

Telerik Backend Services

SaaS Cloud Platform Providing Database Access
Through RESTful API

JavaScript Applications

Telerik Academy

<http://academy.telerik.com>

- ◆ **Telerik Backend Services Overview**
 - ◆ Registering an application
 - ◆ Creating Content Types
 - ◆ Getting an app key
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 - ◆ *Users, Authentication and Content Types*
- ◆ **JavaScript SDK**
 - ◆ *Users, Authentication and Content Types*

Telerik Backend Services

A SaaS Cloud provider for data storage

Telerik Backend Services

- ◆ **Telerik Backend Services is a Software-as-a-Service cloud provider**
 - ◆ Provide data storage in the cloud
 - ◆ Create Content Types
 - ◆ Get CRUD API over these types
 - ◆ Formally known as Telerik Everlive
- ◆ **Telerik Backend Services has a 30-day-long free trial**

Telerik Backend Services: Registering an Application

- ◆ To register an application:
 - ◆ Go to <http://www.telerik.com/backend-services>
 - ◆ Login with Telerik, Facebook, Google, Yahoo or LiveID account
 - ◆ Create an app
 - ◆ Give it name and description
 - ◆ Ready to go!
- ◆ Once an application is created, an AppKey is generated

Registering an app in Telerik Backend Services

Live Demo

Creating Content Types

Creating Content Types

- ◆ Telerik backend services provide CRUD operations over a set of Content Types
 - ◆ A few built-in Content Types
 - ◆ An unlimited number of custom Content Types
- ◆ Content Types are much like SQL tables
 - ◆ Yet they have different value types

Create a content type

Type name
Student
Instruction: Spaces are not allowed

Fields of this content type (you can define fields later)

Id	Identifier
CreatedAt	DateTime
ModifiedAt	DateTime
Create dBy ↔ Users	Relation
ModifiedBy ↔ Users	Relation
Owner ↔ Users	Relation
Name	Text
Grade	Number
Marks ↔ Users	Relation(multiple)

Add a field

Save Cancel

Creating Content Types (2)

- ◆ Content Types in Telerik Backend Services can have the following types of fields (types of columns)
 - Text (a regular string)
 - Number (a decimal floating-point number)
 - Yes / No (TRUE/FALSE, like a boolean)
 - File (stores either base64 encoded data or multipart/form-data)
 - Geopoint (keeps Latitude and Longitude)
 - Relation (creates a relation between two content types)

Creating Content Types

Live Demo

Backend Services REST API

CRUD operations over the created content types

Backend Services REST API

- ◆ Once the Content Types are created, Telerik backend services provide CRUD operations over these content types
 - ◆ The REST API works with JSON data
- ◆ The end points for the services are as follows:
 - ◆ <http://api.everlive.com/v1/{AppKey}/{ContentType}>

Backend Services

REST API: Example

- ◆ Example for registering a user with JavaScript:

```
var user = {  
    "Username": "DonchoMinkov",  
    "Password": "123456q" };  
$.ajax({  
    type: "POST",  
    url:  
        'https://api.everlive.com/v1/5ea2iMpkmWF5AFhW/Users',  
    contentType: "application/json",  
    data: JSON.stringify(user),  
    success: function(data){  
        alert(JSON.stringify(data));  
    },  
    error: function(error){  
        alert(JSON.stringify(error));  
    }  
});
```

Backend Services

REST API: Example (2)

- ◆ Example for logging in a user:

```
var user = {  
    "Username": "DonchoMinkov",  
    "Password": "123456q" };  
$.ajax({  
    type: "POST",  
    url:  
        'https://api.everlive.com/v1/5ea2iMpkmWF5AFhW/oauth/token',  
    contentType: "application/json",  
    data: JSON.stringify(user),  
    success: function(data){  
        alert(JSON.stringify(data));  
    },  
    error: function(error){  
        alert(JSON.stringify(error));  
    }  
});
```

Backend Services REST API: Registering a User

Live Demo

Backend Services REST API: Getting all Users

- ◆ Backend Services provide CRUD operations for all content types
 - ◆ For requests, different from Register/Login, the REST API needs an authentication token
 - ◆ Used to authenticated the users and check for their rights and restrictions

```
$.ajax({  
    url: 'https://api.everlive.com/v1/5ea2iMpkmWF5AFhW/Users/',  
    type: "GET",  
    headers: {"Authorization" : "Bearer ${AccessToken}"},  
    success: function(data){ pring(data); },  
    error: function(error){ error(data); }));  
})
```

Getting All Users

Live Demo

Backend Services JavaScript SDK

Making your live easier

Backend Services

JavaScript SDK

- ◆ Backend Services have ready-to-use JavaScript SDK, that wraps the whole REST API
 - ◆ Downloadable from
<https://platform.telerik.com/#downloads>
 - ◆ Provides a global Everlive object to work with
 - ◆ The Everlive.\$ object
 - ◆ Provides nice features to work with the data at the backend services
 - ◆ Of course there is a catch:
 - ◆ Some JavaScript files must be included in the correct order

Backend Services JavaScript SDK (2)

- ◆ The following files must be included in the exact same order:

```
//makes HTTP AJAX requests
<script src="path/to/reqwest.min.js"></script>
//handles promise-based HTTP requests
<script src="path/to/rsvp.min.js"></script>
//has a set of object extensions
<script src="path/to/underscore.min.js"></script>
//contains the JavaScript SDK over the REST API
<script src="path/to/everlive.min.js"></script>
```

- ◆ Or use the following:

```
<script src="path/to/everlive.all.min.js"></script>
```

Backend Services JavaScript SDK

Live Demo

Questions?