实验助手接口文档

最终都需要将IP地址换成服务IP地址

操作最终返回的数据格式：

|  |  |
| --- | --- |
|  | **说明** |
| code | 1：表示此次操作不存在异常，有可能返回空的数据  0：表示此次操作有误 |
| msg | 返回的消息 |
| data | 存放数据信息 |

# 1. 登录/注册模块

## 1.1 登录

URL：<http://172.18.0.55:8080/LabAssistant/login>；

### 请求方式

Post

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| nickName | 用户名 |
| pwd | 密码 |

返回成功：{"userID":"4028c681494b994701494b99aba50000","code":"1","msg":"操作成功！"}

返回错误：{"code":"0","msg":"用户名或密码错误"}

## 1.2 注册

URL：<http://172.18.0.55:8080/LabAssistant/register>；

### 请求方式

Post

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| nickName | 用户昵称 |
| pwd | 用户密码 |
| eMail | 邮箱 |
| telNo | 手机号 |
| provinceID | 省份 |
| cityID | 城市 |
| collegeID | 院校 |
| labName | 实验室名称 |
| majorID | 专业 |
| educationID | 学历 |
| titleID | 职称 |
| nState | 用户状态 0-正常，1-禁用 |
| nSource | 注册来源 0-注册，1-微信，2-微博，3-QQ |

返回成功：{"code":"1","msg":"操作成功！"}

返回错误：{"code":"0","msg":"注册失败"}

# 2. 地图模块

## 2.1 获取附近用户

URL：[http:// 172.18.0.55:8080/LabAssistant/map/around?userID=4028c681494b994701494b99aba50000&longitude=121.43700242034244&latitude=31.18441638587652](http://172.18.3.117:8080/LabAssistant/map/around?userID=4028c681494b994701494b99aba50000&longitude=121.43700242034244&latitude=31.18441638587652)

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| **userID** | 用户登录时所获取的唯一标识 |
| **longitude** | 用户所在的经度 |
| **latitude** | 用户所在的纬度 |

返回成功：{"aroundUser":[{"mapID":"2c9283f54fcf29b3014fcf29cfdd0000","userID":"2c9283f54fcf29b3014fcf2a3f530001","longitude":"121.43760323516177","latitude":"31.18471009979488","reagentName":"洗涤液","distance":65.0},{"mapID":"2c9283f54fcf29b3014fcf2a915f0002","userID":"2c9283f54fcf29b3014fcf2abba70003","longitude":"121.4375174044733","latitude":"31.184416385875302","reagentName":"封闭液","distance":49.0},{"mapID":"2c9283f54fcf29b3014fcf2ac4bb0004","userID":"2c9283f54fcf29b3014fcf2b23e50005","longitude":"121.44498467437076","latitude":"31.189335973819038","reagentName":"显色剂","distance":936.0}]}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| mapID | 地图唯一标识 |
| userID | 用户唯一标识 |
| **longitude** | 用户所在的经度 |
| **latitude** | 用户所在的纬度 |
| reagentName | 试剂名称 |
| distance | 距离 |

返回错误：{"code":"0","msg":"获取周围数据错误"}

# 3.实验模块

## 3.1 加载已完成列表

URL: http://172.18.0.55:8080/LabAssistant/lab/getComplete?userID=4028c681494b994701494b99aba50000

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| **userID** | 用户登录时所获取的唯一标识 |

返回成功：

{"data":[{"experimentName":"ELISA检测血清TNF-b浓度","myExpID":"4039c681494b994701494b99aba51237","expState":"2","expInstructionID":"4028c681494b994701494b99bab61111"}],"code":"1","msg":"操作成功！"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| myExpID | 实验唯一标识 |
| expInstructionID | 说明书唯一标识 |
| experimentName | 实验名称 |
| expState | 实验所处的状态实验状态，0-进行中，1-暂停中，2-已完成，3-已生成报告 |

返回错误：{"code":"0","msg":"获取已完成实验列表出错"}

## 3.2 加载正在进行实验列表

URL: http://172.18.0.55:8080/LabAssistant/lab/getDoing?userID=4028c681494b994701494b99aba50000

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| **userID** | 用户登录时所获取的唯一标识 |

