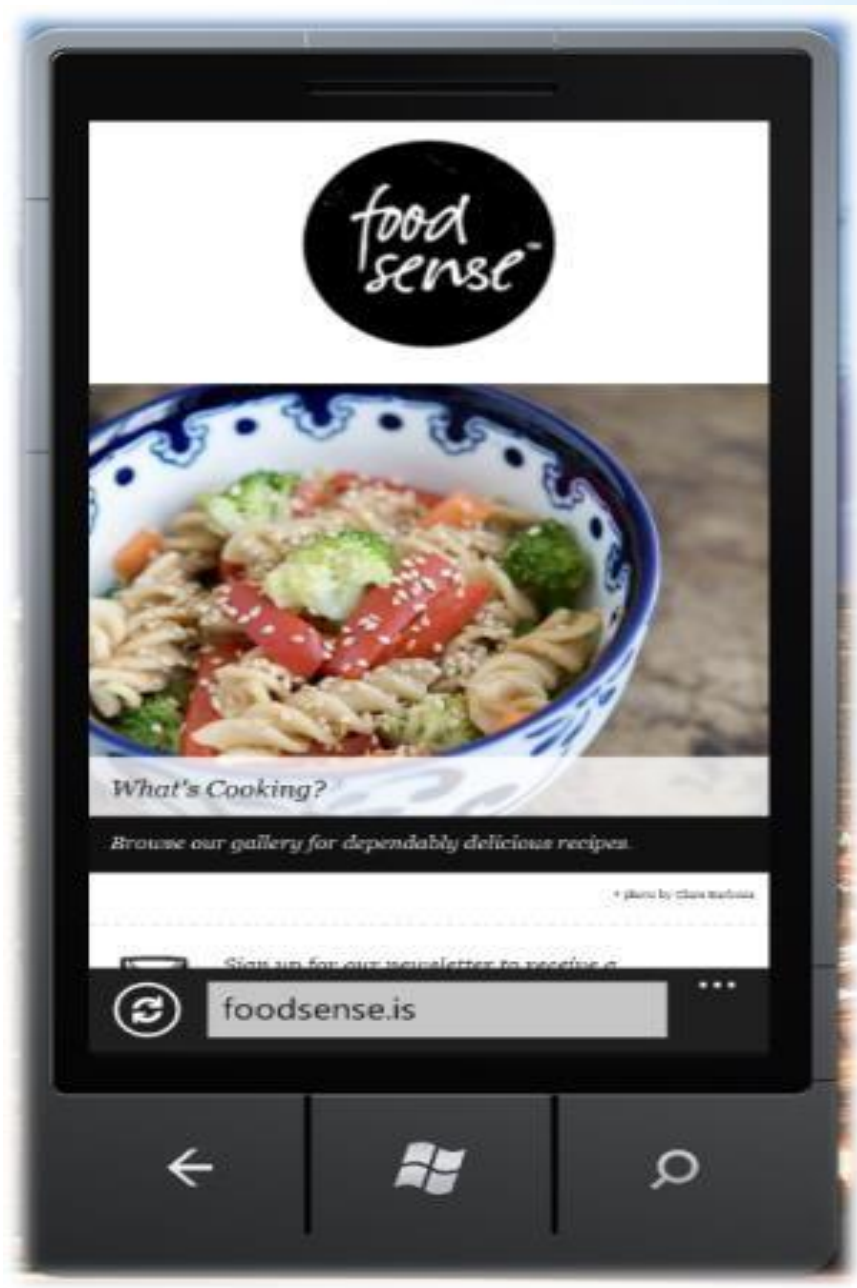
Responsive Web Design

Antarmuka website mampu beradaptasi dengan browser berdasarkan ukuran layar, platform dan orientasi
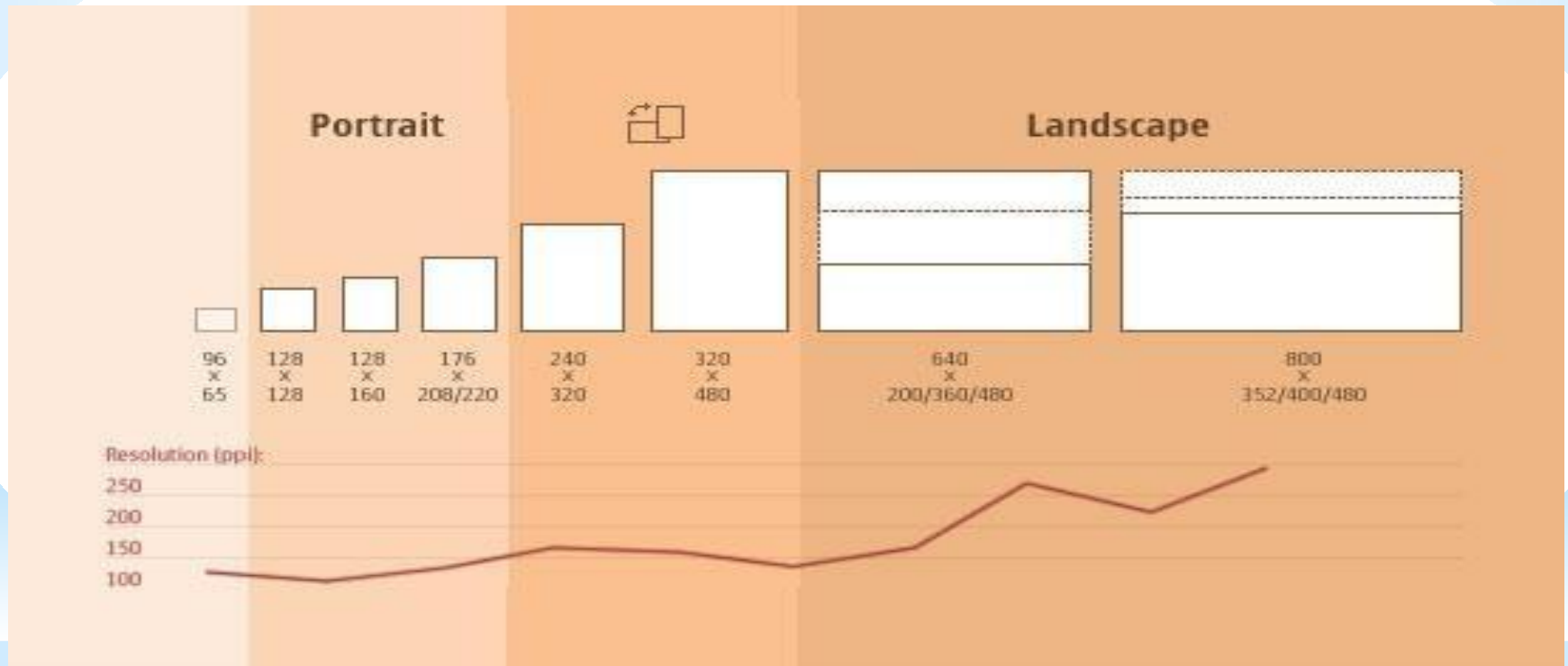
Teknik Pengembangan RWD :: HTML5

- CSS3 Media Queries
- Fluid-grid layouts
- Fluid images and other media

CSS3 Media Queries

- Memungkinkan halaman web menggunakan aturan CSS yang berbeda sesuai karakteristik dari devices atau dan browser yang mengakses

- Secara spesifik CSS disesuaikan dengan:
  - Tinggi dan lebar devices
  - Tinggi dan lebar browser
  - Resolusi layar
  - Orientasi devices (mobile / tablet : lanscape, potrait)

- Spesifikasi : www.w3.org/TR/css3-mediaqueries

CSS3 Media Queries

- Style CSS:

```
body { background: red; }
@media only screen and (max-width: 320px) {
  body { background: orange; }

}
```

- Layar ukuran 0-320px: warna background akan orange
- Layar ukuran lebih besar dari 320px akan merah

CSS3 Media Queries

- Internal Style:

```
@media only screen and (max-width: 320px) {
  /* kode css disini */

}
```

- Eksternal Style link ke file CSS

```
<link media="only screen and (max-width: 768px)"
href="css/tablet.css"rel="stylesheet">
```

- Eksternal Style via @import file

```
@import url("css/tablet.css") only screen and
(max-width: 768px);
```

CSS3 Media Queries : Breakpoint

Label	Layout Width
Smartphones	480px and below
Portrait Tables	480px to 768px
Landscape Tablets	768px to 940px
Default	940px and up
Large Screens	1210px and up

