dbook api 文档 v2

版本	备注	时间
1.0	1, 修改contract为token; 2, 出版api中,参数token改 为currency,添加token信息	2022–11–26
1.1	修改外键book为issue	2022–11–27
1.2	修改购买api	2022-11-28
1.3	修改用户信息api { lowest_price -> min_price, highest_price -> max_price }	2022-12-01
1.4	取消draft和book的current api	2022–12–02
1.5	添加注释; 纠正个别api字段错误	2022–12–03
1.6	补充issue resale api	2022–12–05
1.7	添加常用流程	2022-12-11
1.8	添加NFT销毁流程	2022–12–16
1.9	添加时间说明	2022-12-24
2.0	补充用户信息statistic, 补充issue信息price_range, n_owned	2023-01-02

环境准备

0x1, 安装docker

参考https://docs.docker.com/engine/install/

0x2, 安装docker-compose(windows跳过此步骤)

参考https://docs.docker.com/compose/install/

0x3, 启动server

1 cd backend //进入项目根目录

docker-compose up --build

0x4, 关闭server

```
cd backend //进入项目根目录docker-compose down

0x5, 访问api doc

http://localhost:8000/api-doc //登录用户:admin/admin

0x6, api登录认证

headers: {
  "authorization": "Bearer {token}"
}
```

测试环境

```
api uri: http://dbookmarket.com:56789/api/v1/
api doc: http://dbookmarket.com:56789/api-doc/

后台管理
url: http://dbookmarket.com:56789/d-book-admin/
用户: admin/admin
```

接口说明

HTTP状态码

200: 返回成功201: 创建成功

400: 表单验证报错

错误格式:

```
1 1,字段验证报错
2 {
3     name: [error message],
4     desc: ...,
5     ...
6 }
7 2,非字段验证报错
8 {
9     non_field_errors: []
10 }
11 3,其他错误
12 {
13     detail: ''
14 }
```

401: 无法登陆 403: 无访问权限 405: 请求方法不允许

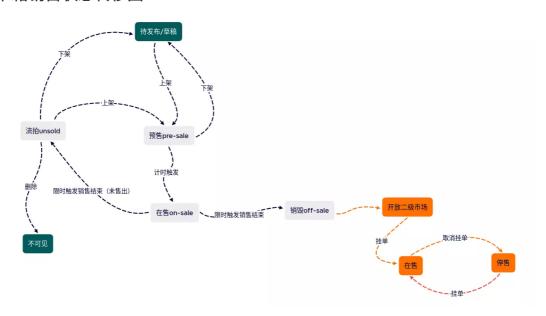
500: 系统错误

时间转换

系统返回的是UTC时间,前端需要转换为当地时间

```
1 //示例: moment js
2 moment.utc("2022-11-29 03:15:00").local().format('YYYY-MM-DD HH:mm:ss')
```

书籍销售状态转移图



用户权限

角色	权限	级别(高等级包含低等级权限)
作者	添加draft, book, issue	1
其他	添加trade, transaction, wishlist, fans	2

常用流程

作者发布书籍流程

Step 1, 调用NFT合约setApprovalForAll()进行授权给platform合约, 若成功, 转step 2;

Step 2, 调用issue接口发布书籍。

用户购买首发书籍流程

Step 1, 调用platform合约payFirstTrade()转账给平台钱包, 若成功, 转step 2;

Step 2, 调用transaction接口购买书籍。

用户购买二手书籍

Step 1, 调用usdc合约approve()授权购买额度给platform合约, 若成功, 转step2;

Step 2, 调用platform合约trade()进行交易,若成功,转step 3;

书籍销毁流程(由作者主动发起)

- Step 1, 调用platform合约burn(), 若成功, 转step 2;
- Step 2, 调用issue接口保存销毁地址。

用户登录

登录流程:

- Step 1, 前端连接metamask, 用户授权连接账户
- Step 2, 连接成功后, 返回钱包地址到后端并获取nonce
- Step 3, 前端使用nonce和钱包地址进行签名signature, 返回signature和address到后端
- Step 4,后端获取到signature和address,通过address查询用户表获取nonce,并 使用nonce和address进行签名new_signature,对比signature,如果相同则登录成功,否则登录失败



```
验证通过后,更新nonce,避免用户伪造登录
问题
{
    1,当用户切换账户时,前端需要提醒用户是否重新登录
    2,当用户切换网络时,前端提醒用户
    3,当用户取消授权操作或签名操作时,需要清除登录状态
    4,连接metamask钱包前需要验证用户是否安装了metamask
}
Pseudo Code
login {
    if metamask not exists:
        tell user('Metamask not found')
    else:
        connect to metamask;
```

```
if user approves:
         get user address and current network;
         call nonce api to get nonce;
         ask user for signing with nonce;
         if user signed:
20
           sign with nonce and get signature;
           call login api;
           if login success:
             get token;
             tell user("login success");
           else:
             clear login status;
             tell user("login fail");
          else:
            clear login status;
            tell user("login fail");
       else:
         clear login status;
         tell user("login fail");
   listen metamask {
     if user change account:
       the metamask will warn user;
     if user change network:
       warn user("The network has been changed, please make sure that any act
   ions you do on this network is what you want!");
40
   }
41
   API
42
   {
43
     1, login
     url: http://{domain}/api/v1/login
45
     data:
46
     {
47
       address: str,
       signature: str
49
     }
50
     method: post
     response:
     201 {
      token: str
54
     }
     or
     400 {
      detail: str
     2, nonce
     url: http://{domain}/api/v1/nonce
     data:
```

```
address: str

address: str

method: POST

response:

201 {
    nonce: str

    or

    400 {
    detail: str

    }

}
```

退出登录

权限校验: 只有在登录状态可操作

操作流程:

Step 1, 调用logout api, 退出登录;

Step 2, 前端清除登录状态, 断开metamask;

```
1 api
2 {
3   1, logout
4   url: http://{domain}/api/v1/logout
5   method: post
6   response:
7   201 {
8    detail: str
9  }
10 }
```

首页

搜索接口

```
url: http://domain/api/v1/issues
method: get
params: {
    search: str
}
response:
200 {
    "count": 2,
    "page_size": 20,
    "page_count": 1,
    "page": 1,
    "next": null,
    "previous": null,
```

```
14
       "results": [
            {
              id: '',
              book: {
               id: '',
                author: {
20
                  id: '',
                  name: '',
                  avatar_url: ''
                },
                title: '',
                cover_url: ''
             },
              price: '',
              n_circulations: '',
              quantity: '',
              published_at: ''
           },
        ]
34
     }
```

广告接口

```
url: http://domain/api/v1/advertisements
   method: get
   params: 无
   response:
     200 {
       "count": 2,
       "page_size": 20,
8
       "page_count": 1,
       "page": 1,
       "next": null,
10
       "previous": null,
       "results": [
           {
             id: '',
14
             issue: {
                id: '',
                book: {
                  author: {
                    name: '',
20
                    avatar_url: ''
                 },
                 title: '',
                  cover_url: ''
24
                },
                price: '',
```

用户详情浏览页(其他用户或者游客浏览)

用户信息

```
url: http://domain/api/v1/users/{id}
  method: get
  params: 无
  response:
    200 {
      id: '',
      name: 昵称,
      address: 钱包地址,
      desc: 描述,
10
      avatar_url: 头像,
      // 非作者返回空
      statistic: {
        total_volume: 预计总收益,
        min_price: 最低价格,
        max_price: 最高价格,
        total_books:已发布书籍数量,
        sales: 销售额,
        n_owners: 购买者数量,
        n_destroyed: 销毁的书籍数量
      website_url: 个人主页,
      discord_url: discord主页,
      twitter_url: twitter主页,
      is_verified: 是否通过twitter认证,
24
      is_fans: 是否是粉丝
```

