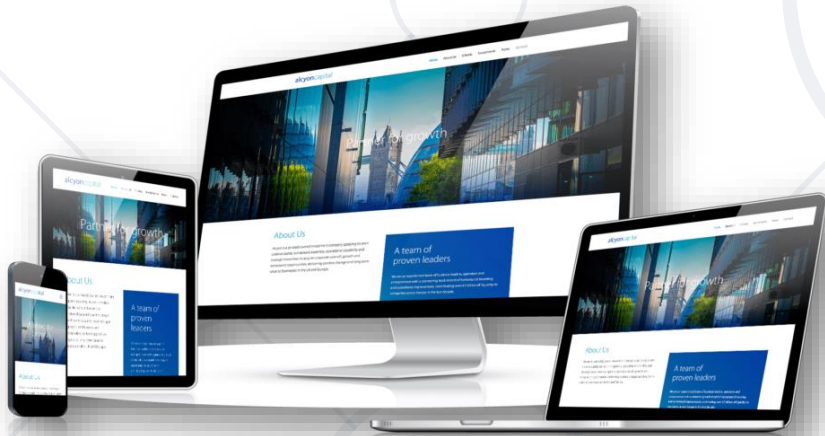


Responsive Web Design



SoftUni Team
Technical Trainers



SoftUni



Software University

<https://softuni.bg>

sli.do

#html-css

Table of Contents

1. What is Responsive web design?
2. Why is it important?
3. What is Mobile First and why use it?
4. Media Queries

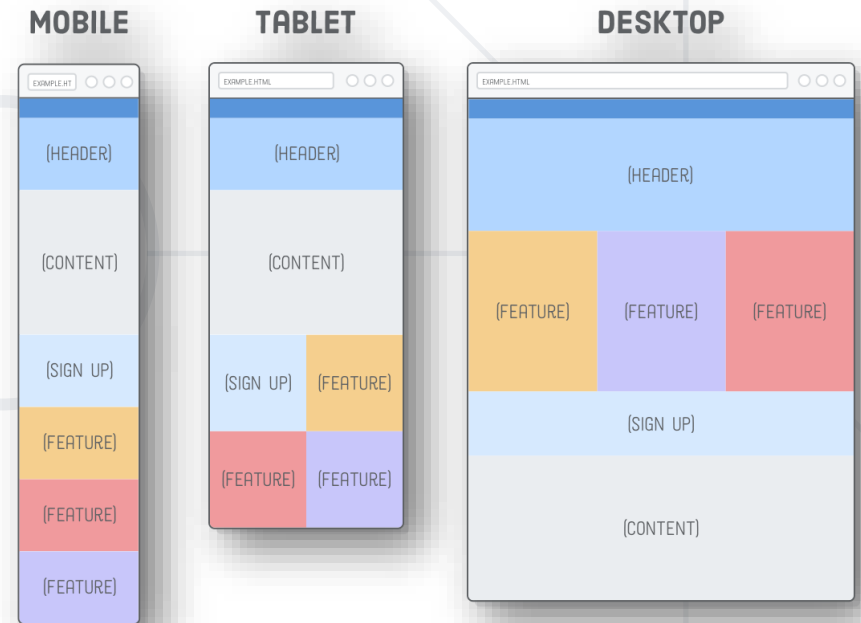
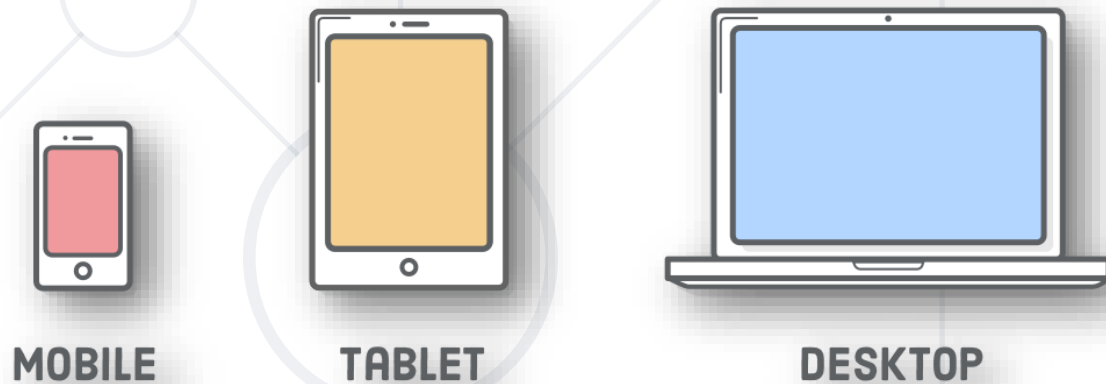