Fluid Grid Layouts

- Style CSS di desain sesuai partisi ukuran lebar

Fluid Grid Layouts

Columns are 60px wide

Gutters are 20px wide

960px

60px 60px 60px 60px 60px 60px 60px 60px 60px 60px 60px 60px

20px 20px 20px 20px 20px 20px 20px 20px 20px 20px 20px

940px

10px on left and right prevents colision with browser chrome

Available working area is 940px wide

Fluid Grid Layouts

ONE	ELEVEN

TWO	TEN

THREE	NINE

FOUR	EIGHT

FIVE	SEVEN

SIX	SIX

SEVEN	FIVE

EIGHT	FOUR

NINE	THREE

TEN	TWO

ELEVEN	ONE

Fluid Grid Layouts : Contoh

```html
<div class="container-fluid">
<div class="row">
    <div class="col-md-12">
    </div>
</div>
<div class="row">
    <div class="col-md-12">
    </div>
</div>
<div class="row">
    <div class="col-md-8">
    </div>
    <div class="col-md-4">
    </div>
</div>
<div class="row">
    <div class="col-md-12">
    </div>
</div>
</div>
```
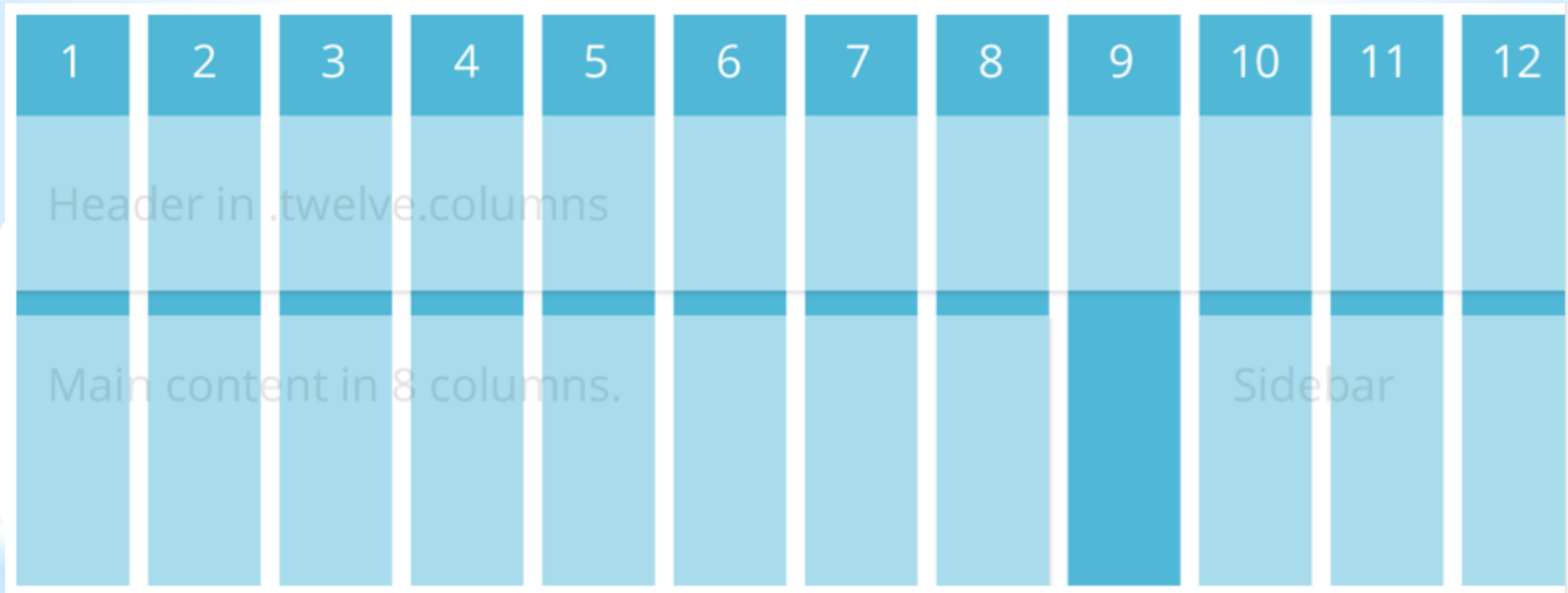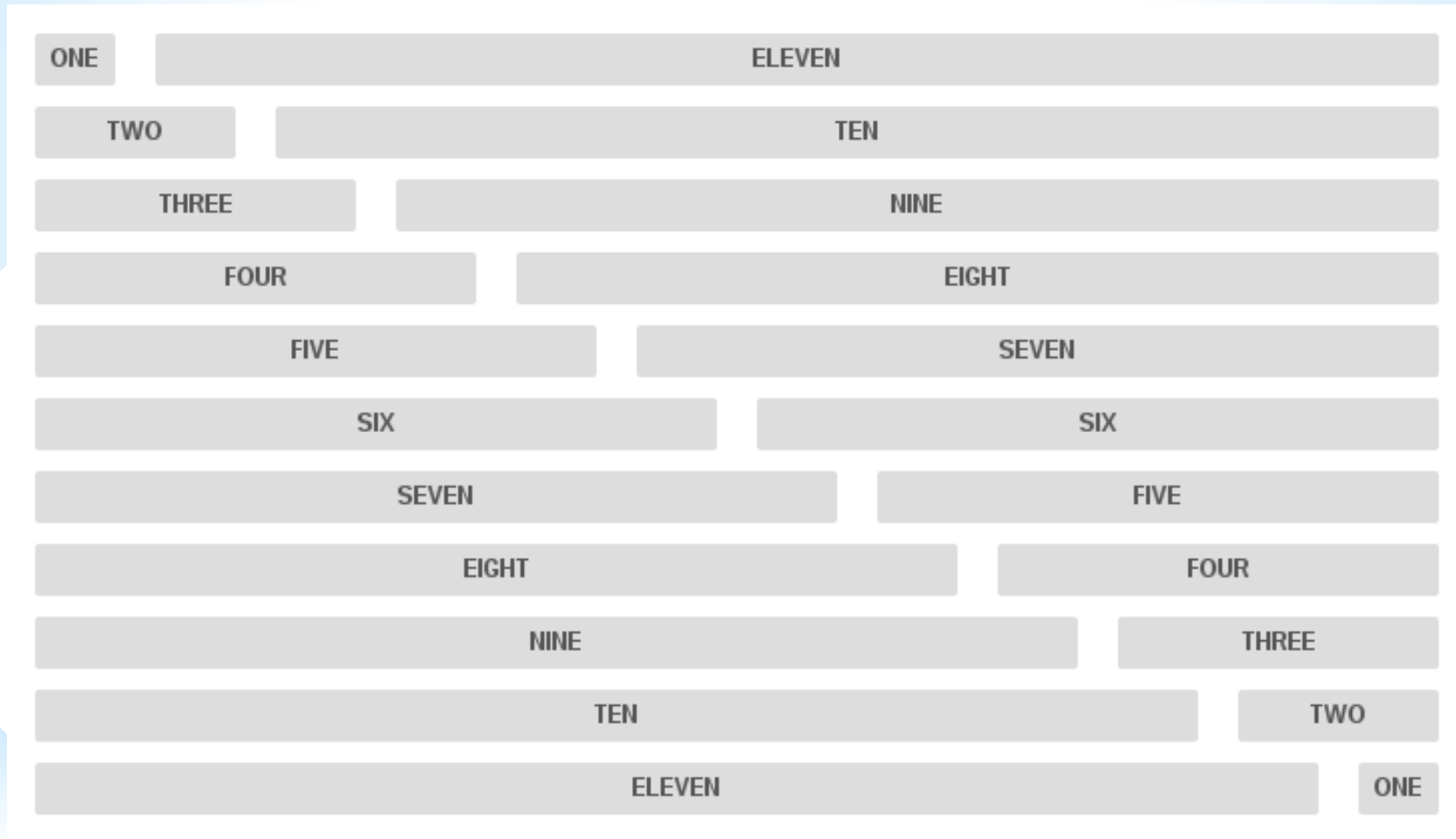
Fluid images (Flexible Images)

