



# Page Transitions in WordPress

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# UKRATKO

- Što koristiti (libovi za animacije i tranzicije)?
- Setup
- Tips & Tricks

**ŠTO KORISTITI?**

## OPCIJE – PAGE TRANSITION

- Barba.js – 4.4kb min gzip
- Turbolinks

# 1. BARBA.JS – MARKUP

```
<div class="page-transition-wrapper">  
  <div class="page-transition-container" data-namespace="homepage">
```

## 2. BARBA.JS – INITIALIZATION

```
// Start barba only once.
if (!barbaStarted) {
  Barba.Pjax.start();
  barbaStarted = true;
}

// Save the last clicked element so we can decide what
// transition to use.
let lastClickEl = null;
Barba.Dispatcher.on('linkClicked', (el) => {
  lastClickEl = el;
});

// Determine which transition should be used.
Barba.Pjax.getTransition = () => {
  barbaWp.detectTransition(lastClickEl);
  return barbaWp.setupTransition();
};
```

### 3. BARBA.JS – DETECTING WHICH TRANSITION TO USE

```
detectTransition(lastClickEl) {  
  
    ...  
  
    // Case -> Case  
    if (this.isNextCaseLink(lastClickEl)) {  
        this.pageOutTransition = this.pageTransitions.list.case.out;  
        this.pageInTransition = this.pageTransitions.list.case.in;  
        return true;  
    }  
  
    // Homepage -> Case  
    if (this.isViewCaseLink(lastClickEl)) {  
        this.pageOutTransition = this.pageTransitions.list.homepage.out;  
        this.pageInTransition = this.pageTransitions.list.case.in;  
        return true;  
    }  
  
    return false;  
}
```



## 4. BARBA.JS – SETUP TRANSITIONS

```
setupTransition() {  
  
  return this.BarbaTemp.BaseTransition.extend({  
  
    start: function() {  
      Promise  
        .all([this.newContainerLoading, this.pageOut()])  
        .then(this.pageIn.bind(this));  
    },  
  
    pageOut: function() {  
      return pageTransitions[pageOutTransition](this.oldContainer).finished;  
    },  
  
    pageIn: function() {  
      pageTransitions[pageInTransition](this.newContainer).finished.then(() => {  
        this.done();  
      });  
    },  
  });  
}
```

## OPCIJE – ANIMATIONS

- anime.js – 17kb
- GSAP – TweenLite 28kb, TweenMax 116kb
- Velocity.js – 48kb
- CSS animations

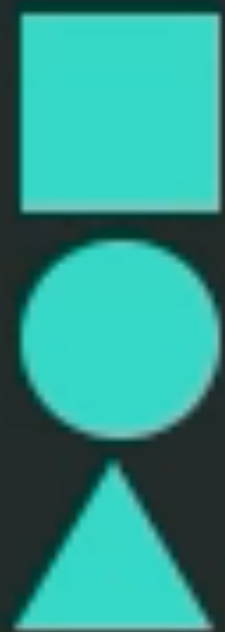
*Sve velicine su minified.*

# 1. ANIME.JS ANIMACIJA

```
anime({  
  targets: '.css-selector-demo .el',  
  translateX: 250  
});
```

## 2. ANIME.JS – BASIC TIMELINE

### TIMELINE BASICS

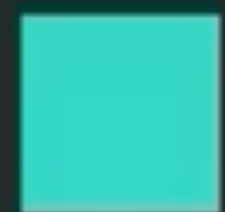


```
// Create a timeline with default parameters
var tl = anime.timeline({
  easing: 'easeOutExpo',
  duration: 750
});

// Add children
tl
.add({
  targets: '.basic-timeline-demo .el.square',
  translateX: 250,
})
.add({
  targets: '.basic-timeline-demo .el.circle',
  translateX: 250,
})
.add({
  targets: '.basic-timeline-demo .el.triangle',
  translateX: 250,
});
```

