



智产智融
Smart P&L

Smart P&L

Test Analysis Report

by Sparklefish



Directory

1. Introduction.....	1
1.1 Intensions of the report.....	1
1.2 Project overview	1
1.3 Terms and abbreviations	2
1.4 Reference.....	3
2. Test summary	4
2.1 Test content	4
2.2 Test case design.....	5
2.3 Test method and tools	5
3. Test cases and test result.....	5
3.1 Web pages	5
3.1.1 Front end.....	5
3.2 Management System	27
3.3 Compatibility.....	27
4. Test conclusion and analysis.....	28
4.1 Capacity	28
4.2 Defect and limit	28
4.3 Evaluation.....	28
5. Test resource consumption	28





1. Introduction

1.1 Intensions of the report

This report is a test analysis report of “Smart p&l” platform with the intensions of summarizing the test procedure during the testing phase and analyzing the test results to describe whether the system meets the demand and realizes the intended target of green-credit platform.

Expected reference includes testers, developers, project managers, other quality managers and the judges and acceptors of the contest who need to read this report.

1.2 Project overview

With the rapid development of China's economy, the number of small and medium-sized enterprises is also growing rapidly, and they are playing more and more important roles in the country's economic aspect. According to the statistics data from the National Administration for Industry and Commerce of China, in 2013 the total amount of China's small and medium enterprises and individual industrial and commercial households registered has more than 15 million. By the end of 2016 the number will be more than 70 million. With the annual growth rate of more than 10%, it is estimated that by 2020, China's small and medium enterprises and individual industrial and commercial households will be more than 90 million. SMEs have accounted for more than 99% of the total number of enterprises. According to the guiding spirit of the 18th National People 's Congress, it is important to “promote public entrepreneurship innovation, and constantly cultivate new, new kinetic energy to promote sustained and healthy development of small and medium enterprises”. With the implement of the next 5 year plan and the in-depth development of China's market economy, the number and size of small and medium enterprises will continue to develop.

While small and medium enterprises are booming, the financing environment for small and medium-sized enterprises is very bad. According to the data from Bank of China released in 2014, we found that by June 2013, the total number of small and medium enterprises has reached 56.51 million yet less than 10% of them could obtain credit





support from the bank. China's SME is currently facing problems in difficult financing processes, limited financing channels, high financing costs, and the problem is becoming increasing hard.

Based on this development background, "Smart p&l" SME financing platform firmly grasp the market development opportunities and access to SME financing market. We are committed to improving the financing of small and medium enterprises, reducing the financing costs of small and medium enterprises, and to provide convenient and standardized services in credit audit and risk assessment for SMEs financing.

System function diagram:



1.3 Terms and abbreviations

Level 1 mistake: Cannot completely satisfy requirements of the system, basic functions are not fully realized; or endanger personal safety.

Level 2 mistake: Influence the requirements of the system or the realization of basic functions seriously, and no correction method.





Level 3 mistake: Influence the requirements of the system or the realization of basic functions seriously, but there is a reasonable correction way

Level 4 mistake: Bring inconvenience and trouble to the operator, but not affect the executive function or other important functions.

Level 5 mistake: other mistakes.

Back-test: After a test item with error or defects is modified and debugged by the developers, the software testers retest the item and the related item.

Test cases: The test data and the expected output are called test cases.

Black box testing: Also called function test or data driven test. Means that the function of a product is known, detecting whether each function works normally through the test. When testing, the program is regarded as a black box that can't open and the program interface is tested.

White box testing: Also called structure testing or logic driven testing, refers to detecting whether the internal working process (which is known) meets the Requirements Specification, whether every path of the procedure can work properly by testing the system as its inner structure. When testing, the tester must check the internal structure of the program, gaining test data from checking the logic of the programs.

1.4 Reference

- a. User manual
- b. System requirements specification
- c. Test Plan





d. Document reference: "computer software product development document preparation guide" (GB 8567-88)

e. "Software Engineering - Practitioners' Research Methods" (Sixth Edition) Roger S. Pressman, Zheng Renjie, Ma Suxia, Bai Xiaoying Translator, Mechanical Industry Press

2. Test summary

2.1 Test content

The system test includes the following five main aspects:

- System Performance Test

Use test plans of the system performance to do the performance test for the system in order to ensure that the server is able to withstand the largest operating pressure of concurrent users, ensure that the server's response time shall be not less than the users' acceptable range in the case of multiple workflow execution. Analysis the test pages of performance test and search for the bottlenecks of the system's performance to solve the problem and optimize the system.