- Gambar / Video ditampilkan secara proporsional sesuai devices yang mengakses

Fluid images (Resizable Images)
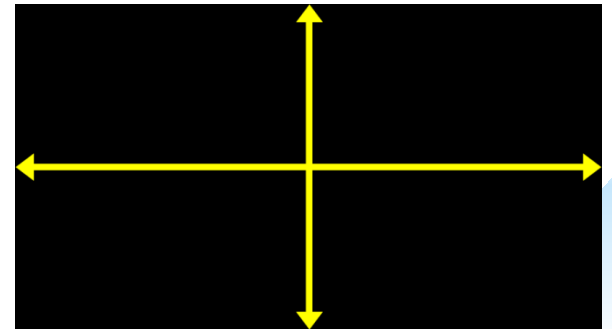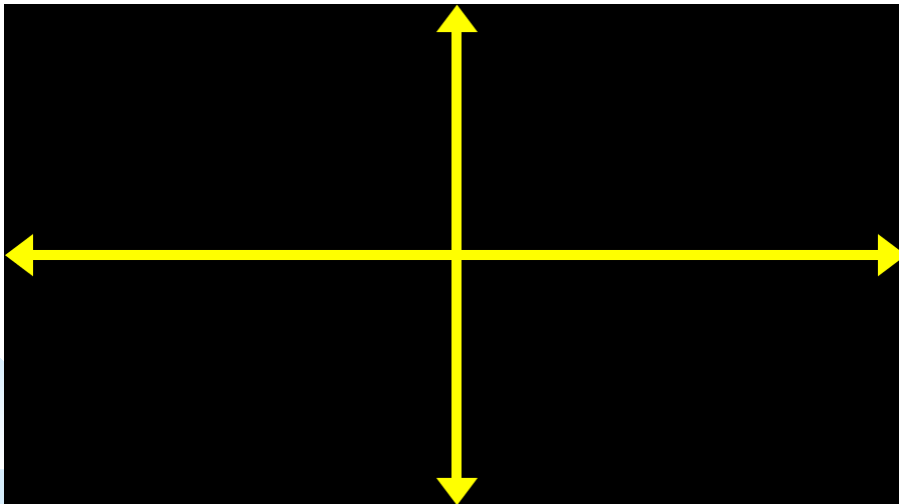
- Hilangkan properti width dan height pada image:

```
<img src="gambar.jpg"/>
```