### 3. ANIME.JS – TIMELINE OFFSETS

#### TIME OFFSETS



no offset



relative offset ('-=600')



absolute offset (400)

```
// Create a timeline with default parameters
var tl = anime.timeline({
  easing: 'easeOutExpo',
  duration: 750
});

tl
  .add({
    targets: '.offsets-demo .el.square',
    translateX: 250,
  })
  .add({
    targets: '.offsets-demo .el.circle',
    translateX: 250,
  }, '-=600') // relative offset
  .add({
    targets: '.offsets-demo .el.triangle',
    translateX: 250,
  }, 0); // absolute offset
```

**SETUP**

# SEKVENCIROVANJE – ŠTO I ZAŠTO?

- Animacije definirati unaprijed – referenca po imenu
- Jednostavno i standardizirano definiranje page transitiona (glorified wrapper za dodavanje timelineova)

# 1. SETUP – ANIMACIJE

```
this.animations['slide-out'] = {
  translateY: '-100vh',
  duration: this.durationMedium,
  elasticity: this.noElasticity,
  easing: this.easePageInTransitions,
};

this.animations['fade-out'] = {
  opacity: [1, 0],
  duration: this.durationMedium,
  elasticity: this.noElasticity,
  easing: this.easePageInTransitions,
};

this.animations['fade-out-slide-out'] = {
  opacity: [1, 0],
  translateY: '-100vh',
  duration: this.durationMedium,
  elasticity: this.noElasticity,
  easing: this.easePageInTransitions,
};
```



## 2. SETUP – BUILDTIMELINE()

```
buildParallel(targets, container) {  
  return this.buildTimeline(targets.map((t) =>  
    ({ ...t, offset: 0 })), container);  
}
```

```
buildTimeline(transitionTargets, container) {  
  this.timeline = this.anime.timeline();  
  for (const target of transitionTargets) {  
  
    // Find target  
    const targetSelector = this.findTargetSelector(target, container);  
  
    // Prepare animation  
    const animation = this.animations.prepare({  
      isSequence: true,  
      name: target.animation,  
      targets: targetSelector,  
      offset: target.offset,  
      duration: target.duration || null,  
      update: target.update || null,  
      change: target.change || null,  
      value: target.value || null,  
    });  
  
    if (!animation) {  
      continue;  
    }  
  
    this.timeline.add(animation, animation.offset);  
  }  
}
```

### 3. SETUP – KADA SVE SPOJIMO...

```
homepageOut(container) {
  const activeSection = '.section.active';
  const targets = [
    { // Header
      selector: '.js-header',
      animation: 'fade-out-slide-out',
      duration: this.DEFAULT_DURATION,
    },
    { // Images
      selector: `${activeSection} .js-case-image-container`,
      animation: 'fade-out-slide-out',
      duration: this.DEFAULT_DURATION,
      offset: this.OFFSET_FAST,
    },
    ...
    { // Container
      animation: 'fade-out-slide-out',
      duration: this.DEFAULT_DURATION,
      offset: this.OFFSET_FAST,
    },
  ];

  return this.animationSequencer.buildTimeline(targets, container);
}
```

# TIPS & TRICKS

# **1. NEMOJTE OVO RADITI**

## 2. ...ALI AKO MORATE, KORISTITE VIEWOVE

```
var Homepage = Barba.BaseView.extend({
  namespace: 'homepage',
  onEnter: function() {
    // The new Container is ready and attached to the DOM.
  },
  onEnterCompleted: function() {
    // The Transition has just finished.
  },
  onLeave: function() {
    // A new Transition toward a new page has just started.
  },
  onLeaveCompleted: function() {
    // The Container has just been removed from the DOM.
  }
});

// Don't forget to init the view!
Homepage.init();
```

# **3. CHOOSE WHAT YOU ANIMATE WISELY**

transform, opacity

## **4. PREFETCHING == FLUIDNE ANIMACIJE**

## 5. OPTIMIZACIJA

```
will-change: transform;  
transform: translateZ(0);
```



# RESOURCES

- <https://animejs.com/documentation>
- <http://barbajs.org/>
- **Browser Rendering Optimisation by Google – <https://eu.udacity.com/course/browser-rendering-optimization--ud860>**



**Hvala na pažnji!**  
**Pitanja?**

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