- System Function Test

System function test is the verification of every product's function. According to the case of function test, we can check whether the products satisfy the users' demand through each test.

- System Availability Test

Availability Test is a test that let users use the design model or finished product and then record and analyze users' behavior and feelings through observation to improve the availability of the product.





- System Compatibility Test

Compatibility Test will verify the reliance between software and its environment especially the browsers and operating systems.

- System Safety Test

Safety test is the procedure about verification of website's secure services and identification of website's potential secure defect.

2.2 Test case design

The system test case design uses Boundary Value Analysis, Effect Graphs and other ways. It tests every function of the system, analyzes and summarizes the system's performance, functions and reliability.

2.3 Test method and tools

This test is mainly black box testing, focusing on the function testing and compatibility testing,

3. Test cases and test result

3.1 Web pages

3.1.1 Front end

In the front page of the system, small and medium enterprises or financial institutions to register the information of enterprises or institutions, registered after the success of the entry into the home page. On the one hand, companies can publish their own borrowing





needs or willingness to provide loans on the platform, after the release of the borrowing needs of the platform will be smart to match the corresponding willing to provide loans to the enterprise and published to the business circle, the two sides to initiate an application and consent to contact The borrower can modify the information about the loan that was initiated before, and initiate the contract template to the lender, and the lender confirms that the contract is officially started and the process of the guarantee business is similar. At the same time, small and medium enterprises can be in the platform for debt transactions (including the issuance of claims and the purchase of claims). The platform tracks every transaction that occurs on the platform as a basis for a corporate credit rating.

(1) List of use cases

Case number	Case name	Functions	Participants
UC001	User registration	The user registers the account with the information through the platform	Zheng Weilin
UC002	User login	The user enters the platform through the account number and password	Zheng Weilin
UC003	Introduction	Users can see the platform's business characteristics on this page	Zheng Weilin
UC004	Information disclosure	Users in the page you can see on the platform have bad history of the enterprise	Zheng Weilin
UC005	about us	Users on this page can see the object of cooperation with the platform	Zheng Weilin
UC006	Cooperation	Financial institution users see specific ways to work with the platform on the page	Zheng Weilin
UC007	My	Users click into the specific user specific	Zheng Weilin





	business	business fill	
UC008	Partner	Users in this page to build business friends circle	Zheng Weilin
UC009	Borrowing business	The user performs the process of borrowing on the page	Zheng Weilin
UC010	Bond trade	The user operates the process of dealing with the bond on this page	Zheng Weilin
UC011	Guarantee business	The user performs a guaranteed process on the page	Zheng Weilin
UC012	Message Center	Users can view information about friends and business applications on this page	Zheng Weilin

(2) Detailed use cases

UC001 User Register

Module Name	User Register		Tester	Zheng Weilin	
Test Code	registMain.vue		Test Time	2017-09-09	
Function	The user registers the account number on the platform by filling in his / her own personal information				
Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
Register the validity of the mailbox	Check input validity	Can not be registered	Can not be registered	none	
Password Enter 6-12 numeric character combination	Check the input password for validity	Can not be registered and there will be a window to remind	Can not be registered and there will be a window to remind	none	
The password is not the same as the confirmation password	Check the correctness of the password	Can not be registered and there will be a	Can not be registered and there will be a window to	none	





		window to remind	remind		
Related business information can not be empty	Check input validity	Can not be registered and there will be a window to remind	Can not be registered and there will be a window to remind	none	
Registered capital greater than 0	Detection of registered capital greater than 0	Can not be registered and there will be a window to remind	Can not be registered and there will be a window to remind	none	
Enterprise industry must choose	Check input validity	Can not be registered and there will be a window to remind	Can not be registered and there will be a window to remind	none	
The registered email address has been registered	Check whether the registered mailbox has been registered	Can not be registered and there will be a window to remind	Can not be registered and there will be a window to remind	none	
Business contacts can not be empty	Check input validity	Can not be registered and there will be a window to remind	Can not be registered and there will be a window to remind	none	