- Styling CSS ukuran image yang resizable:

```
img {
  max-width:100% ; height: auto;
}
```

Proses desain web responsive : Mobile First

- Buat design web versi mobile terlebih dahulu (phone, phablet, tablet)
- Gunakan desain versi mobile sebagai acuan untuk membuat design utama di Desktop Computer & Laptop

Proses desain web responsive : Mobile

- Mobile Layout:
    - Buat link / tombol yang cukup besar untuk di tekan
    - Tampilkan informasi yang penting dan paling penting dari website
    - Lupakan Mouse OnHover
    - Buat menu yang mudah untuk diakses pengguna

- Mobile Design:
    - Prototype lebih berguna dari Mockup
    - Tidak berkutan dengan Pixel Perfect Design
    - Jadikan design versi mobile sebagai acuan untuk membuat large screen design

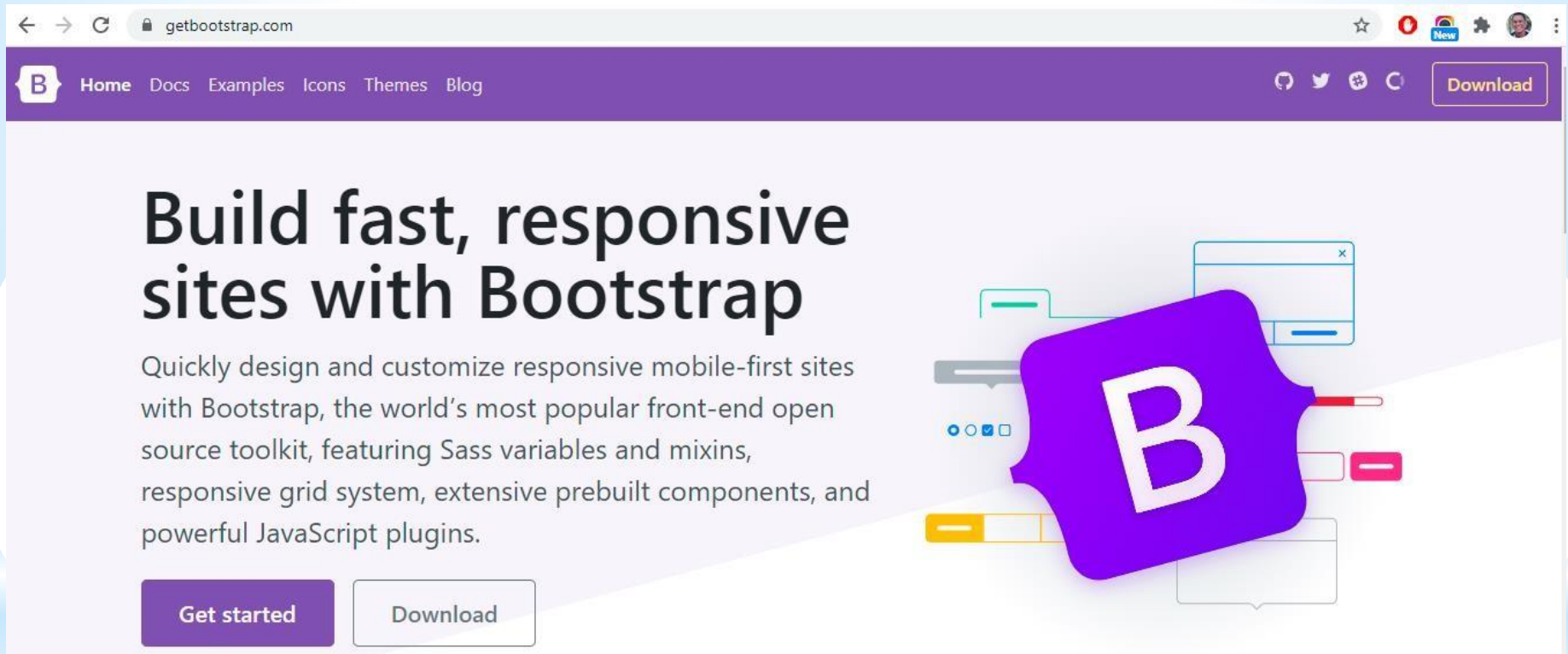# Responsive Framework

- Kumpulan library DHTML yang mendukung pengembangan website dengan responsive web design
- Framework meyediakan styling CSS yang mendukung teknik-teknik RWD
- Framework dilengkapi dengan library JavaScript yang mendukung RWD

Responsive Framework

- http://www.responsivegridsystem.com/
- http://titanthemes.com/titan-framework-a-css-framework-for-responsive-web-designs#!prettyPhoto
- http://foundation.zurb.com/index.php
- http://twitter.github.com/bootstrap/
- http://html5boilerplate.com/

Responsive Framework: Bootstrap

Responsive Framework : Bootstrap

Reason #1: Rich Features

Designed for everyone, everywhere.