个人藏品collection

```
url: http://domain/api/v1/assets
method: get
params: {
   user: int, required
}
response:
200 {
   "count": 2,
```

```
9
       "page_size": 20,
10
       "page_count": 1,
       "page": 1,
       "next": null,
       "previous": null,
       "results": [
14
           {
             id: '',
             quantity: 收藏数量,
             issue: {
               id: '',
20
               price: '',
               n_circulations: '',
               quantity: '',
               published_at: '',
               bookmark: {
                 id: '',
                 issue: issue id,
                 current_page: 当前阅读页,
               },
               book: {
                 id: '',
                 author: {
                   id: '',
                   name: '',
                   avatar_url: ''
34
                  },
                  title: '',
                  cover_url: ''
             }
40
           },
41
42
        ]
43
     }
```

交易活动记录activity

```
url: http://domain/api/v1/transactions
method: get
params: {
    user: int, required
}
response:
    200: {
    "count": 2,
    "page_size": 20,
    "page_count": 1,
    "page": 1,
```

```
"next": null,
       "previous": null,
14
        "results": [
           {
              id: '',
              issue: {
               id: '',
                book: {
20
                 id: '',
                 title: '',
                 cover_url: ''
                },
24
                . . .
              }
26
              quantity: '',
              price: '',
              seller: {
               id: '',
                name: '',
30
                address: ''
              },
              buyer: {
               id: '',
34
                name: '',
                address: ''
              },
              created_at: ''
            },
41
        ]
42
     }
```

发布的书籍published book

```
url: http://domain/api/v1/issues
   method: get
   params: {
     author: int required
   response:
     200 {
       "count": 2,
9
       "page_size": 20,
       "page_count": 1,
       "page": 1,
       "next": null,
       "previous": null,
14
       "results": [
           {
```

```
id: '',
              book: {
                id: '',
                author: {
                  id: '',
                 name: '',
                 avatar_url: ''
                },
24
                title: '',
                cover_url: ''
             },
             price: '',
              n_circulations: '',
             quantity: '',
              published_at: ''
30
            },
        ]
34
     }
```

个人详情页

用户接口

```
url: http://domain/api/v1/users/current
  method: get
  params: 无
   response:
     200 {
      id: '',
      name: '',
8
      address: '',
      desc: '',
      avatar_url: '',
10
      statistic: {
        total_volume: 预计总收益,
        min_price: 最低价格,
14
        max_price: 最高价格,
        total_books:已发布书籍数量,
        sales: 销售额,
        n_owners: 购买者数量,
        n_destroyed: 销毁的书籍数量
      },
      website_url: '',
      discord_url: '',
      twitter_url: '',
      is_verified: ''
24
     }
```

个人藏品collection

```
url: http://domain/api/v1/assets/current
   method: get
   params: {
     user: int, required
   response:
     200 {
       "count": 2,
       "page_size": 20,
10
       "page_count": 1,
       "page": 1,
       "next": null,
       "previous": null,
       "results": [
14
          {
             id: '',
             quantity: '',
             issue: {
               id: '',
               book: {
20
                 id: '',
                 title: '',
                 cover_url: ''
24
               },
             }
           },
            . . .
     }
```

已挂订单pending orders

```
url: http://domain/api/v1/trades/current
method: get
params: 无
response:
200 {
    "count": 2,
    "page_size": 20,
    "page_count": 1,
    "page": 1,
    "next": null,
    "previous": null,
    "results": [
    {
```

```
14
              id: '',
              issue: {
                id: '',
                book: {
                   id: '',
                  title: '',
20
                  cover_url: ''
                },
                 . . .
24
              price: '',
              quantity: ''
            },
28
         ]
     }
```

交易活动记录activity

```
url: http://domain/api/v1/transactions/current
   method: get
   params: 无
   response:
     200: {
       "count": 2,
       "page_size": 20,
8
       "page_count": 1,
       "page": 1,
10
       "next": null,
       "previous": null,
       "results": [
           {
             id: '',
14
             issue: {
               id: '',
               book: {
                 id: '',
                 title: '',
                 cover_url: ''
               },
             }
24
             quantity: '',
             price: '',
             seller: {
               id: '',
               name: '',
               address: ''
30
             },
```

```
buyer: {
    id: '',
    name: '',
    address: ''
},
    created_at: ''
},
```

