

测试报告

小组成员：陈美璇，王婧，牛皓玥，薛岚天

金融网站名称及功能描述

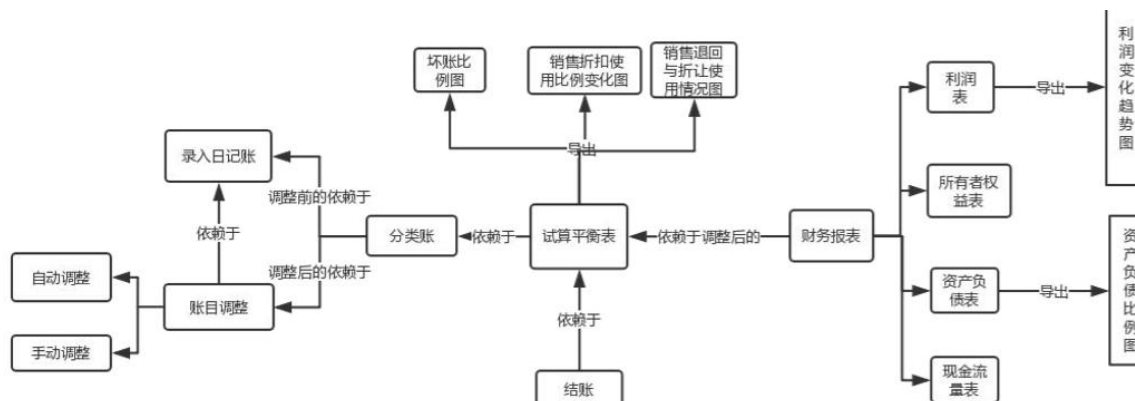
名称：公司财务管理系统（company finance management system）

功能：

1. 主页展示，有相关连接和登录注册选项
2. 录入日记账 某些账目实现自动调整
3. 日记账自动过账到总分类账
4. 某些账目需要手动调整，在日记账中重新输入调整账目关系
5. 生成调整后的试算平衡表
6. 试算平衡表生成财务报表（利润表、所有者权益表、资产负债表、现金流量表）
7. 结账（会计周期选择）
8. 相关数据制作可视化分析图

测试需求分析

首先绘制整个项目的流程图如下：



从以上流程图中，分析得到需要进行测试的关键部分如下：

1. 功能性测试：

登录注册表单信息传递；
文件操作和计算（财务报表导出到本地，会计账目核算）；
媒体播放组件（帮助页视频能否正确播放）；

2. 用户界面和可用性测试：

导航（系统导航是否准确，连接间是否出现错误）；
跨浏览器测试（页面在不同浏览器上是否能够一致显示）；
帮助和文档（帮助是否准确，页面文档内容是否清晰明确）；
布局（网页整体布局是否美观，各页面间风格是否一致）；

3. 安全性测试：

用户信息加密（用户提交的信息是否能保证安全性）；

测试黑盒设计

登录表单测试:

(假定存在用户邮箱为 123@qq.com,密码为 123456, 本次登录验证码为 asf3)

等价类:

输入数据	有效等价类	无效等价类
用户邮箱	1. 输入符合邮箱格式	2.无@符号 3.@符号前有非数字字母字符 4.@符号后.前有非数字字母字符 5.不以 cn/com/org/net 结尾
用户密码	6.输入正确密码	7.输入错误密码
验证码	8.验证码输入正确	9 验证码输入错误

测试用例:

测试数据	期望结果	测试范围
有效等价类测试用例		
用户邮箱: 123@qq.com	输入有效	1
用户密码: 123456	输入有效	6
验证码: asf3	输入有效	8
无效等价类测试用例		
用户邮箱: ~141fagga	输入无效	2
~前 1415@123.com	输入无效	3
123@安 aafag.com	输入无效	4
131@aea.sqe	输入无效	5
密码: 1234155	密码错误	7
验证码: dDfA	验证码错误	9

边界值 :