Test Page

The registration form is titled "注册" (Register) and is divided into three steps:

- Step 1:** Basic registration information.
 - 邮箱地址 (Email Address): 请输入企业邮箱 (Please enter corporate email)
 - 密码 (Password): 6-12位数字字母组合 (6-12 digit alphanumeric combination)
 - 确认密码 (Confirm Password): 确认密码 (Confirm password)
 - Link: 已有账户? 点击登录 (Already have an account? Click to login)
- Step 2:** Company information.
 - 企业信息 (Company Information):
 - 企业名称 (Company Name)
 - 组织机构代码 (Organizational Code)
 - 注册资本 (Registered Capital)
 - 成立时间 (Establishment Time)
 - 法定代表人 (Legal Representative)
 - 公司邮箱 (Company Email)
 - 公司电话 (Company Phone)
 - 其他信息 (Other Information):
 - 总经理 (General Manager)
 - 注册地址 (Registered Address)
 - 办公地址 (Office Address)
 - 所属行业 (Industry)
 - 主营产品 (Main Products)
 - 企业简介 (Company Introduction)
- Step 3:** Verification and completion.
 - 企业联系人信息 (Company Contact Information):
 - 姓名 (Name)
 - 职务 (Position)
 - 手机号 (Mobile Number)
 - 电子邮箱 (Email)
 - QQ号码 (QQ Number)
 - 公司个人电话 (Company/Personal Phone)
 - 上传照片验证资料 (Upload photo verification materials):
 - 法人单位执照 (Legal Entity License)
 - 银行开户许可证 (Bank Account Opening License)
 - 第三方认证 (Third-party authentication)
 - 提交 (Submit) button





UC002 User Login

Module Name	User Login		Tester	Zheng Weilin	
Test Code	loginFac.vue		Test time	2017-09-09	
Function	The user enters the platform by filling in his / her account and password				
Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
Input does not exist account	Verify the correctnes s of the account	The drop-down text shows the account number or password is incorrect	The drop-down text shows the account number or password is incorrect	none	
Enter the wrong password	Check the password input correctnes s	The drop-down text shows the account number or password is incorrect	The drop-down text shows the account number or password is incorrect	none	
Click "Forgot Password"	Check the correctnes s of the link	The system automatically sends mail to the user's mailbox	The system automatically sends mail to the user's mailbox	none	
Click "Register"	Check the correctnes s of the link	Jump the registration page	Jump the registration page	none	
Click to	Check the correctnes	Jump home page	Jump home page	none	





Login"	s of the link				
Test page					

UC003 Introduction page

Module Name	Introduction page		Tester		Zheng Weilin	
Test Code File	home.vue 和 introduction.vue		Test Time		2017-09-09	
Functions	This page allows the user a simple understanding of the platform's process					
Test Condition	Test Content	Expected Test Result	Actual Test Result	Test	Problems	Amendment
Platform information	To view	Display platform information	Display platform information		none	
Click Login to jump to the login screen	Test the correctness of the link	Jump to the login screen	Jump to the login screen		none	





Test page



UC004 Information disclosure

Module	Information	Tester	Zheng Weilin
Name	disclosure		
Test Code	home.vue 和 information.vue	Test Time	2017-09-09
File			
Functions	Users can see companies with bad historical records on the platform		





Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
To view	Show dishonest business	Show dishonest business	Show dishonest business	None	
Test page					





UC006 Cooperation

Module Name	Cooperation		Tester	Zheng Weilin	
Test Code	home.vue 和 cooperate.vue		Test Time	2017-09-09	
File					
Functions	Financial institution users see specific ways to work with the platform on the page				
Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
To view	see specific ways to work with the platform	see specific ways to work with the platform	see specific ways to work with the platform	none	
Test Page	<div><div>local-end</div><div>front-end</div><div>localhost:8080</div><div><div><div></div><div>简化放贷过程</div></div><div><div></div><div>参与企业债权债务收购</div></div><div><div></div><div>获得更多客户来源</div></div><div><div></div><div>提高知名度</div></div></div><div><p>本平台主要与金融机构达成合作伙伴关系。合作的金融机构可以通过平台对于向本机构贷款的企业进行企业信用审核，简化放贷流程；同时，平台还可以与金融机构合作，建立较为规范的企业担保放贷体系；最后，金融机构还可以参与企业债权的收购业务。</p></div><div><div><div>覆盖整个珠三角地区</div><div>企业客户量庞大</div></div><div><div>平台属于互联网+主流</div><div>线上线下零距离对接</div></div><div><div>基于企业合作伙伴关系网络</div><div>金融风险小</div></div></div><div>合作伙伴展示</div><div><div></div><div></div><div></div><div></div></div></div>				