个人总收益

草稿draft

```
url: http://domain/api/v1/drafts
   method: get
   params: 无
   response:
     200: {
       "count": 2,
       "page_size": 20,
8
       "page_count": 1,
       "page": 1,
10
       "next": null,
       "previous": null,
       "results": [
         {
14
           id: '',
           title: 标题,
           content: 内容,
           updated_at: 更新时间
18
         },
         . . .
20
       ]
```

即将上架to be listed

```
url: http://domain/api/v1/books
   method: get
   params: 无
   response:
     200: {
       "count": 2,
       "page_size": 20,
       "page_count": 1,
       "page": 1,
10
       "next": null,
       "previous": null,
       "results": [
        {
           id: '',
           title: 标题,
          cover_url: 封面,
           status: 上架状态
         },
         . . .
20
       ]
     }
  edit按钮调用book api
24 publication按钮调用issue api
  delete按钮调用book api
```

上架成功的书籍avaliable

```
url: http://domain/api/v1/issues/current
   method: get
   params: 无
   response:
     200: {
       "count": 2,
       "page_size": 20,
       "page_count": 1,
       "page": 1,
10
       "next": null,
       "previous": null,
       "results": [
         {
           id: '',
14
           book: {
             id: '',
             title: '',
             cover_url: '',
```

```
author: {
                id: '',
                avatar_url: '',
                address: '',
                name: ''
24
              }
            }
            price: '',
            quantity: '',
            n_circulations: '',
            status: ''
30
          },
          . . .
       }
```

未售出的issue重新上架

```
url: http://domain/api/v1/issues/{id}/resale
  method: patch
  params: {
    price: 发行价格, float
    quantity: 发行数量, int
    royalty: 版税, float, 0-100
    buy_limit: 购买限制, int
    published_at: 预售时间, str, datetime, 必须
8
    duration: 销售时长, int, 单位分钟
9
10
   response:
    201: {
      id: '',
      book: {
        id: '',
        title: 书籍名称,
        cover_url: 书籍封面,
        desc: 书籍描述,
        author: {
20
          id: '',
          name: 用户昵称,
          avatar_url: 头像,
          address: 钱包地址,
24
          website_url: 个人网站,
          discord_url: discord主页,
          twitter_url: twitter主页,
        },
        preview: {
          file_url: 预览文件url
30
        },
```

```
},
      price: 出版价格,
      quantity: 出版数量,
      published_at: 出售开始时间,
      duration: 出售时长,
      status: 出版状态,
      n_circulations:已售数量,
      destroyed_log: NFT销毁记录地址,
      buy_limit: 购买限制,
40
      trade: {
        id: '',
42
        quantity: 挂单数量,
        price: 挂单价格
43
44
      },
45
      n_owners: 购买者者数量,
      is_wished: 是否添加心愿单,
47
      token: {
        id: NFT id,
        contract_address: NFT合约地址,
        block_chain: 区块链网络,
        standard: 合约标准,
        currency: NFT购买token
      }
54
    }
    or
    400 {}
```

书籍上传页

当添加一本新书时,不管是pdf或者草稿,都会启动一个task去发起书籍上传动作。如果是草稿,则需要先对草稿进行处理,然后再加密上传。g

```
url: http://domain/api/v1/books
  method: post
  params: {
   file: pdf/epub/txt, 小于200M
    cover: jpg/png, 小于5M,必须
   title: 长度150,必须
    desc: 长度1500, 必须
    draft: 草稿id
9 }
  response:
    201: {
      id: '',
      title: 标题,
      desc: 描述,
14
      cover_url: 封面url,
      draft: draft id
16
```

```
17 }
18 or
19 400 {}
```

