The Mobile Web Web Engineering Prof. D. König



Computerphile

https://www.youtube.com/watch?v=88jkB1V6N9w

Responsive Design

Respond to varying screen sizes/resolutions

Prerequisite Knowledge:

HTML, CSS, JavaScript, Web-MVC

Testing the WebMile

The variety of devices, screen sizes, and resolutions makes any testing difficult.

Provider and products change quickly: google, microsoft, soucelabs, mobiready, ...

Approaches

Flexible layout (CSS)

Media queries (CSS)

Dynamic in-page logic (HTML, JS)

Serve different views per capability (MVC)

Flexible Layout { float: left; }

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Media Query (CSS)

```
#title { width: 50%; }
@media screen and (max-width: 800px) {
  #title { width: 100%; }
```

Media Query Attributes

max-width, max-device-width, min-width, min-device-width, (height) orientation (portrait, landscape), [min-,max-,device-]aspect-ratio, color, resolution, touch-enabled, ...

Dynamic in-page logic

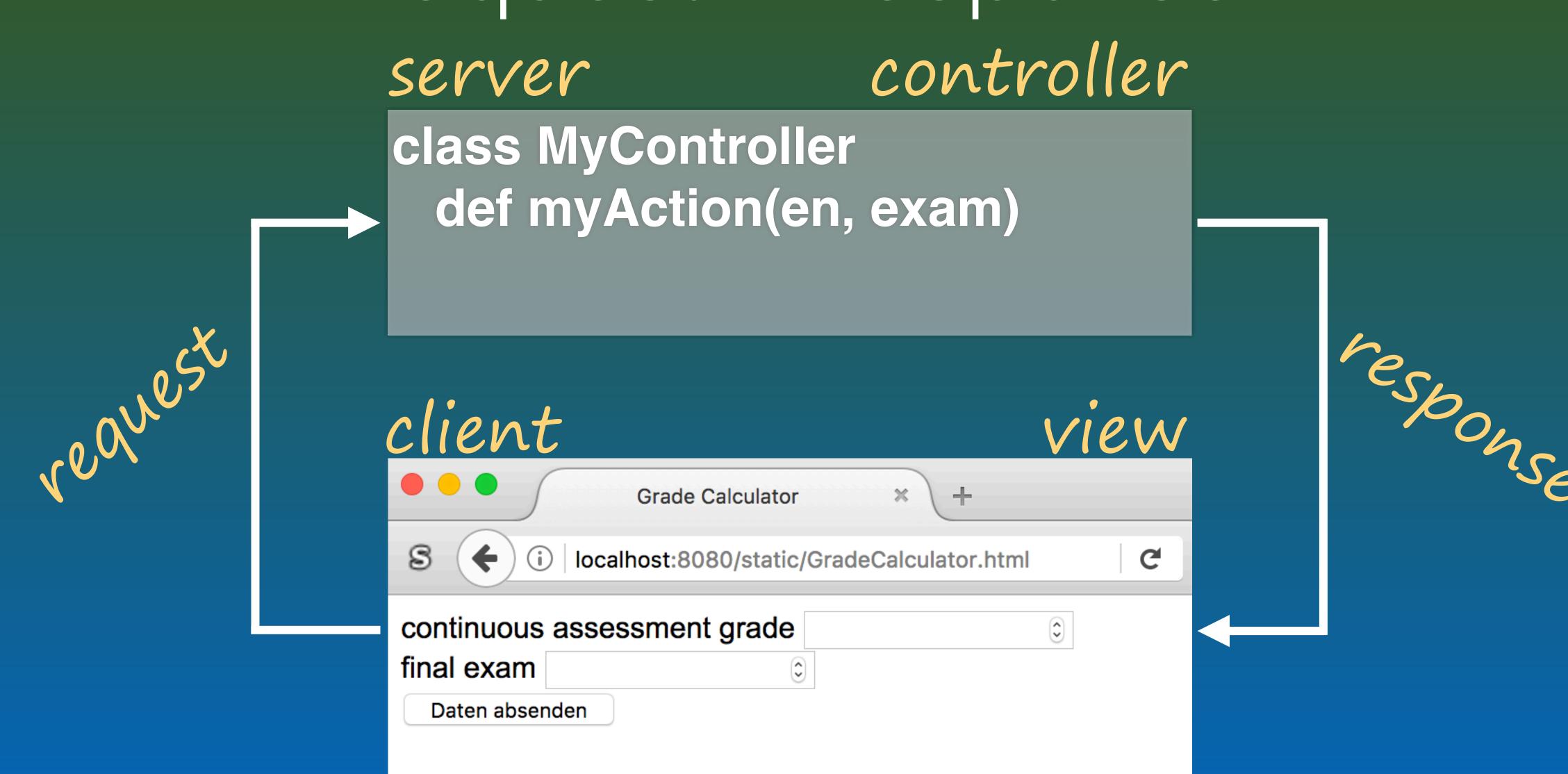
```
<body onresize="adapt()">
```

```
<script>
 function adapt() { ...; screen.size ... }
</script>
```

View per Capability

How to detect the capability?
How to change the view?

Request - Response



How to change the View?

Use different CSS

Select a different layout

Rendering a different view

When to use: rule of thumb

CSS float Always consider

onresize Fine-grained control

MVC Default