Third Party APIs

Google APIs and Facebook API

JavaScript Applications

Telerik Software Academy

http://academy.telerik.com

1. **What is API?**

2. **Google API**
   - **Google Maps API**
   - **YouTube API**

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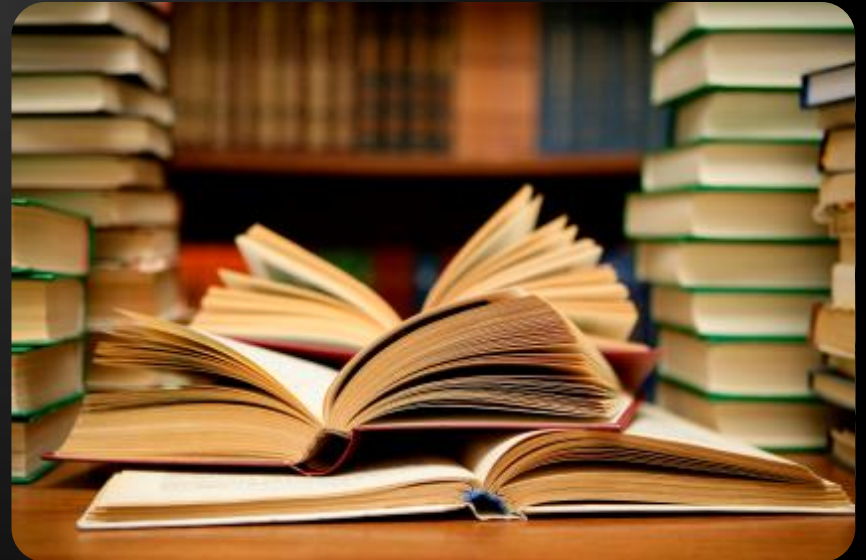
- **Application Control Interface**
  - **Provides ready functionality**
  - **Usually from a remote server**
  - **Tools for easy developing**
  - **Normally is divided by blocks**
  - **Programmers creates new application by combining these blocks**

- **How to use it**
  - **Include a script into the HTML containing the URL to the API**
  - **Done! You are ready to use all the functionality**

- **Example for Google Maps**

```
<script
src="https://maps.googleapis.com/maps/api/js?v=3.ex
p&sensor=false">
</script>
```

Google APIs

Thousands!

Google+ APIs

- **Go to https://developers.google.com/**

  - **YouTube**

  - **Google+**

  - **Google Maps**

  - **Android**

  - **Google Places**

  - **Chrome**

  - **Google TV**

  - **Games**

- Simple map
  - The most basic map
  - Can get coordinates with zoom and display them

- API link

```
<script
src="https://maps.googleapis.com/maps/api/js?v=3.ex
p&sensor=false">
</script>
```

- **Coordinates are objects with two arguments: Latitude and Longitude**
- **Options for the map:**
  - **Type – ROADMAP and SATELLITE**
  - **Center – where to initialize the map**
  - **Zoom**
- **Methods**
  - **panTo(coordinates) – moves the map**
  - **setZoom(number) , setCenter(coordinates)**

Simple Map

Live demo

- **Geolocation**
  - **Get it with HTML5 functionality and pass the coordinates to the map**

- **Information window**
  - **Shows custom content on a particular position and map**

- **Language option**
  - **Displays the map in preset language**
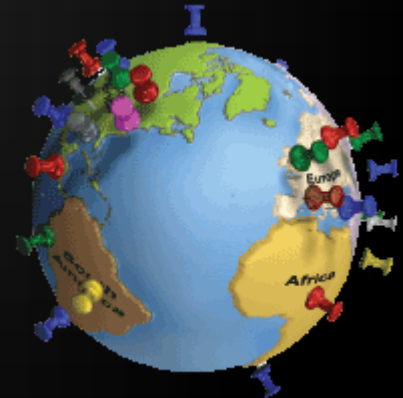
Advanced options

Live demo

Markers and Events

- **Marker**
  - **Mark a special position on your map**
  - **Has properties for map, position and title**
- **Events**
  - **On the map - center_changed, zoom_changed, etc.**
  - **On the marker**
  - **On other DOM elements**

Markers and Events

Live demo

- Styles

- Layers

- Controls

- Map types

- Services

- Find more at:

  - https://developers.google.com/maps/documentation/javascript/

- Embed the player in your page
- Functionality for various controls
  - .playVideo()
  - .pauseVideo()
  - .loadVideoById()
  - .loadPlaylist()
  - .nextVideo()
  - .previousVideo()

YouTube API

Live demo

Questions?

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1. *Create an "Online Map Tourism" application using Google maps

   - Choose 10 capital cities from the world

   - Make two buttons for "Next" and "Previous" which should iterate through the cities

   - When one of the buttons is clicked, map should pan to the new location of the new city

   - Each city should have Infobox with more information about it on the map

   - Show lists of the cities on the page. If the user chooses a city, the map should pan directly to it

2. *Read about the Google+ JavaScript API

3. *Combine Google+ and YouTube APIs

  - If the user logins with Google+ the player should show, otherwise it should be hidden

  - When the user logs, his profile picture should be shown

  - Create custom controls for the video – pause, stop, load by id, load playlist, next, previous, mute, unmute, set volume, playback quality options

  - Add options to share the current video on Google+

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