书籍出版页

```
url: http://domain/api/v1/issues
  method: post
  params: {
    book: 书籍id, 必须
    price: 发行价格,默认0
    quantity:发行数量,默认1
    royalty: 版税, 默认0
    buy_limit: 购买限制,默认1
    published_at: 预售时间,必须
    duration: 销售时长,整型数字,单位分钟
10
    token: {
      block_chain: polygon/bnb二选一
      currency: USDC
    }
14
  }
   response:
    201: {
      id: '',
      book: {
        id: '',
        title: 书籍名称,
        cover_url: 书籍封面,
        desc: 书籍描述,
24
        author: {
          id: '',
          name: 用户昵称,
          avatar_url: 头像,
          address: 钱包地址,
          website_url: 个人网站,
          discord_url: discord主页,
          twitter_url: twitter主页,
        },
        preview: {
          file_url: 预览文件url
34
        },
      },
      price: 出版价格,
      quantity: 出版数量,
      published_at: 出售开始时间,
      duration: 出售时长,
40
41
      status: 出版状态,
42
      n_circulations:已售数量,
```

```
43
      destroyed_log: NFT销毁记录地址,
      buy_limit: 购买限制,
45
      trade: {
        id: '',
46
47
        quantity: 挂单数量,
48
        price: 挂单价格
      n_owners: 购买者者数量,
50
      is_wished: 是否添加心愿单,
      token: {
        id: NFT id,
        contract_address: NFT合约地址,
        block_chain: 区块链网络,
        standard: 合约标准,
        currency: NFT购买token
      }
    }
60
    or
61
    400 {}
```

书籍详情页

书籍信息

```
url: http://domain/api/v1/issues/{id}
   method: get
   params: 无
   response:
     200: {
      id: '',
      book: {
        id: '',
        title: 书籍名称,
10
        cover_url: 书籍封面,
        desc: 书籍描述,
         author: {
          id: '',
          name: 用户昵称,
          avatar_url: 头像,
          address: 钱包地址,
          website_url: 个人网站,
          discord_url: discord主页,
          twitter_url: twitter主页,
20
        },
         preview: {
          file_url: 预览文件url
         },
24
      },
```

```
price: 出版价格,
      quantity: 出版数量,
      published_at: 出售开始时间,
      duration: 出售时长,
      status: 出版状态,
30
      n_circulations:已售数量,
      destroyed_log: NFT销毁记录地址,
      buy_limit: 购买限制,
      trade: {
        id: '',
        quantity: 挂单数量,
        price: 挂单价格
      },
      price_range: {
        min_price: 所有挂单中的最低价格,
        max_price: 所有挂单中的最高价格
41
      },
42
      n_owned: 当前登陆用户拥有的数量,
      n_owners: 购买者数量,
44
      is_wished: 是否添加心愿单,
45
      token: {
        id: NFT id,
46
        contract_address: NFT合约地址,
47
        block_chain: 区块链网络,
        standard: 合约标准,
        currency: NFT购买token
50
      }
    }
```

二手市场挂单列表

```
url: http://domain/api/v1/trades
   method: get
   params: {
     issue: id
   }
   response:
     200: {
       "count": 2,
       "page_size": 20,
10
       "page_count": 1,
       "page": 1,
       "next": null,
       "previous": null,
       "results": [
14
         {
           id: '',
           user: {
             id: '',
```

```
name: '',
              address: '',
              avatar_url: ''
           },
           issue: {
24
             id: '',
              book: {
               id: '',
               . . .
             },
             . . .
30
           },
           quantity: 挂单数量,
           price: 挂单价格,
           first_release: 首发,
           created_at: ''
34
         },
          . . .
       ]
    }
```