返回成功：

{"data":[{"experimentName":"ELISA检测血清TNF-a浓度","myExpID":"4039c681494b994701494b99aba51236","expState":"0","expInstructionID":"4028c681494b994701494b99bab60000"}],"code":"1","msg":"操作成功！"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| myExpID | 实验唯一标识 |
| expInstructionID | 说明书唯一标识 |
| experimentName | 实验名称 |
| expState | 实验所处的状态，0-进行中，1-暂停中，2-已完成，3-已生成报告 |

返回错误：{"code":"0","msg":"获取正在进行的实验列表出错"}

## 3.3 获取实验或说明书下所有的实验步骤

URL: <http://172.18.0.55:8080/LabAssistant/lab/getAllProcessExceptComplete?userID=4028c681494b994701494b99aba50000&myExpID=4039c681494b994701494b99aba51236&expInstructionID=4028c681494b994701494b99bab60000&expState=1>

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| **userID** | 用户登录时所获取的唯一标识 |
| **myExpID** | 实验唯一标识 |
| expInstructionID | 说明书唯一标识 |
| expState | 实验所处的状态 |

返回成功：

{"data":{"experimentName":"ELISA检测血清TNF-a浓度","steps":[{"stepNum":"1","stepDesc":"用包被缓冲液溶解抗原，使抗原浓度为10-20 μg/ml，加100 μl/孔，4℃放置"},{"stepNum":"2","stepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡"},{"stepNum":"3","stepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡"},{"stepNum":"4","stepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡"},{"stepNum":"5","stepDesc":"每孔加入150 μl 1％ BSA 37℃封闭1 小时"},{"stepNum":"6","stepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡"}]},"code":"1","msg":"操作成功！"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| experimentName | 实验名称 |
| steps | 实验步骤 |

返回错误：{"code":"0","msg":"获取实验下所有步骤出错"}

## 3.4 获取热门说明书

URL：http://172.18.0.55:8080/LabAssistant/lab/getHotInstructions?returnLimit=2

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| returnLimit | 可选，限制返回的条数，默认10条 |

返回成功：

{"data":[{"expInstructionID":"4028c681494b994701494b99bab61111","experimentName":"ELISA检测血清TNF-b浓度","downloadCount":20,"reviewCount":0,"nDaysAgo":"2天"},{"expInstructionID":"4028c681494b994701494b99bab60000","experimentName":"ELISA检测血清TNF-a浓度","downloadCount":7,"reviewCount":0,"nDaysAgo":"2天"}],"code":"1","msg":"操作成功！"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| expInstructionID | 说明书唯一标识 |
| experimentName | 说明书名称 |
| downloadCount | 下载量 |
| reviewCount | 评论量 |
| nDaysAgo | N天前创建的 |

返回错误：{"code":"0","msg":"无法获取热门说明书"}

## 3.5 获取说明书下的详细信息

URL：http://172.18.0.55:8080/LabAssistant/lab/getInstructionDetail? userID=4028c681494b994701494b99aba50000&expInstructionID=4028c681494b994701494b99bab61111

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| **userID** | **用户唯一标识** |
| expInstructionID | 说明书唯一标识 |

返回成功：

{"data":{"expInstructionID":"4028c681494b994701494b99bab61111","experimentName":"ELISA检测血清TNF-b浓度","supplierName":"海尔","productNum":"hhd","instructState":"未下载"},"code":"1","msg":"操作成功！"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| expInstructionID | 说明书唯一标识 |
| experimentName | 说明书名称 |
| supplierName | 供应商名称—厂商（在返回的字段中和provideUser就存在一个，即若说明书是厂商提供的返回supplierName，若说明书是个人提供的返回provideUser） |
| provideUser | 提供者—个人 |
| productNum | 货号 |
| instructState | 说明书的状态 下载，未下载 |

返回错误：{"code":"0","msg":"获取说明书详细信息出错"}

## 3.6 下载实验说明书

URL：http://172.18.0.55:8080/LabAssistant/lab/downloadInstruction?userID=4028c681494b994701494b99aba50000&expInstructionID=4028c681494b994701494b99bab60000

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| **userID** | **用户唯一标识** |
| expInstructionID | 说明书唯一标识 |