输入等价类	测试用例说明	测试数据	期望结果	选取理由
用户邮箱	1.一个字符 2.输入字符全不为字母 数字 3.@符号前全不为字母 数字字符 4.@到.间无数字字母字 符 5.不以 cn/com/org/net 结尾 6.正确格式输入邮箱	@ 啊打发~,< 三大@DFA.COM ADAF@收到.com Adaf@daf.cma Aqqr@123.com	输入无效 输入无效 输入无效 输入无效 输入有效	仅有一个字符输入 无效字符个数最多 局部无效字符个数最多 局部无效字符个数最多 局部无效字符个数最多 输入类型有效
用户密码	1.输入仅一个字符不符 2.输入全部字符不符 3.输入正确密码	123466 1234567 653233 123456	密码错误 密码错误 密码错误 密码正确	输入不符数最少 输入不符数最多 输入类型有效
验证码	1.仅输入一个字符 2.输入一个字符错误 3. 全部字符错误 3.输入全部字符正确	1 Asf4 dhdj Asf3	输入无效 验证码错误 验证码正确	仅输入一个字符 错误字符数最少 错误字符数最多 输入类型有效

注册表单测试：

等价类：

输入数据	有效等价类	无效等价类
用户邮箱	1. 输入符合邮箱格式	2.无@符号 3.@符号前有非数字字母字符 4.@符号后.前有非数字字母字符 5.不以 cn/com/org/net 结尾
用户密码	6.两次输入密码相符	7.两次输入密码不一致

测试用例：

测试数据	期望结果	测试范围
有效等价类测试用例		
用户邮箱：123@qq.com	输入有效	1
用户密码及再次输入： 123456；123456	输入有效	6
无效等价类测试用例		
用户邮箱：~141fagga	输入无效	2
~前 1415@123.com	输入无效	3
123@安 aafag.com	输入无效	4
131@aea.sqe	输入无效	5
密码：12345 123456	两次密码不一致	7

边界值：

输入等价类	测试用例说明	测试数据	期望结果	选取理由
用户邮箱	1.一个字符 2.输入字符全不为字母 数字 3.@符号前全不为字母 数字字符 4.@到.间无数字字母字 符 5.不以 cn/com/org/net 结尾 6.正确格式输入邮箱	@ 啊打发~,< 三大@DFA.COM ADAF@收到.com Adaf@daf.cma Aqqr@123.com	输入无效 输入无效 输入无效 输入无效 输入无效 输入有效	仅有一个字符输入 无效字符个数最多 局部无效字符个数最多 局部无效字符个数最多 局部无效字符个数最多 输入类型有效
用户密码	1.两次输入仅一个字符 不符 2.两次输入全部字符不 符 3.两次输入密码相符	123466, 123456; 653233, 124552; 123456, 123456;	输入无效 输入无效 密码正确	输入不符数最少 输入不符数最多 输入类型有效

日记账表单录入测试

等价类：

输入数据	有效等价类	无效等价类
借贷金额	1. 输入为大于 0 的数字， 最多两位小数	2. 输入数值小于 0 3. 输入有非数字及小数点字符 4. 输入小数点后超过两位数字

测试用例：

测试数据	期望结果	测试范围
有效等价类测试用例		
123557.89	输入有效	1
无效等价类测试用例		
-12314	输入无效	2
DffaE242	输入无效	3
2414. 352	输入无效	4

边界值：

输入等价类	测试用例说明	测试数据	期望结果	选取理由
借贷金额	1. 一个字符	@	输入无效	仅有一个字符输入
	2. 输入字符全不为数字	啊打发~, <	输入无效	无效字符个数最多
	3. 小数点前全不为数字	Dafa.24	输入无效	局部无效字符个数最多
	4. 小数点后全不为数字	23425.qrq	输入无效	局部无效字符个数最多
	5. 小数点后位数为 3	2451.353	输入无效	仅多出有效输入一位
	6. 输入负数	-1441	输入无效	输入数值小于 0
	7. 小数点后位数为 1	12415.6	输入有效	少于最大小数位数一位
	8. 小数位数为 0	14156	输入有效	小数位数最少情况
	8. 正确格式输入	1345.67	输入有效	输入类型有效