二手市场交易列表activity

```
url: http://domain/api/v1/transactions
   method: get
   params: {
     issue: id
   }
6
   response:
     200: {
       "count": 2,
9
       "page_size": 20,
       "page_count": 1,
       "page": 1,
       "next": null,
       "previous": null,
       "results": [
14
         {
           id: '',
           issue: {
             id: '',
18
             book: {
20
               id: '',
               title: '',
               cover_url: '',
             },
24
             . . .
           },
           quantity: 购买数量,
```

```
price: 购买单价,
          seller: {
            id: '',
30
            address: '',
            name: ''
          },
          buyer: {
            id: '',
            address: '',
            name: ''
          },
          source: 1 or 2, # 1表示一级市场 / 2表示二级市场
          hash: 链上交易hash值,
          created_at: ''
        }
42
43
   }
```

二手市场交易趋势图trend

```
url: http://domain/api/v1/transactions/trend
method: get
params: {
  issue: id
}
response:
200: {
  dates: 日期列表,
  quantities: 数量列表
}
```

用户信息修改页

信息修改

```
url: http://domain/api/v1/users/{id}
method: put/patch
params: {

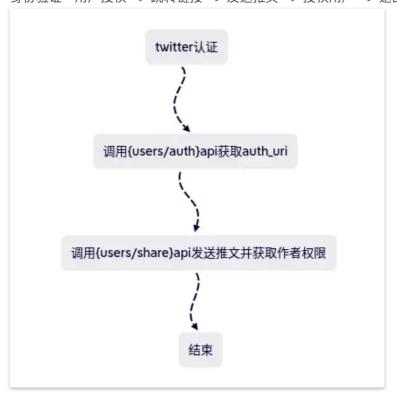
avatar: jpg/png, 小于5M
banner: jpg/png, 小于5M
name: 长度150
desc: 长度1500
website_url: url
discord_url: url
}
response:
200 {
id: '',
```

```
name: '',
       address: '',
       desc: '',
       avatar_url: '',
       // 非作者返回空
       statistic: {
         total_volume: '',
20
         min_price: '',
         max_price: '',
         total_books: '',
         sales: '',
         n_owners: '',
       website_url: '',
       discord_url: '',
       twitter_url: '',
       is_verified: true
     }
```

twitter认证

需要绑定用户的twitter账号和平台的账号,当对用户授权时可以直接通过关联查询获取到用户的平台账号并调用合同直接给用户授权。

身份验证: 用户授权 -> 跳转链接 -> 发送推文 -> 授权用户 -> 返回主页



```
1,获取用户twitter授权
2 url: http://domain/api/v1/users/auth
3 method: put/patch
4 params: 无
5 response:
6 200 {
```

```
auth_url: ''
8
    }
9
  2,发送twitter并授权
url: http://domain/api/v1/users/share
method: put/patch
  params: {
    oauth_token: str, required,来自auth_url
14
     oauth_verifier: str, required, 来自auth_url
    content: str, required
16 }
   response:
     200 {
      'detail': 'success'
     }
```

个人关注页

书籍收藏

```
添加收藏
  url: http://domain/api/v1/wishlists
   method: post
   params: {
     issue: 出版id
   response:
     200 {
     }
   url: http://domain/api/v1/wishlists/current
   method: get
14
   params: 无
   response:
     200 {
       "count": 2,
       "page_size": 20,
20
       "page_count": 1,
       "page": 1,
       "next": null,
       "previous": null,
       "results": [
24
         {
           id: '',
           issue: {
             id: '',
             quantity: '',
```

```
30
              price: '',
              n_circulations: '',
              published_at: '',
              book: {
                id: '',
                title: '',
                desc: '',
                cover_url: '',
                author: {
                  id: '',
                  name: '',
41
                  avatar_url: '',
                  address: ''
42
43
                }
44
              },
45
              token: {
46
                id: '',
47
                contract_address: '',
                block_chain: '',
48
                standard: '',
49
                currency: ''
50
              }
           }
          },
54
          . . .
    }
   取消收藏
   url: http://domain/api/v1/wishlists/remove
   method: post
61
   params: {
     issue: 出版id
63
   }
64
   response:
     204
```

