

# Web Programming with Python and JavaScript

Lecture 6: Front Ends

July 17, 2018

# Single-Page Applications

# HTML5 History API

# History

/first

# History

/second

/first

# History

/third

/second

/first

# History

/second

/first

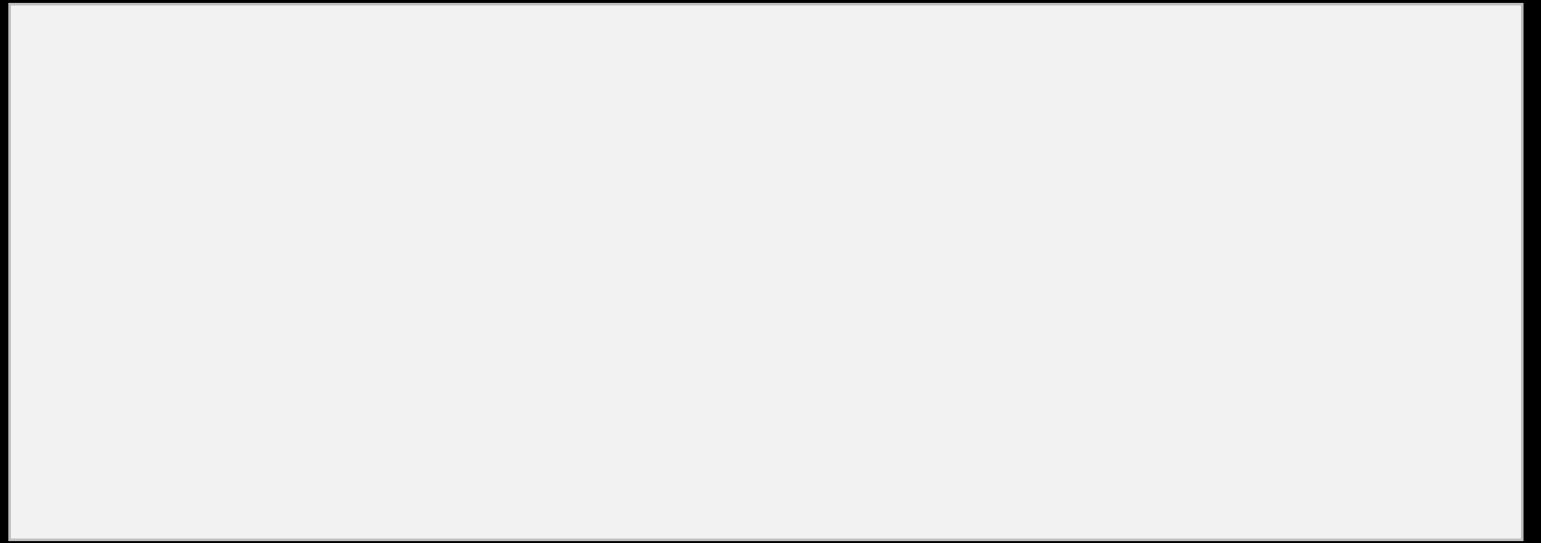
# HTML5 History

- pushState
- onpopstate