文件操作及计算测试

测试内容	测试步骤	预期测试结果
导出表格到本地	1. 登录账户 2. 生成相应财务表格 3. 点击导出按钮	成功导出表格

跨浏览器测试

测试内容	测试步骤	预期测试结果
测试项目在不同浏览器上的兼容性	1. 用不同主流浏览器如 chrome, 360, ie 等浏览器分别打开项目	项目与其中大部分浏览器兼容

导航链接测试

测试内容	测试步骤	预期测试结果
测试项目不同页面间链接关系	1. 登录账户 2. 点击布置的相应到首页、到主	各链接链接到正常期待页面

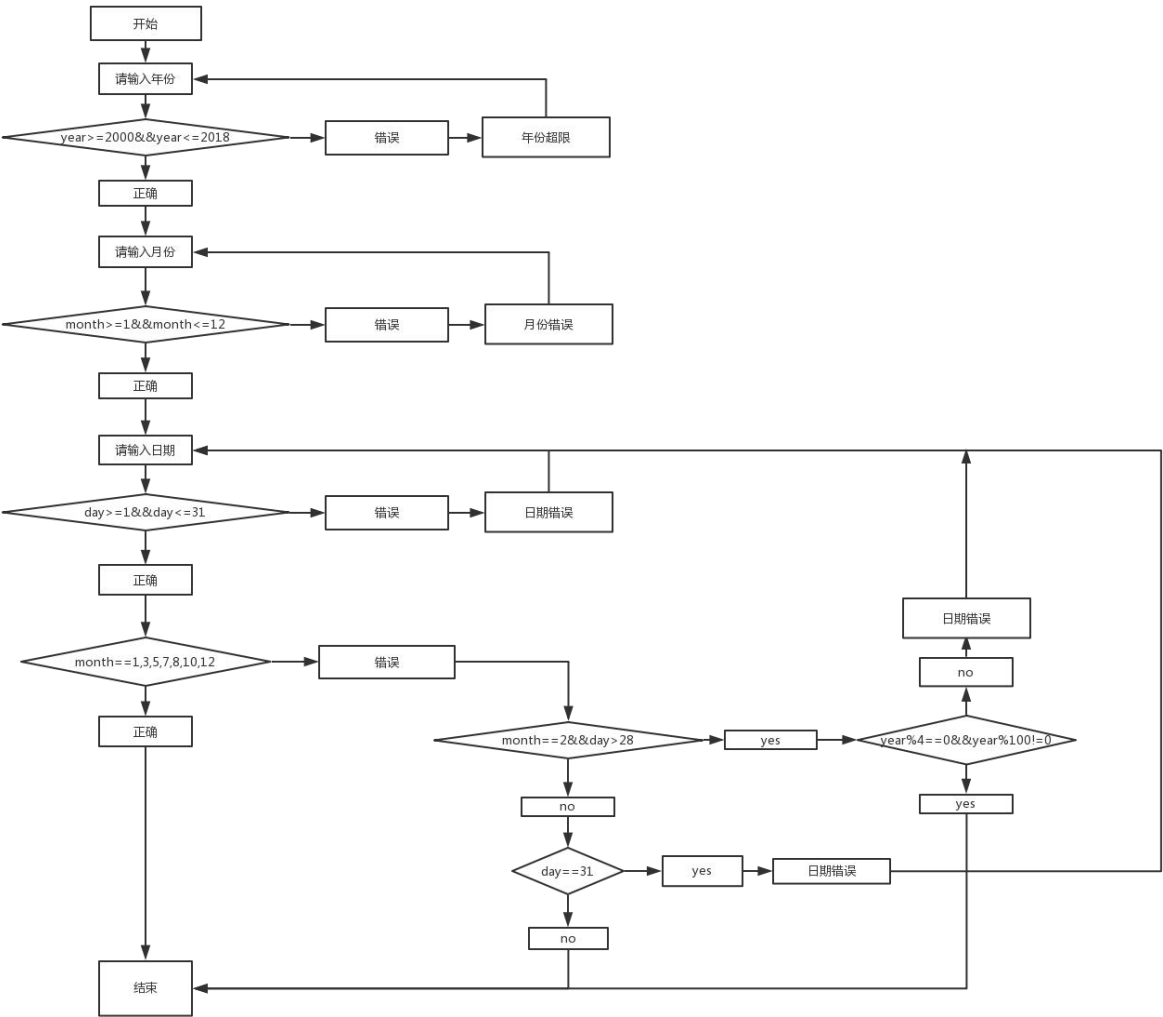
	页、到登录注册等页面的链接，查看链接关系是否有误	
--	--------------------------	--

