

d20 Spell Manager

Introduction

The API provides routes to help manage characters and their spells in tabletop games using the "d20 System" e.g. Wizards of the Coast's "Dungeons & Dragons". Players of such games can use the API (ideally through the web app utilising it) to collate all of their spells in one place, rather than over several different books.

Request/Response Bodies

All app routes accepting bodies (i.e. all POST routes except /api/admin/delspell) expect the data to be in JSON form. All app routes returning object bodies will return it as JSON.

Authentication

App routes under /auth and /api are authenticated using basic access authentication (https://en.wikipedia.org/wiki/Basic_access_authentication), with routes under /api/admin only accepting admin credentials.

Error Codes

- 200 Any successful request will return a 200.
- 400 This is sent by POST routes when the body is missing parameters that are needed to complete the request. It is also sent when the client attempts to edit or delete a non-existent character or spell.
- 401 Sent whenever authentication fails. This will happen whenever incorrect credentials are supplied or non-admin credentials are supplied for an admin route.
- 403 Sent whenever a client attempts to access a resource that is not associated with the authenticated user.
- 500 Sent whenever express or my code encounters an error processing the request.

Rate limit

None.



Check whether the web service is online

Will return an empty body with status 200 if the web service is up. If the web service is not up, the request will fail.

Example Request Basic Example curl --location --request GET 'http://localhost:8090/ping' \ --data-raw ''

GET http://localhost:8090/auth

```
http://localhost:8090/auth
```

Determine whether the supplied authentication is for a user or admin

If the supplied credentials are correct and correspond to a non-admin user, it will return body "user".

If the credentials are correct and correspond to an admin, it will return body "admin".

If the credentials are incorrect, it will return code 401.

Example Request

```
Basic Example

curl --location --request GET 'http://localhost:8090/auth' \
--data-raw ''
```



POST http://localhost:8090/api/admin/addspell

http://localhost:8090/api/admin/addspell

Add a spell to the list of available spells

Request body:

A JSON object with the the following properties:

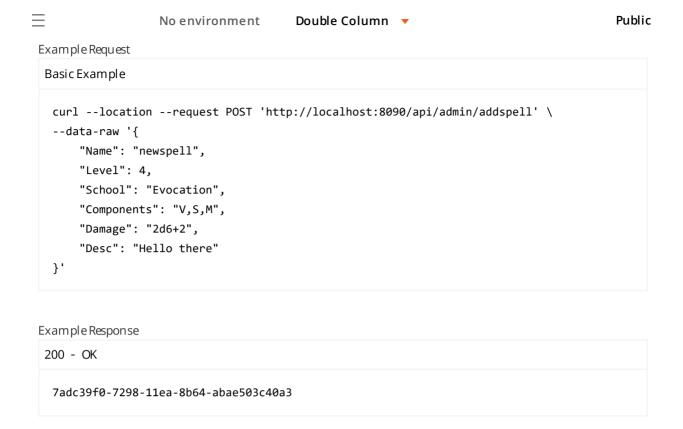
Property	Туре	Description
Name	String	The name of the spell
Level	Number (in the range 0-9)	The level of the spell
School	String	The school of magic the spell belongs to
Components	String	The components requried to cast the spell
Damage	String	The damage done by the spell
Desc	String	A description of the spell's effects

Response code:

- 200 Request completed successfully, spell saved to disk
- 400 Not all of the information for the spell was given in the request, or the spell level was outside of the range.
- 401 Authentication failed
- 500 The server encountered an error

Response body:

A string containing the id of the newly created spell.



POST http://localhost:8090/api/admin/delspell

http://localhost:8090/api/admin/delspell?id=7adc39f0-7298-11ea-8b64-abae503c40a3

Remove a spell from the list of available spells

Request

The id of the spell to delete is sent as a query parameter under the name "id".

Response codes

- 200 Request completed successfully, spell no longer on disk.
- 400 An id was not given with the request, or the id given does not correspond to a spell.
- 401 Authentication failed
- 500 The server encountered an error

PARAMS

id

7adc39f0-7298-11ea-8b64-abae503c40a3



GET http://localhost:8090/api/spells

```
http://localhost:8090/api/spells
```

Search and fetch from the list of available spells

Request queryparams

The parameters for the request are given in the querystring, with the following available:

Parameter	Description	
id	Limits the search to only the spell with the given id	
ids	Limits the search to only spells with the ids given (ids should be given in array form). Overridden by "id"	
name	Limits the search to spells whose name contains the string given	
level	Limits the search to spells of the given level	
school	Limits the search to spells of the given school of magic	
damage	Limits the search to spells with the damage given	

Any combination of these can be used together and the route will return any spells matching all of the given parameters. Sending the request with no parameters will return all available spells.