Need reasons to love Bootstrap? Look no further.

Built for and by nerds

Like you, we love building awesome products on the web. We love it so much, we decided to help people just like us do it easier, better, and faster. Bootstrap is built for you.

For all skill levels

Bootstrap is designed to help people of all skill levels— designer or developer, huge nerd or early beginner. Use it as a complete kit or use to start something more complex.

Cross-everything

Originally built with only modern browsers in mind, Bootstrap has evolved to include support for all major browsers (even IE7!) and, with Bootstrap 2, tablets and smartphones, too.

12-column grid

Grid systems aren't everything, but having a durable and flexible one at the core of your work can make development much simpler. Use our built-in grid classes or roll your own.

Responsive design

With Bootstrap 2, we've gone fully responsive. Our components are scaled according to a range of resolutions and devices to provide a consistent experience, no matter what.

Styleguide docs

Unlike other front-end toolkits, Bootstrap was designed first and foremost as a styleguide to document not only our features, but best practices and living, coded examples.

Growing library

Despite being only 10kb (gzipped), Bootstrap is one of the most complete front-end toolkits out there with dozens of fully functional components ready to be put to use.

Custom jQuery plugins

What good is an awesome design component without easy-to-use, proper, and extensible interactions? With Bootstrap, you get custom-built jQuery plugins to bring your projects to life.

Built on LESS

Where vanilla CSS falters, LESS excels. Variables, nesting, operations, and mixins in LESS makes coding CSS faster and more efficient with minimal overhead.

HTML5

Built to support new HTML5 elements and syntax.

CSS3

Progressively enhanced components for ultimate style.

Open-source
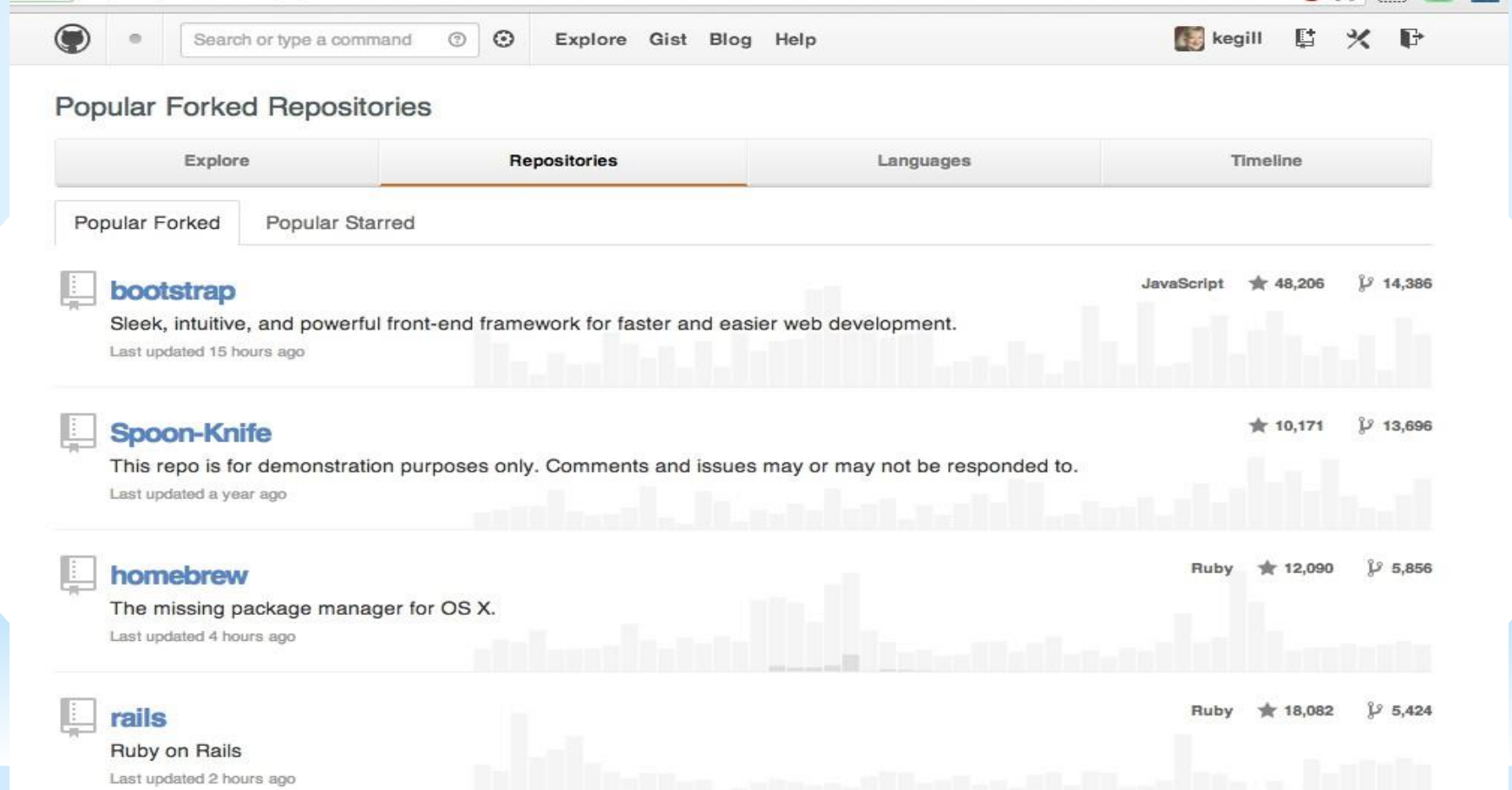
Built for and maintained by the community via GitHub.