Responsive Web Design

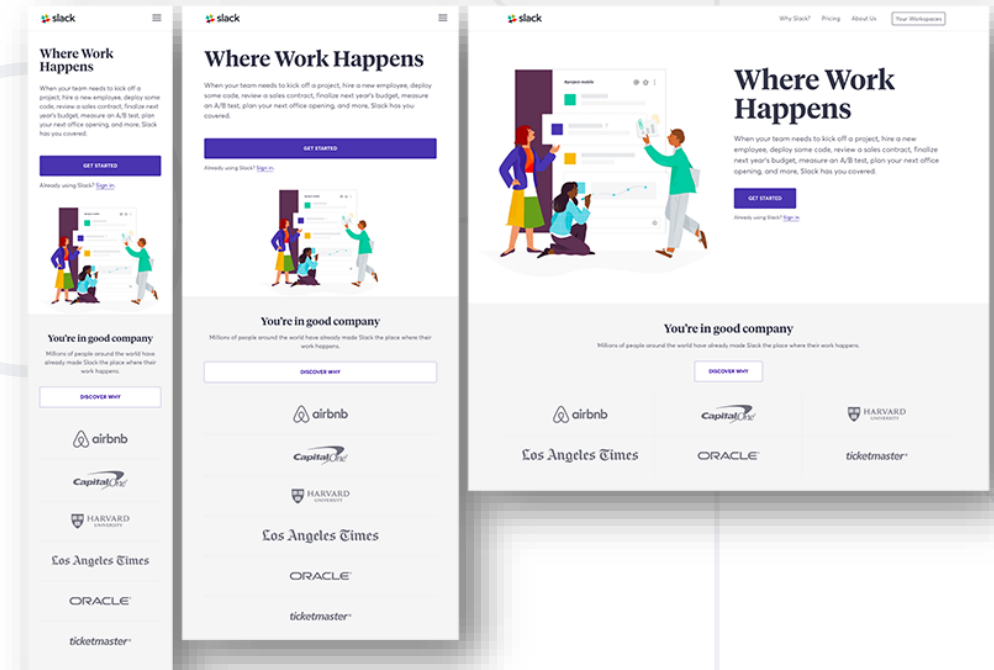
What is Responsive Web Design?

- It is an approach to make web pages render well on all screen sizes and resolutions while ensuring good usability
- It is the way to design for **a multi-device web**



