### 物联网设备管理平台——第一轮迭代API文档

后端采用对象映射数据库，传输数据用json格式

## 1. Account数据库

class Account(Base):

\_\_tablename\_\_ = 'account'

user\_name = Column(String(255), nullable=False, primary\_key=True)

password = Column(String(512), nullable=False)

email = Column(String(30), nullable=False, unique=True)

md5 = Column(String(512), nullable=False)

phone = Column(String(20), nullable=False)

# date = Column(Date, nullable=False)

info\_keys = ['user\_name', 'password', 'email', 'phone']

def \_\_repr\_\_(self):

return self.user\_name

def \_\_init\_\_(self, user\_name, password, email, md5, phone):

self.user\_name = user\_name

self.password = password

self.email = email

self.md5 = md5

self.phone = phone

def show\_info(self):

information = {}

for key in self.info\_keys:

information[key] = self.\_\_getattribute\_\_(key)

return information

## 2. 注册

/api/account\_api/register，调用方法推荐post，参数以json格式传输

@api.route('/api/account\_api/register', methods=['POST', 'get'])

def register():

try:

session = Session()

new\_account\_json = request.json

new\_account = Account(

new\_account\_json['user\_name'], new\_account\_json['password'], new\_account\_json['email'], new\_account\_json['md5'], new\_account\_json['phone'])

session.add(new\_account)

session.commit()

return jsonify({'message': "New account has been created successfully!",

'signal': "success"

}), 200

except Exception as e:

logging.exception(e)

session.rollback()

return jsonify({'message': "New account creation failed!",

'signal': "fail"}), 200

输入数据

{

'user\_name': 'admin',

'password': 'admin123',

'email': '123@qq.com',

'md5': 'adfsdfhkshffdjosjfpjsfjdf', #maybe wrong

'phone': '15377273704'

}

#where 'md5' is encrypted password

返回参数

# success

{

'message': "New account has been created successfully!",

'signal': "success"

}

#failure

{

'message': "New account creation failed!",

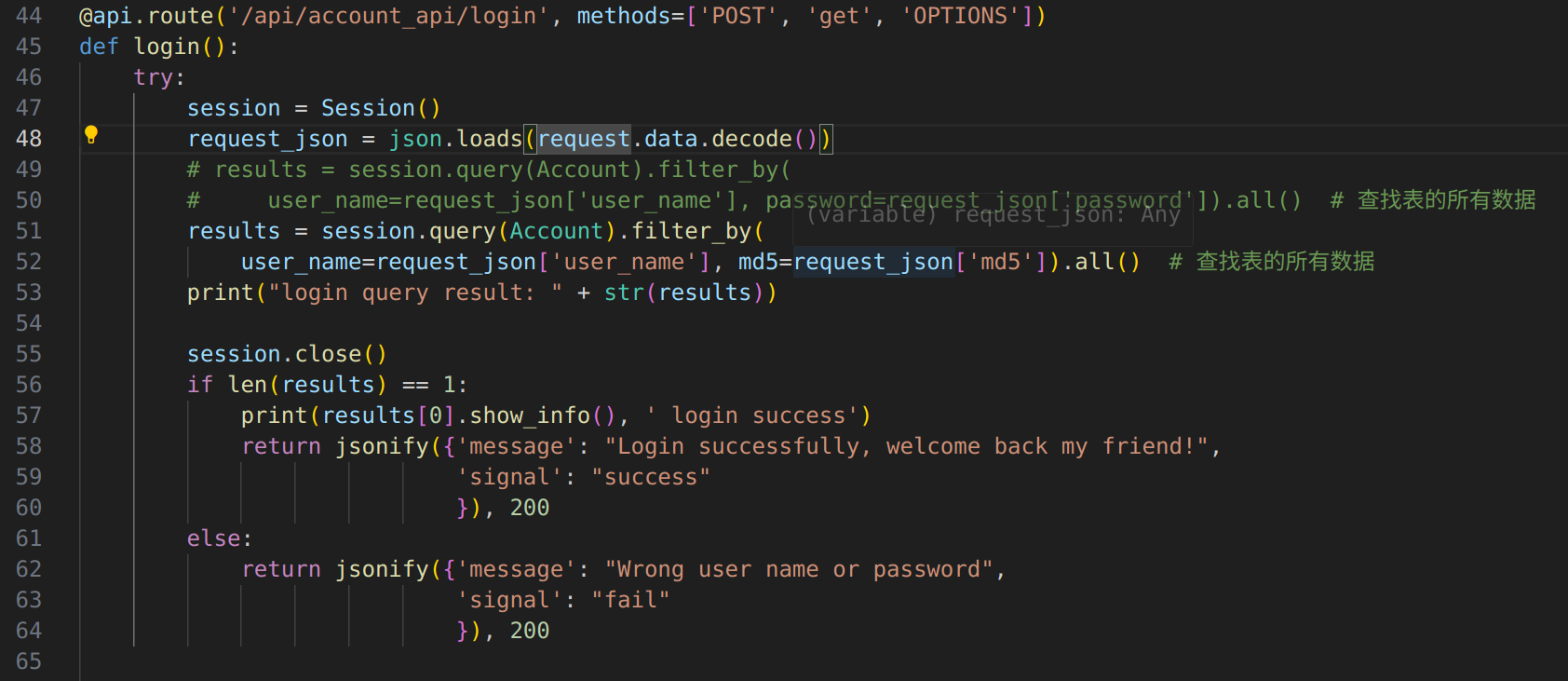
'signal': "fail"

}

#both the status code is 200 to avoid trigger exception at frontend

## 3. 登陆

/api/account\_api/login，调用方法推荐post，参数以json格式传输



输入数据

{

'user\_name': 'admin',

'md5': 'adfsdfhkshffdjosjfpjsfjdf'

}

#where 'md5' is encrypted password

返回参数

# success

{

'message': "Login successfully, welcome back my friend!",

'signal': "success"

}

#failure

{

'message': "Wrong user name or password",

'signal': "fail"

}

#both the status code is 200 to avoid trigger exception at frontend

## 4. 账户信息查询

/api/account\_api/showinfo，调用方法推荐post，参数以json格式传输

@api.route('/api/account\_api/showinfo', methods=['POST', 'get', 'OPTIONS'])

def show\_info():

try:

session = Session()

request\_json = json.loads(request.data.decode())

results = session.query(Account).filter\_by(

user\_name=request\_json['user\_name']).all() # 查找表的所有数据

print("login query result: " + str(results))

session.close()

if len(results) == 1:

user = results[0].show\_info()

print(results[0].show\_info(), ' login success')

return jsonify({'message': "Login successfully, welcome back my friend!",

'signal': "success",

'user': user

}), 200

else:

return jsonify({'message': "Wrong user name or password",

'signal': "fail",

'user': {}

}), 200

except Exception as e:

logging.exception(e)

session.rollback()

return jsonify({'message': "There is something wrong leading to failure!",

'signal': "fail"}), 200

输入数据

{

'user\_name': 'admin'

}

返回参数

# success

{

'message': "Login successfully, welcome back my friend!",

'signal': "success",

'user': {

'user\_name': "admin",

'password': "admin123",

'email': "123@qq.com",

'phone': "153772723704"

}

}

#failure but there is no possibility to fail here

{ 'message': "Wrong user name or password",

'signal': "fail",

'user': {}

}