**window**

**window**



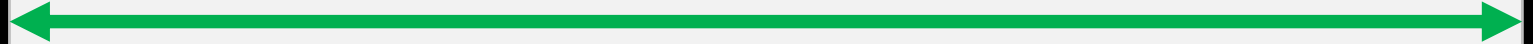
# window

`window.innerHeight`  
`Window.innerWidth`



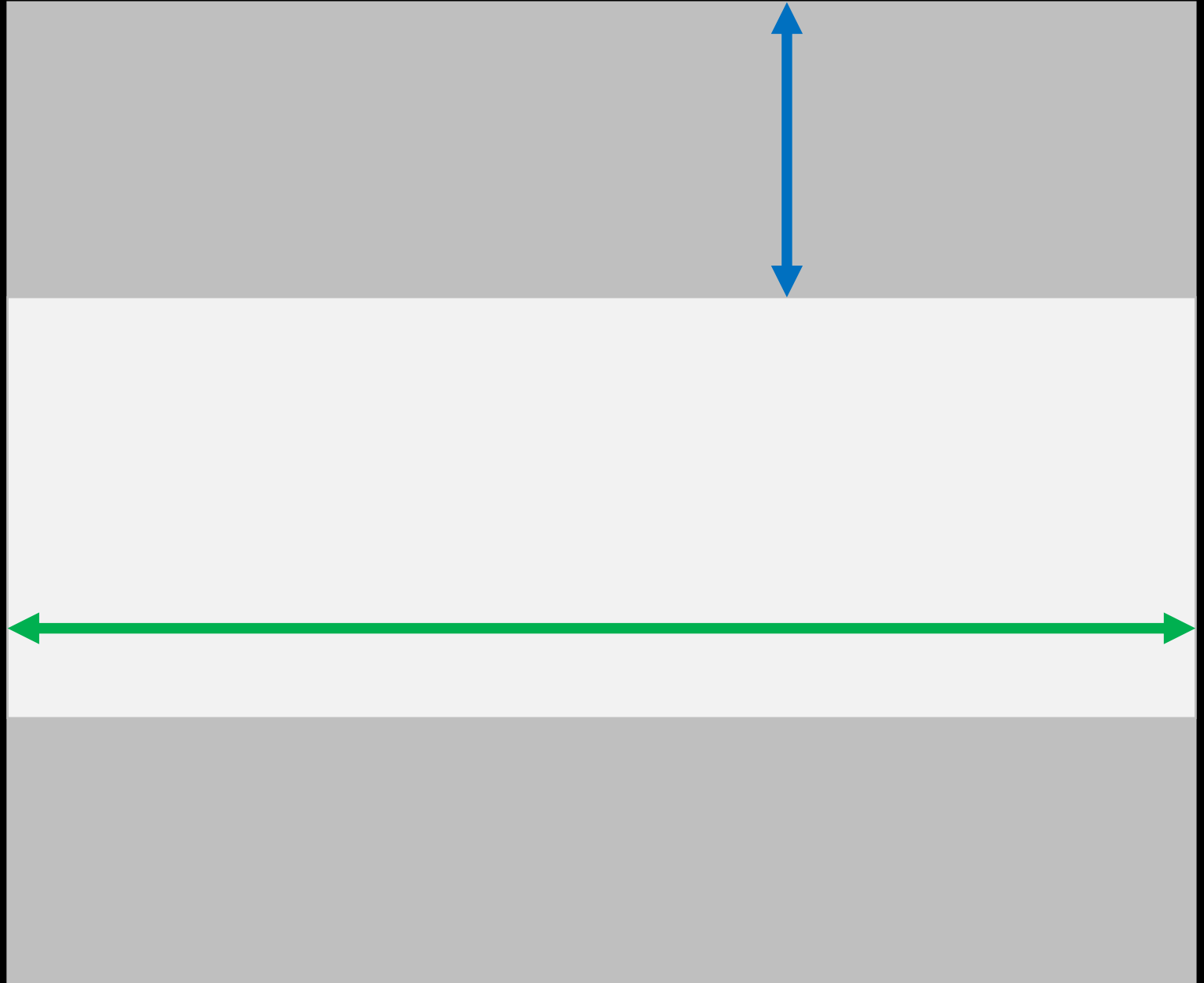
# window

`window.innerHeight`  
`Window.innerWidth`



**window**

`window.innerHeight`  
`Window.innerWidth`  
`window.scrollY`



# window

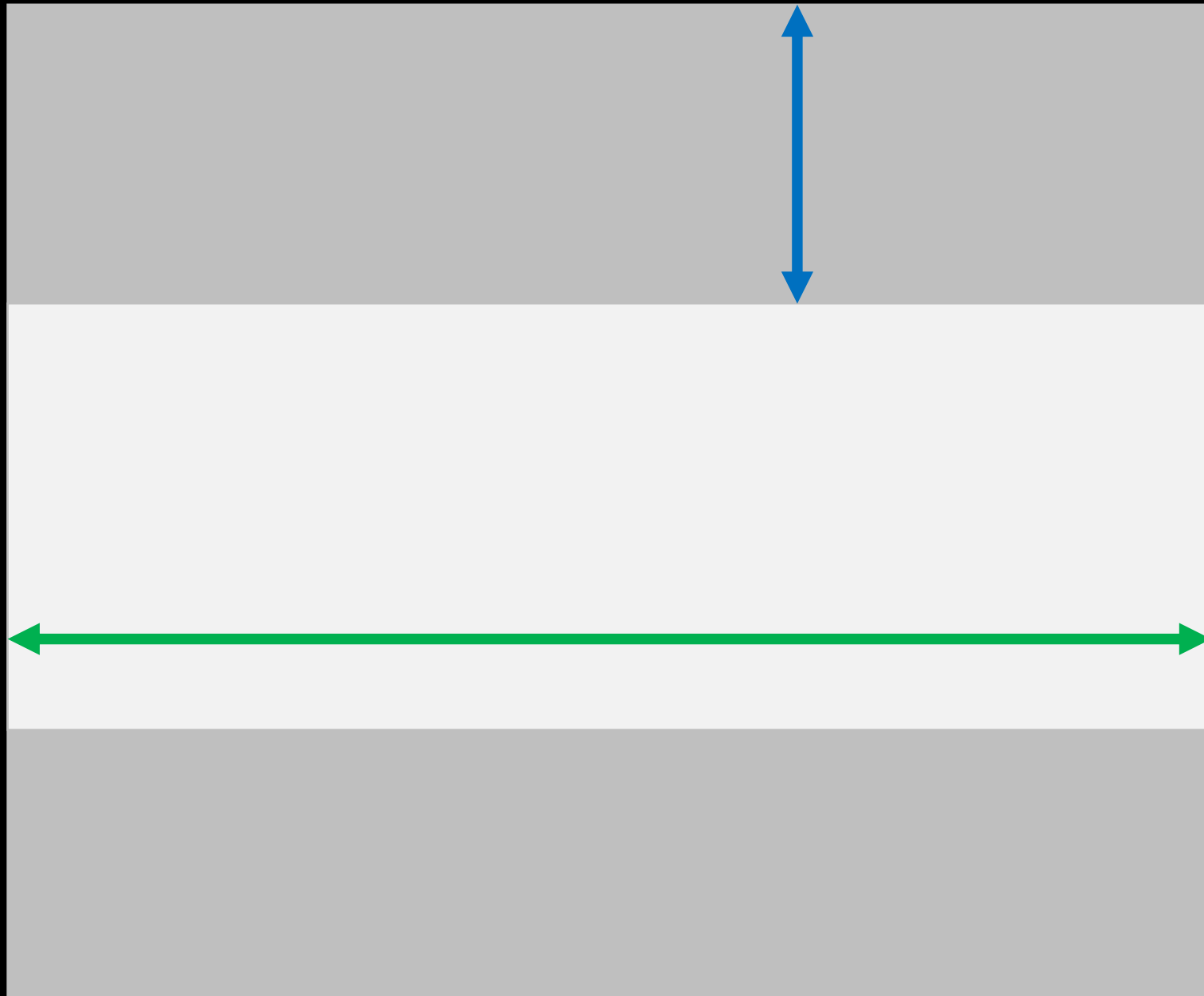
`window.innerHeight`

`Window.innerWidth`

`window.scrollY`

`document.body.`

`offsetHeight`



# JavaScript Templates

# CSS Animation



# CSS Animation Properties

- `animation-name`
- `animation-duration`
- `animation-iteration-count`
- `animation-fill-mode`
- `animation-play-state`
- ...

**SVG**