UC007 My business

Module	My business	Tester	Zheng Weilin
--------	-------------	--------	--------------





Name																																	
Test Code File	main.vue		Test Time		2017-09-08																												
Functions	The user clicks into the specific user to fill the specific business																																
Test Condition	Test Content	Expected Test Result	Actual Test Result	Test	Problems	Amendment																											
Click to jump to the interface of each business	Successfully jump to the new interface	Successfully jump to the new interface	Successfully jump to the new interface		none																												
Click on the top of each tab jump correct	Successfully jump to the business interface	Successfully jump to the business interface	Successfully jump to the business interface		none																												
Test Page	<div><div><div>投资策略</div><div>根据您的投资特点，建议您采用长线投资的方式，以股票类和混合类产品为主，可避免频繁操作的交易成本，减少赎回费用，保证较高收益。另配合稳健投资，以固定收益类和货币类为主，收益稳定，灵活性强。</div></div><div><div>个人历史记录</div><div>市场分析</div><div>理财策略推荐</div><div>个性化推荐</div><div>理财预约</div></div><div><div>个性化推荐</div><table><thead><tr><th>基金代码</th><th>基金名称</th><th>单位净值</th><th>累计净值</th><th>近三个月利率</th><th>近半年利率</th><th>近一年利率</th></tr></thead><tbody><tr><td>590008</td><td>中邮战略新兴产业股票</td><td>2.8560</td><td>2.8560</td><td>20.6081</td><td>25.3181</td><td>58.6667</td></tr><tr><td>000017</td><td>财通可持续主题</td><td>1.4930</td><td>1.5630</td><td>19.1540</td><td>21.3086</td><td>48.0762</td></tr><tr><td>000263</td><td>工银信息产业股票</td><td>1.3500</td><td>1.3500</td><td>22.7273</td><td>12.4063</td><td>-1</td></tr></tbody></table></div></div>					基金代码	基金名称	单位净值	累计净值	近三个月利率	近半年利率	近一年利率	590008	中邮战略新兴产业股票	2.8560	2.8560	20.6081	25.3181	58.6667	000017	财通可持续主题	1.4930	1.5630	19.1540	21.3086	48.0762	000263	工银信息产业股票	1.3500	1.3500	22.7273	12.4063	-1
基金代码	基金名称	单位净值	累计净值	近三个月利率	近半年利率	近一年利率																											
590008	中邮战略新兴产业股票	2.8560	2.8560	20.6081	25.3181	58.6667																											
000017	财通可持续主题	1.4930	1.5630	19.1540	21.3086	48.0762																											
000263	工银信息产业股票	1.3500	1.3500	22.7273	12.4063	-1																											