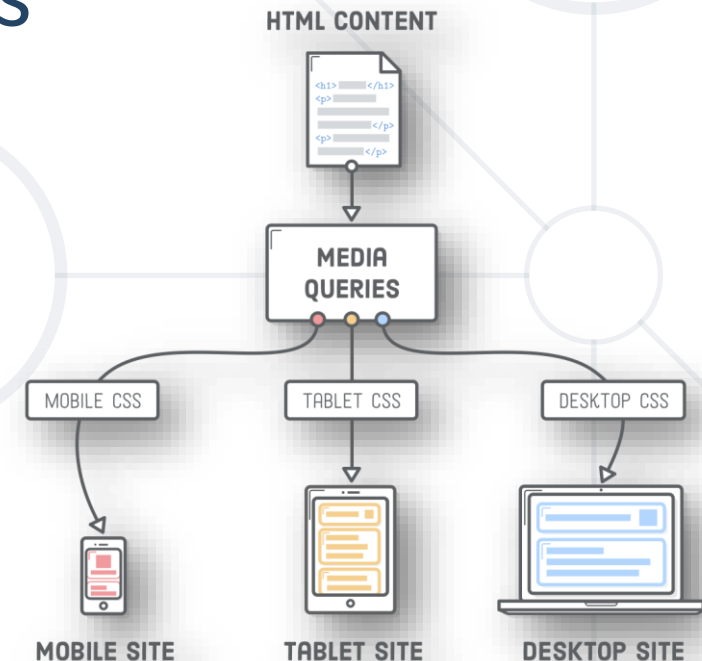
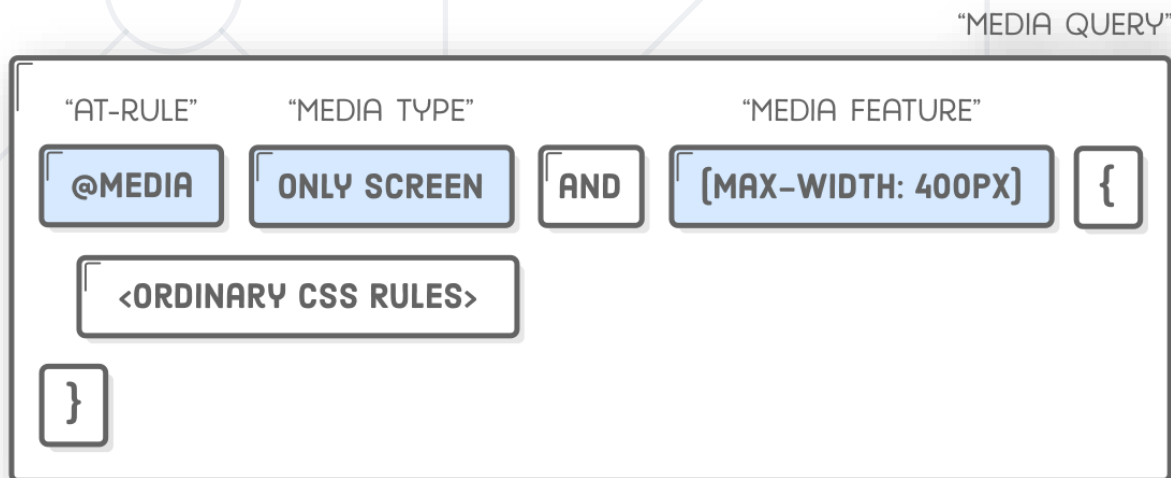
What is Responsive Web Design?

- [Ethan Marcotte](#) wrote an introductory article about the approach, [Responsive Web Design](#), for A List Apart
- https://developer.mozilla.org/en-US/docs/Learn/CSS/CSS_layout/Responsive_Design



Responsive Web Design – How?

- **Media Queries** - Allow us to run a **series of tests** (e.g., whether the user's screen is greater than a certain width, or a certain resolution) and **apply CSS** selectively to style the page appropriately for the user's needs



- **In HTML**

- Media Queries can be applied to various elements:
 - In the **link element's** media attribute, they define the media to which a linked resource (typically CSS) should be applied
 - In the **source element's** media attribute, they define the media to which that source should be applied (This is only valid inside picture elements)
 - In the **style element's** media attribute, they define the media to which the style should be applied

■ Media Types

- Media types describe the general category of a given device
- Although, websites are commonly **designed with screens in mind**, you may want to create styles that target special devices such as printers or audio-based screen readers

```
@media print { ... }  
@media screen, print { ... }
```

- **@import**
 - The **@import** CSS at-rule is used to import style rules from other style sheets
 - These rules must precede all other types of rules, except **@charset rules**
 - As it is not a nested statement, **@import** cannot be used inside conditional group at-rules

```
@import url('styles.css') screen;
```

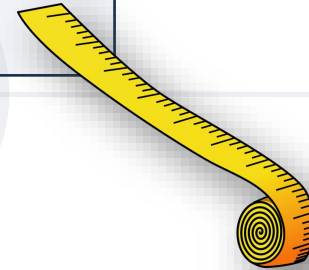
- **Media Features**
 - Media features describe a specific characteristic of the **user agent, output device, or environment**:

```
@media screen and (min-width: 600px) {  
  ...  
}
```