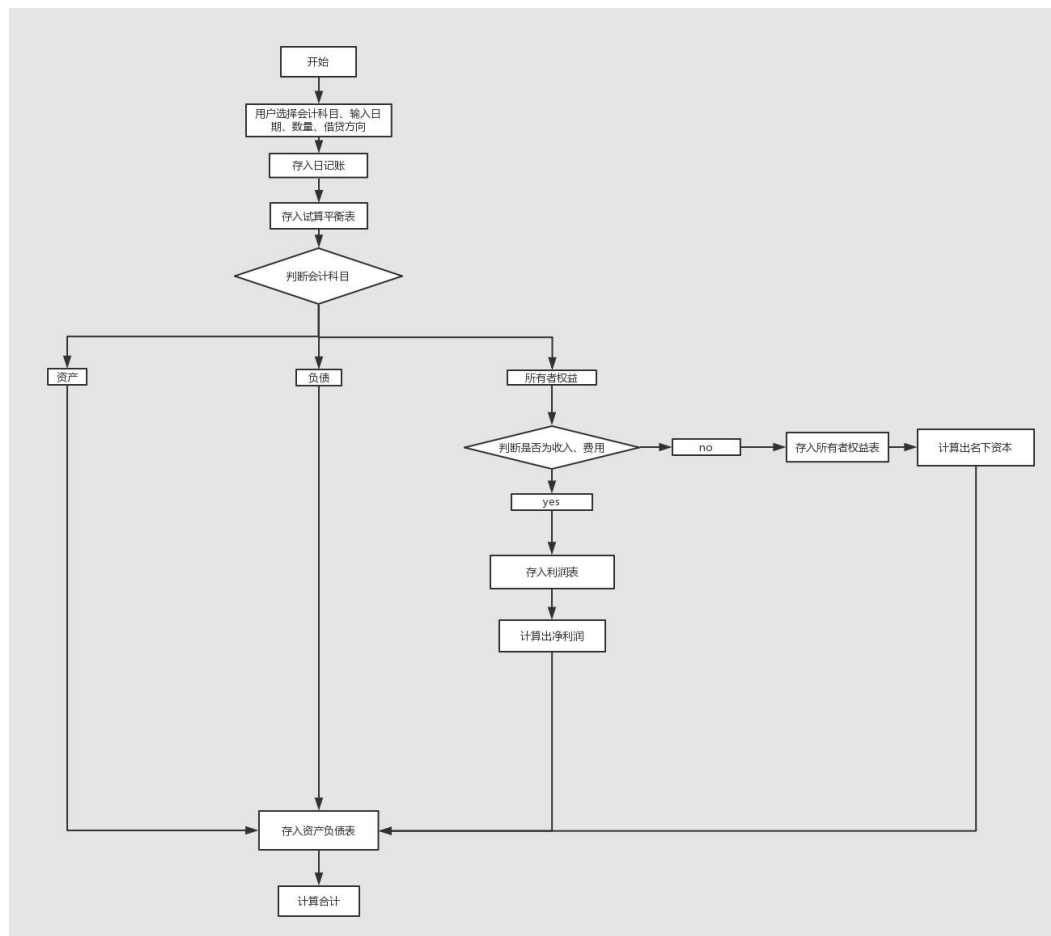
测试白盒设计

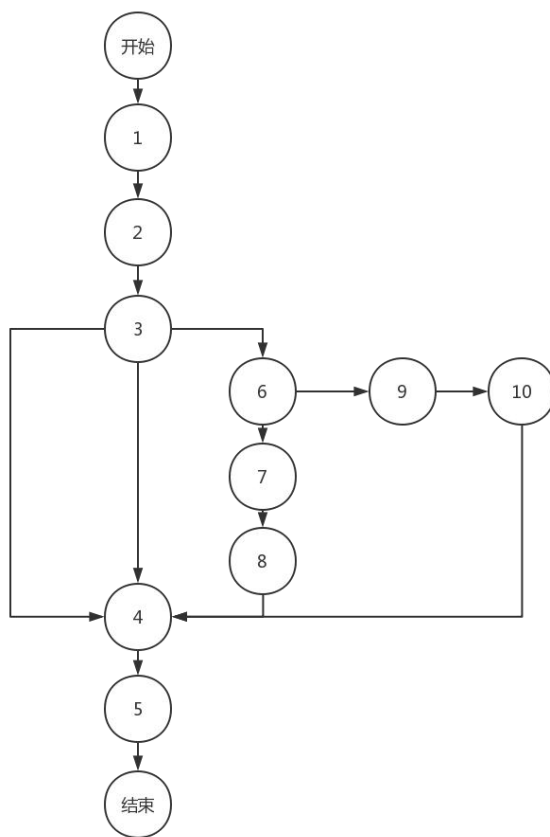
测试项目

- 用户输入日期的合法性检查；
- 对用户输入合法性的判断；
- 日记账检查借贷是否不平；

用户输入日期的白盒测试流程图如下：







测试工具：

功能测试：selenium IDE（基于 firefox 浏览器，作为其插件进行使用）

性能测试：jmeter

测试结果分析：

功能测试：

登录表单测试：

Command	Target	Value
3. type	id=username	161278031
4. click at	id=password	61,8
5. type	id=password	Wj19981219
6. click at	id=ValidateC	64,10

Runs: 1 Failures: 0

Log

```

2. Trying to execute clickAt on id=username with value 03,10... Success
3. Trying to execute type on id=username with value 161278031... Success
4. Trying to execute clickAt on id=password with value 61,8... Success
5. Trying to execute type on id=password with value Wj19981219... Success
6. Trying to execute clickAt on id=ValidateCode with value 64,10... Success
  
```

（输入有效）

journal3*
link*
output*
signin*
signin1*
signin2*
signin3*
signin4*
signin5*

	Command	Target	Value
3.	type	id=userName	161278031
4.	click at	id=Main	202,184
5.	click at	id=password	91,15
6.	type	id=password	123456789

Command
Target
Value
Comment

Runs: 1 Failures: 0

Log

5. Trying to execute clickAt on id=password with value 91,15... Success
6. Trying to execute type on id=password with value 123456789... Success
7. Trying to execute clickAt on id=ValidateCode with value 86,6... Success
8. Trying to execute type on id=ValidateCode with value 3rtx... Success
9. Trying to execute clickAt on css=input.Btn with value 54,7... Success