返回成功：就是将实验说明书主表，实验试剂表，实验耗材表，实验设备表，实验详细流程表中相关记录的所有字段返回

{"data":{"expInstructionMain":{"expInstructionID":"4028c681494b994701494b99bab60000","experimentName":"ELISA检测血清TNF-a浓度","experimentDesc":"我也不知道","experimentTheory":"还是不知道","provideUser":"","supplierID":"4037d681494b994701494b99aba50000","supplierName":"海尔","productNum":"hhd","expCategoryID":"1","expSubCategoryID":"11","createDate":1442332800000,"expVersion":1,"allowDownload":1,"filterStr":"","reviewCount":0,"downloadCount":8},"expProcess":[{"expStepID":"4028c681494b994701494b99bab70000","expInstructionID":"4028c681494b994701494b99bab60000","stepNum":1,"expStepDesc":"用包被缓冲液溶解抗原，使抗原浓度为10-20 μg/ml，加100 μl/孔，4℃放置","expStepTime":10.0},{"expStepID":"4028c681494b994701494b99bab70001","expInstructionID":"4028c681494b994701494b99bab60000","stepNum":2,"expStepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡","expStepTime":10.0},{"expStepID":"4028c681494b994701494b99bab70002","expInstructionID":"4028c681494b994701494b99bab60000","stepNum":3,"expStepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡","expStepTime":10.0},{"expStepID":"4028c681494b994701494b99bab70003","expInstructionID":"4028c681494b994701494b99bab60000","stepNum":4,"expStepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡","expStepTime":10.0},{"expStepID":"4028c681494b994701494b99bab70004","expInstructionID":"4028c681494b994701494b99bab60000","stepNum":5,"expStepDesc":"每孔加入150 μl 1％ BSA 37℃封闭1 小时","expStepTime":10.0},{"expStepID":"4028c681494b994701494b99bab70005","expInstructionID":"4028c681494b994701494b99bab60000","stepNum":6,"expStepDesc":"弃去液体后，在吸水纸拍干，每孔加入300μl PBST 洗涤，振荡","expStepTime":10.0}],"expReagent":[{"expReagentID":"4028c681494b994701494b99aba50000","expInstructionID":"4028c681494b994701494b99bab60000","reagentID":"111","reagentName":"洗涤液","reagentCommonName":"洗涤液","reagentSpec":"洗涤液","useAmount":50,"createMethod":"洗涤液"},{"expReagentID":"4028c681494b994701494b99aba50001","expInstructionID":"4028c681494b994701494b99bab60000","reagentID":"112","reagentName":"洗涤液1","reagentCommonName":"洗涤液1","reagentSpec":"洗涤液1","useAmount":500,"createMethod":"洗涤液1"},{"expReagentID":"4028c681494b994701494b99aba50002","expInstructionID":"4028c681494b994701494b99bab60000","reagentID":"113","reagentName":"洗涤液2","reagentCommonName":"洗涤液2","reagentSpec":"洗涤液2","useAmount":60,"createMethod":"洗涤液2"}],"expConsumable":[{"expConsumableID":"4028c791494b994701494b99aba50000","expInstructionID":"4028c681494b994701494b99bab60000","consumableID":"111","consumableType":"96T","consumableCount":2,"consumableFactory":"不知道"}],"expEquipment":[{"expEquipmentID":"4028c791564b994701494b99aba50000","expInstructionID":"4028c681494b994701494b99bab60000","equipmentID":"222","equipmentName":"4℃冰箱","equipmentFactory":"海尔"},{"expEquipmentID":"4028c791564b994701494b99aba50001","expInstructionID":"4028c681494b994701494b99bab60000","equipmentID":"223","equipmentName":"恒温培养箱","equipmentFactory":"上海一恒"},{"expEquipmentID":"4028c791564b994701494b99aba50002","expInstructionID":"4028c681494b994701494b99bab60000","equipmentID":"224","equipmentName":"酶标仪","equipmentFactory":"Tecan 200"}]},"code":"1","msg":"操作成功！"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| expInstructionMain | 对应实验说明书主表中的记录 |
| expProcess | 对应实验详细流程表中的记录 |
| expReagent | 对应实验试剂表中的记录 |
| expEquipment | 对应实验设备表中的记录 |
| expConsumable | 对应实验耗材表中的记录 |

返回错误：{"code":"0","msg":"下载说明书出错"}

## 3.7 获取实验一级分类列表

URL：http://172.18.0.55:8080/LabAssistant/expCategory/allExpCategory

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
|  |  |
|  |  |

返回成功：

{"msg":"操作成功！","data":[{"expCategoryID":"24201826039496705","expCategoryName":"DNA实验技术"},{"expCategoryID":"24201826039496706","expCategoryName":"RNA实验技术"},{"expCategoryID":"24201826039496707","expCategoryName":"感受态细胞的制备及其转化"},{"expCategoryID":"24201826039496708","expCategoryName":"PCR技术"},{"expCategoryID":"24201826039496709","expCategoryName":"蛋白质技术"}],"code":"1"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| expCategoryID | 实验一级分类ID |
| expCategoryName | 实验一级分类名称 |