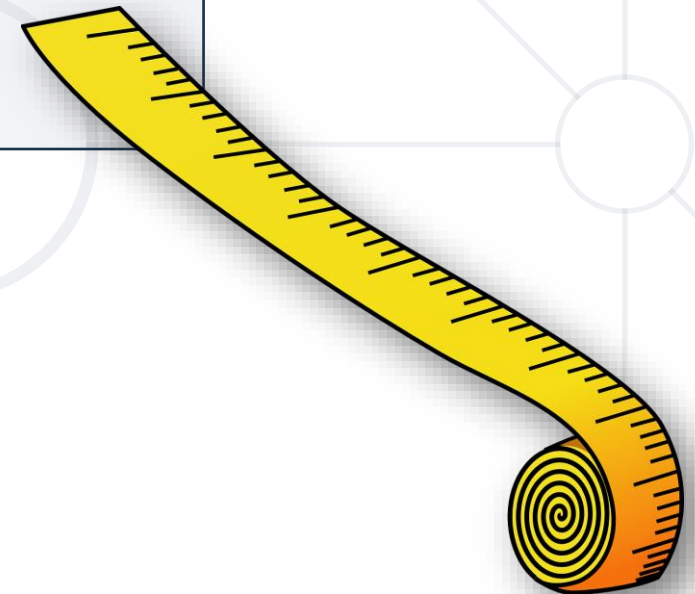
- Media Features – **min-width**
 - Specifies a **minimal width** for the viewport in order to apply the rules included

```
@media screen and (min-width: 600px) {  
  ...  
}
```



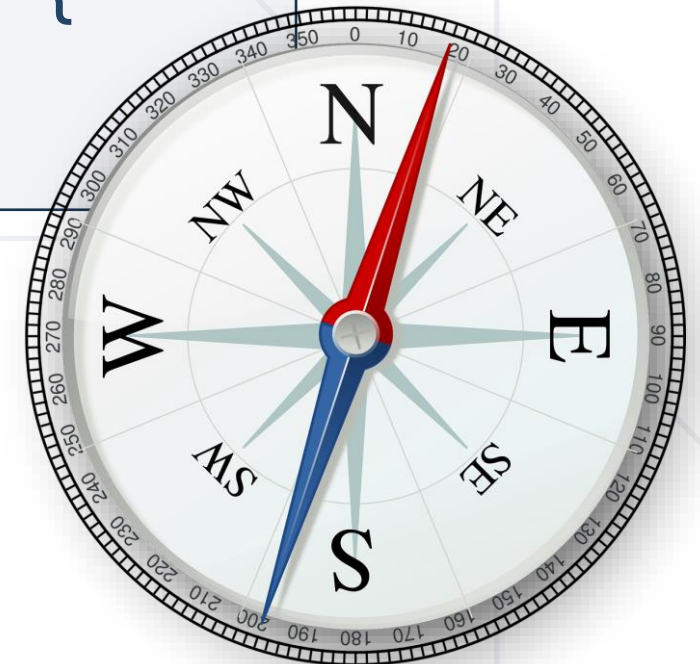
- Media Features – **max-width**
 - Specifies a **maximum width** for the viewport up to which it will apply the rules included

```
@media screen and (max-width: 600px) {  
  ...  
}
```



- Media Features – **orientation**
 - Specifies a **device orientation** for which it will apply the rules included

```
@media screen and (orientation: landscape) {  
  ...  
}
```



- Media Features – **hover**
 - Checks for a **device ability** for which it will apply the rules included

```
@media screen and (hover: hover) {  
  ...  
}
```



- Media Features – **pointer**
 - Checks for a **device ability** for which it will apply the rules included

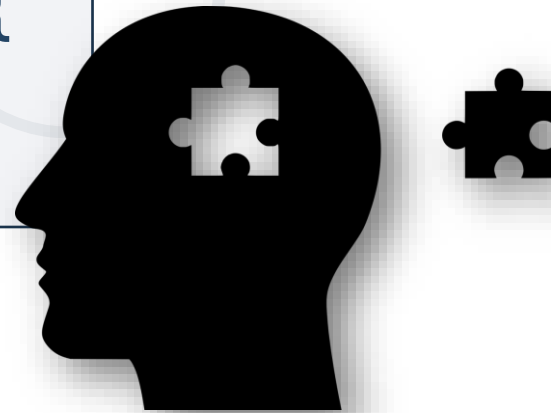
```
@media screen and (pointer: fine) {  
  ...  
}
```



- **Logical operators**

- The logical operators only can be used to **compose a complex** media query
- You can also **combine multiple** media queries into a single rule by separating them with commas

```
@media screen and (pointer: fine) {  
  ...  
}
```



- Logical operators – **and**
 - The and operator is used for combining multiple media features together into a single media query, requiring each chained feature to return true in order for the query to be true
 - It is also used for **joining media features** with media types

```
@media screen and (pointer: fine) {  
  ...  
}
```