10. Trying to execute clickAt on css=#Main > a with value 19,16... Success
'signup1' completed successfully

(输入无效 密码输入错误)

journal3*
link*
output*
signin*
signin1*
signin2*
signin3*
signin4*
signin5*

	Command	Target	Value
3.	type	id=userName	161278031
4.	click at	css=form	170,140
5.	click at	id=password	97,10
6.	type	id=password	wj19981219

Command
Target
Value
Comment

Runs: 1 Failures: 0



Log

2. Trying to execute clickAt on id=userName with value 73,13... Success
3. Trying to execute type on id=userName with value 161278031... Success
4. Trying to execute clickAt on css=form with value 170,140... Success
5. Trying to execute clickAt on id=password with value 97,10... Success
6. Trying to execute type on id=password with value wj19981219... Success
7. Trying to execute clickAt on id=ValidateCode with value 98,6... Success
8. Trying to execute type on id=ValidateCode with value 1234... Success
9. Trying to execute clickAt on css=input.Btn with value 51,14... Success

(输入无效 验证码输入错误)

注册表单测试:

	Command	Target	Value
3.	type	id=email	161278031@smail.nju.edu.cn
4.	click at	css=p.public-tip.public-pwd1-tip > i.	6,6
5.	click at	id=password	176,10



Command
Target  
Value
Comment

id=password with value 176,10... Success
f=password with value wj19981219=-... Success
id=confirmPassword with value 163,27... Success
f=confirmPassword with value wj19981219=-... Success
id=userRegister with value 147,10... Success
ver on id=userRegister... Success
ut on id=userRegister... Success

