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## İleri Seviye HTML 5 Eğitimi

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### Eğitim Hakkında

Digital Vizyon Akademi'nin "İleri Seviye HTML5 Geliştirme Eğitimi" ile HTML5 becerilerinizi bir sonraki seviyeye taşımak için ihtiyaç duyduğunuz her şeyi öğreneceksiniz.

Katılımcılarımız ile birlikte; how to use powerful APIs to leverage device orientation, audio and video, drag and drop, speech recognition, geolocation, the onboard battery, vibrations konularını işleyeceğiz.

### Neler Öğreneceksiniz

- Obtain the charge status of a device's battery
- Gain end users' attention via their sense of touch
- Send the end user notifications that appear outside the web browser
- Tap into the device's physical orientation
- Make portions of your web page editable by the end user
- Display portions of the web page so that they occupy the users' entire screen
- Implement voice recognition and speech synthesis
- Leverage the new media elements (audio and video)
- Work with the new <form> elements and attributes
- Work with the WebStorage API
- Send and receive messages from web pages, including web pages from a different domain
- Associate HTML elements with data
- Make any object on the web page draggable
- Use the new features of XMLHttpRequest (XHR) level 2
- Open full duplex connections from client to server with the WebSocket specification
- Create single unidirectional channels between the server and the client
- Create a 2D drawing surface with the <canvas> element and "draw" on the canvas with JavaScript.
- Use geolocation information in your applications
- Use web workers to boost the performance of your web applications

### Eğitim İçeriği

#### Introduction

#### BatteryStatus API



- Why use the BatteryStatus API?
- How does the BatteryStatus API work?
- The BatteryStatus API
  - BatteryStatus API methods
  - BatteryManager properties
  - BatteryManager events
- Browser support

## Vibration API

- Why use the Vibration API?
- How does the Vibration API work?
- Vibration methods

## Notifications API

- Why use the Notifications API?
- How does the Notifications API work?
- Notifications API
  - Notification object attributes
  - Notification events
  - Notification API methods

## DeviceOrientation Event API

- Why use the DeviceOrientation API?
- DeviceOrientation Event API
  - DeviceOrientation events
  - How does the DeviceOrientation Event API work?
  - DeviceOrientation
  - DeviceMotion
  - DeviceOrientation Event API

## Fullscreen API

- Why use the Fullscreen API?
- The Fullscreen API
  - Fullscreen API methods
  - Fullscreen API properties

- Fullscreen API events
- Notes on the fullscreen view

## Speech APIs

- Speech Recognition and Speech Synthesis
- Speech Synthesis
  - SpeechUtterance object
  - SpeechUtterance object properties
  - SpeechUtterance object events
- Speech Recognition

## HTML5 Media elements and API

- Audio and Video
  - The media elements
  - What are the new elements used for?
  - Browser support for the new media elements
  - <audio> element attributes
  - <video> element attributes
  - Browser support <video>
  - Browser support Ogg/Theora video format\*
  - Browser support WebM/VP8 video format\*
  - Browser support MPEG-4/H.264video format\*
  - Browser support audio codec
  - When do I use these new elements?
- Video and Audio APIs
  - Video/audio methods
  - Video/audio object properties
  - Video/audio object events

## Forms/Constraint Validation API

- New form input types
- What are the new input types?
  - New attributes for input elements
  - New form elements
- When do I use the new elements?
  - The placeholder attribute



- The autocomplete attribute
- The autofocus attribute
- The list attribute and the datalist element
- The spellcheck attribute
- HTML5 form validation
  - Preventing default validation from occurring
- Constraint Validation API
  - Form properties
  - Form control methods
  - Form controls validity and validityState

## WebStorage API

- Browser support for WebStorage API
- WebStorage API
  - The Storage Object
- When
- Cookies vs. session storage vs. local storage

## Web Messaging API

- Web messaging's postMessage() method
  - Establishing trust between domains
  - The origin
- What is cross-origin resource sharing?
  - CORS support and the server
- Ports and channel messaging
  - MessagePort methods
  - The Message event object properties

## Dataset API

- data-\* syntax rules
- The dataset API

## Drag and Drop API

- What is drag and drop?
  - What is drag and drop used for?



- Browser support for drag and drop
- Understanding drag and drop
- The draggable attribute
- Drag and drop with a data “payload”
- Drag events
- Drop events

## **XMLHttpRequest Level 2 API**

- Objectives
- The XMLHttpRequest object
- XHR API
  - What is XHR used for?
  - Benefits of XHR level 2
  - The XHR object: readyState property
- The XHR object
  - The XHR object: Events
  - The XHR Object: Methods
  - The XHR object: Properties

## Web Sockets API

- HTTP
  - WebSocket properties
  - WebSocket event handlers
  - WebSocket methods
- Using a WebSocket server with the WebSocket API

## Server-sent Events API

- The server messages
- Creating an EventSource
  - The EventSource properties
  - The EventSource events
  - The advantages of server-sent events
  - The disadvantages of server-sent events
  - Server-sent events summary

## Canvas API



- What are the new elements?
- Why use the Canvas API?
- Canvas quick summary
- Uses for the new Canvas API
- Canvas Demos

## Geolocation API

- What is the Geolocation API used for?
- Browser support for Geolocation
- The Geolocation API
  - Geolocation object methods
  - Position object properties
  - Position interface attributes

## Web Workers API

- Features available to Web Workers
- Why use Web Workers?
- When should Web Workers be used?
- How do Web Workers work?
- The Web Worker API
  - The abstractWorker interface properties
  - The WorkerGlobalScope object
  - The WorkerGlobalScope object properties
  - The WorkerGlobalScope object methods
  - The WorkerGlobalScope events
- Browser support for Web Workers
- Types of Web Workers
  - Dedicated Worker
  - Shared Worker
- Creating Shared Workers