Made at Twitter

Brought to you by an experienced engineer and designer.

Responsive Framework : Bootstrap

Reason #2: Popularity

c. [US] https://github.com/popular/forked

Search or type a command   Explore Gist Blog Help   kegill

Popular Forked Repositories

| Explore | Repositories | Languages | Timeline |

Popular Forked   Popular Starred

bootstrap   JavaScript ★ 48,206 ⑂ 14,386
Sleek, intuitive, and powerful front-end framework for faster and easier web development.
Last updated 15 hours ago

Spoon-Knife   ★ 10,171 ⑂ 13,696
This repo is for demonstration purposes only. Comments and issues may or may not be responded to.
Last updated a year ago

homebrew   Ruby ★ 12,090 ⑂ 5,856
The missing package manager for OS X.
Last updated 4 hours ago

rails   Ruby ★ 18,082 ⑂ 5,424
Ruby on Rails
Last updated 2 hours ago

Responsive Framework : Twitter Bootstrap

Reason #3: Browser Support

Responsive Framework : Bootstrap

Reason #4: Icon set
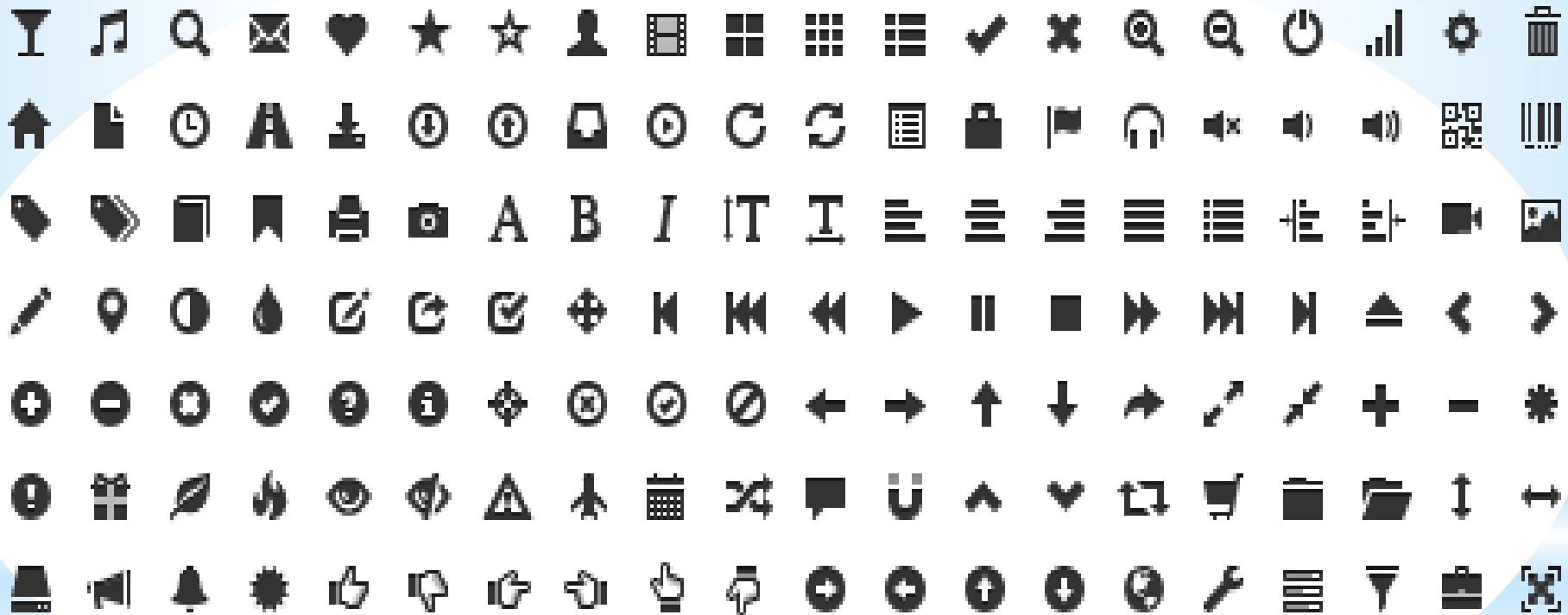
Responsive Framework : Bootstrap

