

# API Documentation for Kapustin's Opera

## Authentication Endpoints:

Register User	
Endpoint:	/auth/register
Method:	POST
Description:	Register a new user.
Payload:	{ "username": "string", "password": "string", "email": "string" }

Login User	
Endpoint:	/auth/login
Method:	POST
Description:	Authenticate and log in a user.
Payload:	{ "username": "string", "password": "string" }

## Opus Endpoints:

Get All Works	
Endpoint:	/opus
Method:	GET
Description:	Retrieve all works by Kapustin.

Get Work by Opus Number	
Endpoint:	/opus/{opusNumber}
Method:	GET
Description:	Retrieve a specific work by its opus number.

Search Works by Title	
Endpoint:	/opus/search/title?name={titleKeyword}
Method:	GET
Description:	Search for works based on their title.

Filter Works by Type	
Endpoint:	/opus/filter?type={type}
Method:	GET
Description:	Filter works based on their type.

Add New Work	
Endpoint:	/opus
Method:	POST
Description:	Add a new work to the database.
Payload:	{ "opusNumber": "integer", "title": "string", ... }

Update Work	
Endpoint:	/opus/{opusNumber}
Method:	PUT
Description:	Update details of a specific work.
Payload:	{ "title": "string", "type": "enum", ... }

Delete Work	
Endpoint:	/opus/{opusNumber}
Method:	DELETE
Description:	Delete a specific work by its opus number.

Get Works with No Recording	
Endpoint:	/opus/no-recording
Method:	GET
Description:	Retrieve all works which no recording exists.

Get Works Referencing Other Artists	
Endpoint:	/opus/referenced
Method:	GET
Description:	Retrieve all works that reference another artist's work.

Filter Works by Instrument	
Endpoint:	/opus/filter?instruments={instrument1, ...}
Method:	GET
Description:	Filter works by instrument. Multiple instruments can be separated by commas.

Filter Works by Number of Instruments	
Endpoint:	/opus/filter?num-instruments={numInstruments}
Method:	GET
Description:	Filter works by number of instruments. Anything above 6 will not be returned.

Filter Works by Maximum Length	
Endpoint:	/opus/filter?length-max={maxLength}
Method:	GET
Description:	Retrieve works that have a length less than or equal to the sepcified maximum time (in minutes).

Filter Works by Minimum Length	
Endpoint:	/opus/filter?length-min={minLength}
Method:	GET
Description:	Retrieve works that have a length greater than or equal to the specified minimum time (in minutes).

Filter Works by Number of Sections	
Endpoint:	/opus/filter?num-sections={numSections}
Method:	GET
Description:	Filter works by the total number of sections they have.

Search Works by Section Name	
Endpoint:	/opus/search/section?name={sectionKeyword}
Method:	GET
Description:	Search works by the names of their sections.