Response codes

- 200 Request completed successfully
- 401 Authentication failed
- 500 The server encountered an error

Response body

An array containing objects with the following properties:

Property	Туре	Description
Id	String	The unique Id of the spell
Name	String	The name of the spell
Level	Number	The level of the spell
School	String	The school of magic the spell belongs to
Components	String	The components requried to cast the spell
Damage	String	The damage done by the spell
Desc	String	A description of the spell's effects

Public

Example Request

```
Basic Example ▼

curl --location --request GET 'http://localhost:8090/api/spells' \
--data-raw ''
```

Example Response

POST http://localhost:8090/api/newchar

```
http://localhost:8090/api/newchar
```

Public

Request body

JSON object with the following properties:

Property	Туре	Description
Name	String	The name of the character
Level	Number	The character's level
Class	String	The class of the character
Race	String	The race of the character

Response codes

- 200 Request completed succesfully, character saved to disk
- 400 Not all of the required information was given in the body
- 401 Authentication failed
- 500 The server encountered an error

Response body

• A string containing the id of the newly created character.

Example Request

```
Basic Example

curl --location --request POST 'http://localhost:8090/api/newchar' \
    --data-raw '{
        "Name": "char1",
        "Level": 3,
        "Class": "Fighter",
        "Race": "Human"
}'
```

Example Response

```
200 - OK
70a0cdc0-729d-11ea-8b64-abae503c40a3
```



Delete a character

Request body

The request body should be an object with the following properties:

Property	Туре	Description
Id	String	The id of the character to be deleted

Response codes

200 - Request completed successfully, character no longer exists on disk. 400 - The id given does not correspond to a character 401 - Authentication failed 403 - The id given corresponds to a character not associated with the authenticated user 500 - The server encountered an error

Example Request

```
Basic Example

curl --location --request POST 'http://localhost:8090/api/delchar' \
   --data-raw '{
     "Id": "70a0cdc0-729d-11ea-8b64-abae503c40a3"
}'
```

POST http://localhost:8090/api/editchar

```
http://localhost:8090/api/editchar
```

Make a change to an existing character

Request body

JSON object with any combination that includes "Id" of the following properties:

=	No environment Double Column ▼ Publ			
Property	Туре	Description		
Id	String	The id of the character to be edited		
Name	String	The new name of the character		
Level	Number	The new level of the character		
Class	String	The new class of the character		
Race	String	The new race of the character		
Spells	Array	An array containing two sub-arrays. The first should contain the id of all spells to be added to the character (if any). The second should contain the id of all spells to be removed from the character (if any).		

Response codes

- 200 Request completed successfully, changed saved to disk.
- 400 An id was not provided, or the id provided does not correspond to a character
- 401 Authentication failed
- 403 The id corresponds to a character associated with a different user
- 500 The server encountered an error

Example Request

```
Basic Example ▼

curl --location --request POST 'http://localhost:8090/api/editchar' \
    --data-raw '{
        "Id": "70a0cdc0-729d-11ea-8b64-abae503c40a3",
        "Name": "newname",
        "Level": 4
}'
```

GET http://localhost:8090/api/characters

```
http://localhost:8090/api/characters
```

Search and fetch from the user's characters

Request queryparams No environment

Double Column 🔻

Public

The request can be sent with any (or none) of the following parameters in a querystring. If no parameters are given, the request will return all characters associated with the user.

Parameter	Description
id	The id of the character to fetch
name	The name of the character to fetch. If this is used, the request will return any characters associated with the user whose name contains the string given.

Response codes

- 200 Request completed successfully
- 401 Authentication failed
- 403 The id given corresponds to a character associated with another user
- 500 The server encountered an error

Response body

The body will be an array containing character objects with the following properties

Property	Туре	Description	
Id	String	The id of the character	
Name	String	The name of the character	
Level	Number	The level of the character	
Class	String	The class of the character	
Race	String	The race of the character	
Spells	Array	An array containing the id of all spells known by the character	

Example Request

Basic Example (no querystring) ▼

```
= curl --location AkorequestnGEEnthttp:///dubbek/Coshtum80990/api/characters' \ Public --data-raw ''
```

Example Response

```
200 - OK

[
{
    "Id": "bf87c250-5735-11ea-b538-0b01d317a8d3",
    "Name": "John Smith",
    "Level": "4",
    "Class": "Artificer",
    "Race": "Human",
    "Spells": [
        "901a3170-5356-11ea-83b6-272f12eVieryfore
        "31f0bef0-5358-11ea-a6ch-dd0e7515cffh".
```

POST http://localhost:8090/newuser

```
http://localhost:8090/newuser
```

Create a new user account

Request body

JSON object with the following parameters

Parameter	Туре	Description
Name	String	The username of the new account
Password	String	The password of the new account

Response codes

- 200 Request completed successfully, user saved to disk
- 403 Username is already taken
- 500 The server encountered an error