返回错误：{"code":"0","msg":"获取实验一级分类出错"}

## 3.8 获取实验二级分类列表

URL：http://172.18.0.55:8080/LabAssistant/expCategory/getSubCategoryByPID?expCategoryID=24201826039496705

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| expCategoryID | 实验一级分类ID |
|  |  |

返回成功：

{"msg":"操作成功！","data":[{"expSubCategoryID":"24201826039496710","expSubCategoryName":"DNA蛋白相互作用","expCategoryID":"24201826039496705"},{"expSubCategoryID":"24201826039496711","expSubCategoryName":"DNA原位杂交技术","expCategoryID":"24201826039496705"},{"expSubCategoryID":"24201826039496712","expSubCategoryName":"DNA基础知识","expCategoryID":"24201826039496705"},{"expSubCategoryID":"24201826039496713","expSubCategoryName":"DNA测序","expCategoryID":"24201826039496705"}],"code":"1"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| expSubCategoryID | 实验二级分类ID |
| expSubCategoryName | 实验二级分类名称 |
| expCategoryID | 实验一级分类ID |

返回错误：{"code":"0","msg":"获取实验二级分类出错"}

## 3.9 根据实验二级分类获取实验说明书列表

URL：http://172.18.0.55:8080/LabAssistant/lab/getInstructionsBySubCategoryID?expSubCategoryID=24201826039496710

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| expSubCategoryID | 实验二级分类ID |
|  |  |

返回成功：

{"msg":"操作成功！","data":[{"expInstructionID":"4028c681494b994701494b99bab60000","experimentName":"ELISA检测血清TNF-a浓度","experimentDesc":"我也不知道","experimentTheory":"还是不知道","provideUser":"","supplierID":"4037d681494b994701494b99aba50000","supplierName":"海尔","productNum":"hhd","expCategoryID":"24201826039496705","expSubCategoryID":"24201826039496710","createDate":1442332800000,"expVersion":1,"allowDownload":1,"filterStr":"","reviewCount":0,"downloadCount":0},{"expInstructionID":"4028c681494b994701494b99bab61111","experimentName":"ELISA检测血清TNF-b浓度","experimentDesc":"我也不知道","experimentTheory":"还是不知道","provideUser":"","supplierID":"4037d681494b994701494b99aba50000","supplierName":"海尔","productNum":"hhd","expCategoryID":"24201826039496705","expSubCategoryID":"24201826039496710","createDate":1442332800000,"expVersion":1,"allowDownload":1,"filterStr":"","reviewCount":0,"downloadCount":20}],"code":"1"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| expInstructionID | 实验说明书ID |
| experimentName | 实验说明书名称 |
| experimentDesc | 实验说明书描述 |
| experimentTheory | 实验说明书原理 |
| provideUser | 作者 |
| supplierID | 供应商ID |
| supplierName | 供应商名称 |
| productNum | 货号 |
| expSubCategoryID | 实验二级分类ID |
| expCategoryID | 实验一级分类ID |
| createDate | 创建日期 |
| expVersion | 版本号 |
| allowDownload | 是否允许下载，0-否，1-是 |
| filterStr | 组合查找字段 |
| reviewCount | 评论数 |
| downloadCount | 下载数 |

返回错误：{"code":"0","msg":"获取实验列表出错"}

## 3.10 获取实验计划列表

URL：http://172.18.0.55:8080/LabAssistant/lab/getMyExpPlan?userID=4028c681494b994701494b99aba50000&date=2015-09-21

### 请求参数

|  |  |
| --- | --- |
|  | **说明** |
| userID | 用户唯一标识 |
| **date** | 查询的日期，格式2015-09-21 |

返回成功：

{"data":[{"experimentName":"我也不知道","expInstructionID":"4028c681494b994701494b99bab60000"}],"code":"1","msg":"操作成功！"}

### 返回字段说明

|  |  |
| --- | --- |
| **返回值字段** | **字段说明** |
| expInstructionID | 实验说明书ID |
| experimentName | 实验说明书名称 |

返回错误：{"code":"0","msg":"获取实验计划失败"}