- Logical operators – **not**
 - The not operator is used to **negate a media query**, returning true if the query would otherwise return false
 - If present in a comma-separated list of queries, it will **only negate the specific query** to which it is applied
 - If you use the not operator, you must also **specify a media type**

```
@media screen not (pointer: fine) {  
  ...  
}
```

- Logical operators – **only**
 - The **only** operator is used to **apply a style** only if an entire query matches and is useful for preventing older browsers from applying selected styles
 - If you use the **only** operator, you must also **specify a media type**

```
@media only screen and (pointer: fine) {  
    ...  
}
```

- Logical operators – , (comma)
 - Commas are used to **combine multiple media queries** into a single rule
 - Each query in a comma-separated list is **treated separately** from the others
 - Thus, if any of the queries in a list is true, the entire media statement returns true. In other words, lists behave like a logical or operator

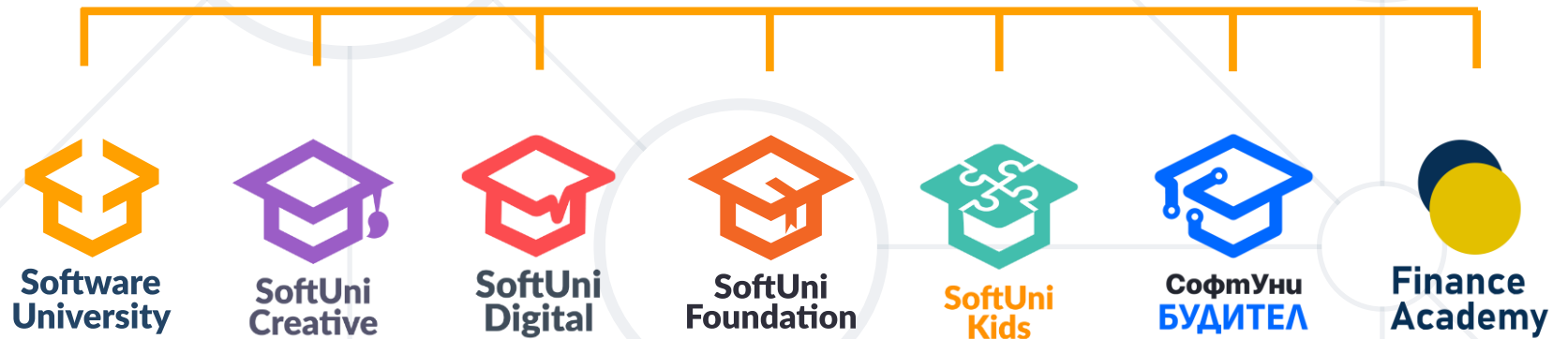
```
@media (min-height: 680px), only screen and (orientation: portrait) {  
    ...  
}
```

- https://developer.mozilla.org/en-US/docs/Web/CSS/Media_Queries
- <https://developer.mozilla.org/en-US/docs/Web/CSS/@import>
- [https://developer.mozilla.org/en-US/docs/Web/CSS/Media_Queries/Testing media queries](https://developer.mozilla.org/en-US/docs/Web/CSS/Media_Queries/Testing_media_queries)
- [https://developer.mozilla.org/en-US/docs/Web/CSS/Media_Queries/Using media queries#Media features](https://developer.mozilla.org/en-US/docs/Web/CSS/Media_Queries/Using_media_queries#Media_features)
- <https://caniuse.com/#feat=css-mediaqueries>
- <https://css-tricks.com/snippets/css/media-queries-for-standard-devices/>
- <https://responsivedesign.is/articles/why-you-dont-need-device-specific-breakpoints/>
- <https://davidwalsh.name/animate-media-queries>
- <https://mediaqueri.es/>
- <https://responsivedesign.is/>

- What is Responsive web design?
- Why is it important?
- What is Mobile First and why use it?
- Media Queries



Questions?



SoftUni Diamond Partners



- This course (slides, examples, demos, exercises, homework, documents, videos and other assets) is **copyrighted content**
- Unauthorized copy, reproduction or use is illegal
- © SoftUni – <https://about.softuni.bg/>
- © Software University – <https://softuni.bg>



- Software University – High-Quality Education, Profession and Job for Software Developers

- softuni.bg, about.softuni.bg

- Software University Foundation

- softuni.foundation

- Software University @ Facebook

- facebook.com/SoftwareUniversity

- Software University Forums

- forum.softuni.bg



Software University

