NodejsSDK

Rivalz Nodejs SDK for developers

https://www.npmjs.com/package/rivalz-client

Rivalz client Node.js SDK

This is a TypeScript library that provides functionalities for Rivazl Al

Features

- Upload Files: Upload any file to the Rivalz platform and get an IPFS hash.
- Upload Passport Images: Upload passport images to the Rivalz platform.
- Download Files: Download files from the Rivalz platform using an IPFS hash.v
- **Delete Files**: Delete files from the Rivalz platform using an IPFS hash.
- **Vectorize Documents**: Vectorize documents to create a RAG (Retrieval-Augmented Generation) based on the document uploaded.
- Create conversations: Create conversations based on the document uploaded.

Installation

Before getting started, ensure that you have both **Node.js** and either **npm** or **yarn** installed. These are essential for managing the Rivalz client dependencies.

To install the Rivalz client, run one of the following commands:

```
# Using npm
npm install rivalz-client
# Or, using yarn
yarn add rivalz-client
```

Usage

- 1. After installing the package, proceed to the **Rivalz Dashboard** to generate your **encryption key** and **secret key**:
- Encryption Key: Used for encrypting files to ensure data security.
- Secret Key: Required for authenticating API requests to access Rivalz services.
- 2. Import and use the RivalzClient class in your TypeScript/JavaScript code:

```
import RivalzClient from 'rivalz-client';
const rivalzClient = new RivalzClient('your-secret-key');
```

API

1. Upload File

```
rivalzClient.uploadFile(file, fileName)
```

- file: A readable stream of the file to be uploaded.
- Returns a promise that resolves to the IPFS hash of the uploaded file.

2. Upload passport file

rivalzClient.uploadPassport(file)

- file: A readable stream of the file to be uploaded.
- Returns a promise that resolves to the IPFS hash of the uploaded file.

3. Download File and save it to the local file system (Node.js only)

rivalzClient.downloadFile(ipfsHash, savePath)

- ipfsHash: The IPFS hash of the file to be downloaded.
- savePath: The path where the downloaded file will be saved.
- Returns a promise that resolves to the path of the saved file.

4. Download the File and return it as a buffer

rivalzClient.download(ipfsHash)

- ipfsHash: The IPFS hash of the file to be downloaded.
- Returns a promise that resolves to a buffer containing the downloaded file.

5. Delete File

rivalzClient.deleteFile(ipfsHash)

- ipfsHash: The IPFS hash of the file to be deleted.
- Returns a promise that resolves to the IPFS hash of the deleted file.

Please replace your-secret, file, passport, ipfsHash, and savePath with actual values when using the RivalzClient class.

```
```javascript
const RivalzClient = require('rivalz-client');
const fs = require('node:fs');
const rivalzClient = new RivalzClient('your-secret-key');
//Upload File
async function uploadFile() {
 const filePath = 'file_path';
 const buffer = fs.readFileSync(filePath)
 const fileName = filePath.split('/').pop();
 try {
 const filelog = await rivalzClient.uploadFile(buffer,fileName);
 console.log(filelog);
 } catch (error) {
 console.error('Error uploading file:', error);
 7
}
```

# 6. RAG (Retrieval-Augmented Generation) API

#### **Prerequisites**

Before using the RAG API, you need api key and some rivalz credits. Claim for free now here

#### Creating a knowledge base from a document

To vectorize a document and create a knowledge base for Retrieval-Augmented Generation (RAG), use the <a href="mailto:createRagKnowledgeBase">createRagKnowledgeBase</a> method, which takes the document's file path as input. This method generates a vectorized embedding of the document, assigns it a **knowledge base ID**, and stores it for future use in RAG-based conversations. Currently, this process supports only PDF files.

Click here to learn How to create a knowledge base

```
const response = await client.createRagKnowledgeBase('path/to/your/docume
console.log(response)
// {'id': '66fa5bf022e73c17073768f0', 'name': 'test', 'files': '172768356
```

#### Adding documents to an existing knowledge base

To add a document to an existing knowledge base, use the addDocumentToKnowledgeBase method with the knowledge base id and the path to the document.

```
const response = await client.addDocumentToKnowledgeBase('path/to/your/do
console.log(response)
```

#### Deleting documents from an existing knowledge base

To delete a document from an existing knowledge base, use the deleteDocumentFromKnowledgeBase method with the knowledge base id and the document name.

```
const response = await client.deleteDocumentFromKnowledgeBase('document_i
console.log(response)
```

#### **Getting all knowledge bases**

To get all knowledge bases, use the getKnowledgeBases method.

```
const response = await client.getKnowledgeBases()
console.log(response)
```

#### Getting details of a knowledge base

To get details of a knowledge base, use the <code>getKnowledgeBase</code> method with the knowledge base id.

```
const response = await client.getKnowledgeBase('knowledge_base_id')
console.log(response)
```

### 7. Conversations

To initiate a conversation in the RAG (Retrieval Augmented Generation) system, use the createChatSession method. This method requires the **knowledge base ID** (from your existing knowledge base) and the **question** you want to ask. The AI will return a response based on the context provided by the knowledge base, along with a **chat session ID** to continue the conversation if needed.

```
const response = await client.createChatSession('knowledge_base_id', 'que
console.log(response)
// {'answer': 'Hello! How can I help you today? \n', 'session_id': '66fa6
```

#### Adding a message to a conversation

To add a message to a conversation, use the same method createChatSession
with the chat session id and the message.

```
const response = await client.createChatSession('knowledge_base_id', 'mes
console.log(response)
```

#### **Getting all conversations**

To get all conversations, use the getChatSessions method.

```
const response = await client.getChatSessions()
console.log(response)
```

#### Getting details of a conversation

To get details of a conversation (which contains chat history for this conversation), use the getChatSession method with the chat session id.

```
const response = client.getChatSession('chat_session_id')
console.log(response)
```

#### **Get uploaded documents**

To get all uploaded documents, use the getUploadedDocuments method.

```
const response = await client.getUploadedDocuments()
console.log(response)
```

# **Examples**

Here is a complete example demonstrating how to use the rivalz-client to create a simple RAG conversation based on a PDF document:

```
/*
main.ts
*/
import RivalzClient from 'rivalz-client';
const main = async () => {
 // Initialize the RivalzClient with the secret token
 const client = new RivalzClient('your-secret-key');
 // create knowledge base
 const knowledgeBase = await client.createRagKnowledgeBase('sample.pdf',
 const knowledgeBaseId = knowledgeBase.id;
 if(knowledgeBase.status !== 'ready') {
 console.log('Knowledge base is still processing');
 // wait for 5 seconds to allow the process to finish
 await new Promise(resolve => setTimeout(resolve, 5000));
 // create conversation
 let conversation = await client.createChatSession(knowledgeBaseId, 'wha
 const conversationId = conversation.session_id;
 // add message to conversation
 conversation = await client.createChatSession(knowledgeBaseId, 'What is
 console.log(conversation.answer);
main()
```