(输入有效)

signin*
signin1*

	Command	Target	Value
5.	click at	id=password	141,13
6.	type	id=password	123456
7.	click at	id=confirmPassword	142,17
8.	type	id=confirmP	123456

Command
Target  
Value
Comment



Runs: 1 Failures: 0

Log

1. Trying to execute open on /home/register.mooc... Success
2. Trying to execute clickAt on id=email with value 40,17... Success
3. Trying to execute type on id=email with value ~141fagga... Success
4. Trying to execute clickAt on //div[@id='userRegisterPage']/div[2]/div[2]/div/div[2] with value 303,11... Success
5. Trying to execute clickAt on id=password with value 141,13... Success
6. Trying to execute type on id=password with value 123456... Success
7. Trying to execute clickAt on id=confirmPassword with value 142,17... Success

(输入无效 邮箱格式不正确 无@)

	Command	Target	Value
signin*			
signin1*	2. click at	id=email	-17,29
signin2*	3. type	id=email	~前 1415@123.com
	4. click at	//div[@id='userRegisterPage']/div[2]/div[2]	299,7
	5. click at	id=password	161,12



Command
Target  
Value
Comment

Runs: 1 Failures: 0

Log

- 2. Trying to execute clickAt on id=email with value -17,29... Success
- 3. Trying to execute type on id=email with value ~前 1415@123.com... Success
- 4. Trying to execute clickAt on //div[@id='userRegisterPage']/div[2]/div[2]/div[2] with value 299,7... Success
- 5. Trying to execute clickAt on id=password with value 161,12... Success
- 6. Trying to execute clickAt on id=password with value -182,26... Success
- 7. Trying to execute clickAt on id=confirmPassword with value -48,23... Success

	Command	Target	Value
signin*			
signin1*	3. type	id=email	123@安 aaf ag.com
signin2*	4. click at	//div[@id='userRegisterPage']/div[2]/div[2]	343,13
signin3*	5. click at	id=password	164,11

Command
Target  
Value
Comment

Runs: 1 Failures: 0

Log

- 4. Trying to execute clickAt on //div[@id='userRegisterPage']/div[2]/div[2]/div[2] with value 343,13... Success
- 5. Trying to execute clickAt on id=password with value 164,11... Success
- 6. Trying to execute type on id=password with value 123456... Success
- 7. Trying to execute clickAt on id=confirmPassword with value 196,21... Success
- 8. Trying to execute type on id=confirmPassword with value 123456... Success
- 9. Trying to execute clickAt on id=userRegister with value 163,15... Success

(输入无效 邮箱格式不正确 含非数字字母字符)

	Command	Target	Value
signin*			
signin1*	3. type	id=email	131@aea.s qe
signin2*	4. click at	id=confirmP assword	59,16
signin3*	5. click at	id=passwor d	60,16
signin4*	6. type	id=passwor d	123456

Command
Target
Value
Comment

Runs: 0 Failures: 0

Log

- 2. Trying to execute clickAt on id=email with value 38,11... Success
- 3. Trying to execute type on id=email with value 131@aea.sqe... Success
- 4. Trying to execute clickAt on id=confirmPassword with value 59,16... Success
- 5. Trying to execute clickAt on id=password with value 60,16... Success
- 6. Trying to execute type on id=password with value 123456... Success
- 7. Trying to execute clickAt on id=confirmPassword with value 81,16... Success
- 8. Trying to execute type on id=confirmPassword with value 123456... Success
- 9. Trying to execute clickAt on id=userRegister with value 109,26... Success

(输入无效 邮箱格式不正确 结尾字符非法)

	Command	Target	Value
signin*			
signin1*	2. click at	id=email	29,9
signin2*	3. type	id=email	123456@s mail.nju.edu .cn
signin3*	4. click at	id=confirmP assword	188,17
signin4*	5. click at	id=passwor d	158,4
signin5*			