关注的作者

```
添加关注
url: http://domain/api/v1/fans
method: post
params: {
  author: 作者id
}
response:
200 {
```

```
10
   关注列表
   url: http://domain/api/v1/fans/current
14
   method: get
   params: 无
   response:
     200 {
       "count": 2,
       "page_size": 20,
       "page_count": 1,
       "page": 1,
       "next": null,
       "previous": null,
       "results": [
24
         {
           id: '',
           author: {
             id: '',
             avatar_url: '',
             name: '',
30
             address: ''
          }
         },
34
         . . .
    }
   取消关注
   url: http://domain/api/v1/fans/remove
   method: post
40
41
   params: {
     author: 作者id
43
   }
44
   response:
45
     204
```

阅读

```
url: http://domain/api/v1/assets/{id}/read
method: get
params: 无
response:
200 {
file_url: 文件url,
bookmark: {
id: '',
current_page: 当前阅读页,
```

```
10 }
11 }
```

草稿

```
添加
url: http://domain/api/v1/drafts
  method: post
  params: {
   title: 长度150,必须
    content: 长度1000000,必须
  }
  response:
    201 {
10
     id: '',
     title: '',
      content: ''
    }
14
  修改
  url: http://domain/api/v1/drafts/{id}
  method: put/patch
  params: {
   title: 长度150
     content: 长度1000000
20
  response:
    200 {
     id: '',
24
     title: '',
      content: ''
   }
  删除
30
  url: http://domain/api/v1/drafts/{id}
  method: delete
  params: 无
   response:
     204
```

书籍

```
le

implies the state of the s
```

```
file: pdf/epub/txt, 小于200M
     cover: jpg/png, 小于5M
     title: 长度150
     desc: 长度1500
8
9
     draft: 草稿id
10 }
   response:
     201: {
      id: '',
      title: 标题,
14
      desc: 描述,
      cover_url: 封面,
      draft: 草稿id
    }
19
    or
20
    400 {
      title: [error message],
      desc: ...,
      . . .
24
     }
     or
     {
     non_field_errors: []
    }
    or
30
    {
      detail: ''
    }
   删除
   url: http://domain/api/v1/books/{id}
   method: delete
36 params: 无
  response:
     204
```

出版

```
lead wrl: http://domain/api/v1/issues/{id}
method: put/patch
params: {
price: 发行价格,默认0
quantity: 发行数量,默认1
royalty: 版税,默认0
buy_limit: 购买限制,默认1
published_at: 预售时间,必须
duration: 销售时长,整型数字,单位分钟
token: {
block_chain: polygon/bnb二选一
```

```
currency: 默认USDC
14
     }
   }
   response:
     201: {
18
       id: '',
       book: {
20
         id: '',
         title: '',
         cover_url: '',
         desc: ''
24
         author: {
           id: '',
           name: '',
           avatar_url: '',
           address: '',
           website_url: '',
           discord_url: '',
30
         },
         preview: {
           file_url: ''
         }
34
       },
       price: '',
       quantity: '',
       published_at: '',
       duration: '',
40
       status: '',
41
       n_destroyed: '',
42
       destroyed_log: '',
       buy_limit: '',
43
44
       trade: {
         id: '',
45
46
         quantity: '',
47
         price: ''
48
       },
49
       n_owners: '',
       token: {
         id: '',
         contract_address: '',
         block_chain: '',
         standard: '',
54
         currency: ''
       }
     }
     or
     400 {}
60
61
   删除
```

```
url: http://domain/api/v1/issues/{id}
method: delete
params: 无
response:
204
```

购买

```
url: http://domain/api/v1/transactions
  method: post
  params: {
   trade: int, required
   quantity: int, required
     status: str, //一级市场不需要,二级市场根据链上交易状态定
6
    hash: str //一级市场不需要,二级市场需要
8 }
9
   response:
10
     201 {
      id: '',
      issue: {
       id: '',
14
        book: {
         id: '',
         title: '',
         cover_url: ''
        },
        . . .
20
      },
      quantity: '',
      price: '',
      seller: {
24
        id: '',
        name: '',
        address: ''
26
      },
      buyer: {
       id: '',
30
        name: '',
        address: ''
      },
      created_at: ''
34
     }
```