Reason #5: Grid System

Responsive Framework : Bootstrap
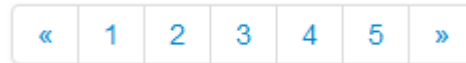
Reason #6: Components

> Buttons:

> Tabs:
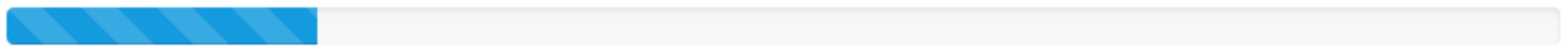
> Breadcrumb:

> Pagination:

> Alerts:

Warning! Best check yo self, you're not looking too good.

> Progress bar:

Responsive Framework : Bootstrap

Reason #7: JavaScript / JQuery

- ☑ Transitions (required for any animation)
- ☑ Modals
- ☑ Dropdowns
- ☑ Scrollspy
- ☑ Togglable tabs
- ☑ Tooltips
- ☑ Popovers (requires Tooltips)

- ☑ Affix
- ☑ Alert messages
- ☑ Buttons
- ☑ Collapse
- ☑ Carousel
- ☑ Typeahead

Heads up!

All checked plugins will be compiled into a single file, bootstrap.js. All plugins require the latest version of jQuery to be included.

Responsive Framework : Bootstrap

Reason #8: Component

1. Choose components

Toggle all

Scaffolding

- ☑ Normalize and reset
- ☑ Body type and links
- ☑ Grid system
- ☑ Layouts

Base CSS

- ☑ Headings, body, etc
- ☑ Code and pre
- ☑ Labels and badges
- ☑ Tables
- ☑ Forms
- ☑ Buttons

Components

- ☑ Button groups and dropdowns
- ☑ Navs, tabs, and pills
- ☑ Navbar
- ☑ Breadcrumbs
- ☑ Pagination
- ☑ Pager
- ☑ Thumbnails
- ☑ Alerts
- ☑ Progress bars
- ☑ Hero unit
- ☑ Media component

Miscellaneous

- ☑ Media object
- ☑ Wells
- ☑ Close icon
- ☑ Utilities
- ☑ Component animations

Responsive

- ☑ Visible/hidden classes
- ☑ Narrow tablets and below (<767px)
- ☑ Tablets to desktops (767-979px)
- ☑ Large desktops (>1200px)
- ☑ Responsive navbar
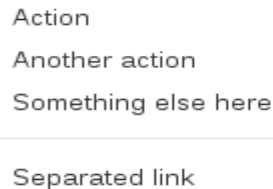
Responsive Framework : Bootstrap

Reason #9: Well Documentation & Example

Dropdown menus

Example

Toggleable, contextual menu for displaying lists of links. Made interactive with the dropdown JavaS

Example

Action
Another action
Something else here

Separated link

```
<ul class="dropdown-menu" role="menu" aria-labelledby="dropdownMenu">
  <li><a tabindex="-1" href="#">Action</a></li>
  <li><a tabindex="-1" href="#">Another action</a></li>
  <li><a tabindex="-1" href="#">Something else here</a></li>
  <li class="divider"></li>
  <li><a tabindex="-1" href="#">Separated link</a></li>
</ul>
```

Responsive Framework : Bootstrap

Reason #10: Integration with Server Side Program

- PHP
  - Framework : Laravel, Yii Framework, CI
- Java Web (Servlet / JSP)
  - Framework : Spring, Tapestry
- ASP.NET
  - ASP.NET MVC
- Ruby
- Python

Responsive Framework : Twitter Bootstrap

Reason #11: Integration with CMS Themes

- Joomla
- Wordpress
- Drupal

Let's Design !!