Command
Target
Value
Comment

Runs: 1 Failures: 0

Log

- 2. Trying to execute clickAt on id=email with value 29,9... Success
- 3. Trying to execute type on id=email with value 123456@smail.nju.edu.cn... Success
- 4. Trying to execute clickAt on id=confirmPassword with value 188,17... Success
- 5. Trying to execute clickAt on id=password with value 158,4... Success
- 6. Trying to execute type on id=password with value 123456... Success
- 7. Trying to execute clickAt on id=confirmPassword with value 190,16... Success
- 8. Trying to execute type on id=confirmPassword with value 1234567... Success

(输入无效 两次输入密码不同)

日记账表单录入测试:

journal*

signin*

signin1*

signin2*

signin3*

signin4*

signin5*

	Command	Target	Value
3.	click at	css=div.DisplayText.DisplayMoney	65,23
4.	type	css=input.inputJieFang	123557.89
5.	submit	id=ctl00	

Command

Target

Value

Comment

Runs: 1 Failures: 0

Log

Running Journal

1. Trying to execute open on /App/Default.aspx... Success

2. Trying to execute selectFrame on index=2... Success

3. Trying to execute clickAt on css=div.DisplayText.DisplayMoney with value 65,23... Success

4. Trying to execute type on css=input.inputJieFang with value 123557.89... Success

5. Trying to execute submit on id=ctl00... Success

'journal' completed successfully

(输入有效)

journal*

journal1*

signin*

signin1*

signin2*

signin3*

signin4*

signin5*

	Command	Target	Value
3.	click at	css=div.DisplayText.DisplayMoney	56,15
4.	type	css=input.inputJieFang	-12314
5.	submit	id=ctl00	

Command

Target

Value

Comment

Runs: 1 Failures: 0

Log

Running journal1

1. Trying to execute open on /App/Default.aspx... Success

2. Trying to execute selectFrame on index=2... Success

3. Trying to execute clickAt on css=div.DisplayText.DisplayMoney with value 56,15... Success

4. Trying to execute type on css=input.inputJieFang with value -12314... Success

5. Trying to execute submit on id=ctl00... Success

'journal1' completed successfully

(输入无效 输入负值)

	Command	Target	Value
journal*			
journal1*			
journal2*	3. click at	css=div.DisplayText.DisplayMoney	199,43
signin*	4. type	css=input.inputJieFang	d
signin1*	5. submit	id=ctl00	
signin2*			
signin3*	Command		
signin4*	Target		
signin5*	Value		
	Comment		

Runs: 1 Failures: 0

Log

Running journal2

- Trying to execute open on /App/Default.aspx... Success
- Trying to execute selectFrame on index=2... Success
- Trying to execute clickAt on css=div.DisplayText.DisplayMoney with value 199,43... Success
- Trying to execute type on css=input.inputJieFang with value d... Success
- Trying to execute submit on id=ctl00... Success

'journal2' completed successfully

(输入无效 输入非数字字符)

	Command	Target	Value
journal*			
journal1*	2. selectFrame	index=2	
journal2*	3. click at	css=div.DisplayText.DisplayMoney	136,27
journal3*	4. type	css=input.inputDaiFang	352
signin*	5. submit	id=ctl00	
signin1*			
signin2*	Command	open	
signin3*	Target	/App/Default.aspx	
signin4*	Value		
	Comment		

Runs: 1 Failures: 1

Log

- Trying to execute open on /App/Default.aspx... Success
- Trying to execute selectFrame on index=2... Success
- Trying to execute clickAt on css=div.DisplayText.DisplayMoney with value 136,27... Success
- Trying to execute type on css=input.inputDaiFang with value 352... **Failed:**
Element is not currently interactable and may not be manipulated
- Trying to execute submit on id=ctl00... Success

'journal3' completed with 1 error(s)

(输入无效 输入数字是其中含有字符)

文件操作及计算测试：

journal*

journal1*

journal2*

journal3*

link*

output*

signin*

signin1*

signin2*

Runs: 1 Failures: 0

	Command	Target	Value
1.	open	/App/Default.aspx	
2.	select frame	index=2	
3.	click at	id=downloadCashFlow	48,14

Command

Target

Value

Comment

Log

16. Trying to execute clickAt on //a[contains(text(), '现金流量表')] with value 53,13... Success

'link' completed successfully

Running 'output'

1. Trying to execute open on /App/Default.aspx... Success

2. Trying to execute selectFrame on index=2... Success

3. Trying to execute clickAt on id=downloadCashFlow with value 48,14... Success

'output' completed successfully

（输入有效 成功导出表格）

导航链接测试：

journal*

journal1*

journal2*

journal3*

link*

signin*

signin1*

signin2*

signin3*

Runs: 1 Failures: 0

	Command	Target	Value
12.	mouse out	//a[contains(text(), '核算项目明细账')]	
13.	click at	//a[contains(text(), '核算项目余额表')]	45,13
14.	click at	id=10500000	83,36

Command

Target

Value

Comment

Log

6. Trying to execute clickAt on //a[contains(text(), '总账')] with value 27,24... Success

7. Trying to execute clickAt on //a[contains(text(), '科目余额表')] with value 33,19... Success

8. Trying to execute clickAt on //a[contains(text(), '科目汇总表')] with value 39,19... Success

9. Trying to execute clickAt on //a[contains(text(), '序时账')] with value 42,25... Success

10. Trying to execute clickAt on //a[contains(text(), '核算项目明细账')] with value 43,27... Success

11. Trying to execute mouseOver on //a[contains(text(), '核算项目明细账')]... Success

（链接有效 能够到达相应的页面）
以上功能测试均成功，系统能够实现预定功能。

性能测试：

安全性：

Database SQL Data Design DDL						
Refresh						
RecNo	company_ID	company_name	password	email	c_time	has_confirmed
Click here to define a filter						
1	176309	test2	3404dada19311c51dd17bcc3d270a5fd5b91d547c33f7bbf677ad87c2c7dc	1072678337@qq.com	2018-05-28 10:30:46.312	<input checked="" type="checkbox"/>

（用户密码存入数据库时进行了 hash 处理 系统安全性较高）

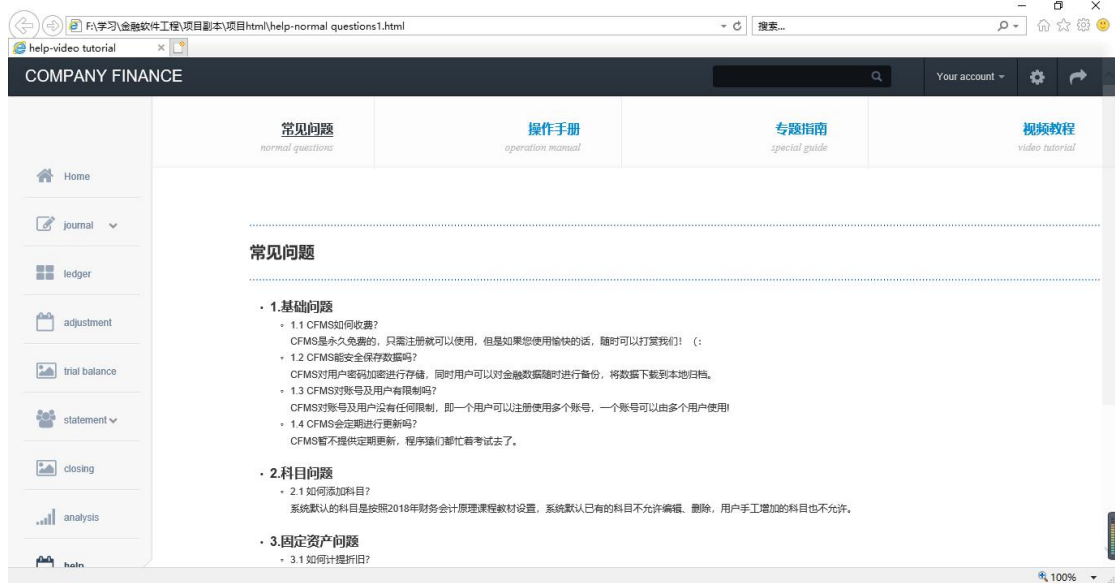
兼容性：



（360 安全浏览器）



（Google chrome）



(IE 浏览器)



(Microsoft Edge)

以上可以看出，系统在各大浏览器中显示均未出现问题，有较强的兼容性。