UC008 Partner

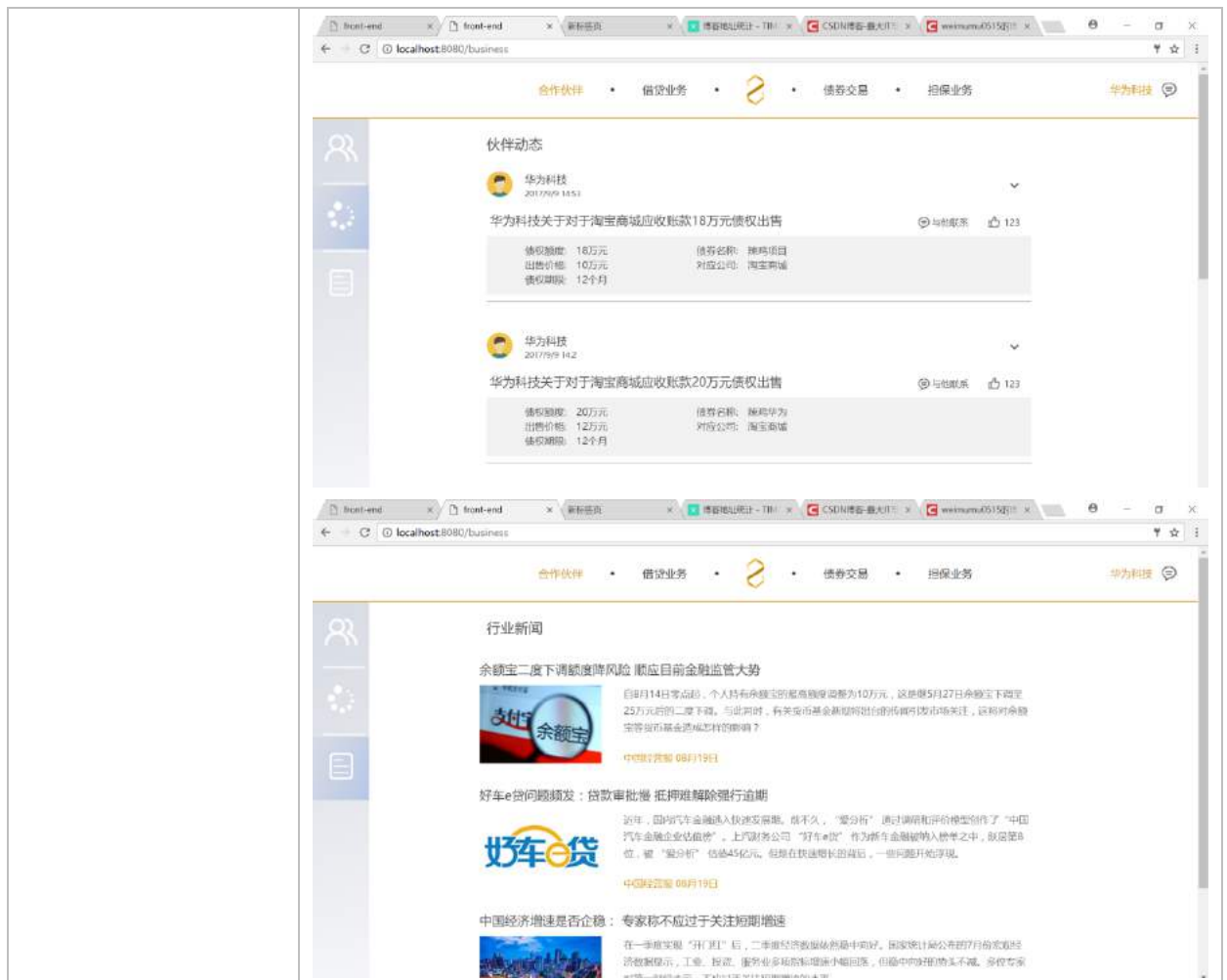
Module Name	Partner	Tester	Zheng Weilin
Test Code File	partner.vue	Test Time	2017-09-08
Functions	Users build a business circle on this page and view partner business news and industry news		





Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
Click on the left of each tab to jump to the corresponding page	Successfully jumps to the interface	Successfully jumps to the interface	Successfully jumps to the interface	none	
Friend management(search, view, remove)	Check the correctness of each part of the process	Check the correctness of each part of the process	Check the correctness of each part of the process	none	
View friends dynamic and respond accordingly	Check the correctness of each operation	Check the correctness of each operation	Check the correctness of each operation	none	
View Quotes News	Check the information correctly	Check the information correctly	Check the information correctly	none	
Test page					





UC009 Borrowing business

Module		Borrowing		Tester		Zheng Weilin	
Name		business					
Test Code	File	borrow.vue		Test Time		2017-09-09	
Functions		The user performs the process of borrowing on the page					
Test Condition		Test Content	Expected Test Result	Actual Test Result	Test	Problems	Amendment
Borrowing business		Test information input	The information input is valid	The information input is valid		none	





information	validity and posting to partner dynamics	and posted to the circle of friends	and posted to the circle of friends		
Loan business information	Test information input validity	Each information input is valid	Each information input is valid	none	
Borrowing business match results	Check the correctness of the application	Successfully initiated the application	Successfully initiated the application	none	
Business details view	View details of the business application	View the corresponding business information and friends made the application	View the corresponding business information and friends made the application	none	



The figure displays three sequential screenshots of the 'Lushan' (绿山) website interface, illustrating the user experience for a company's public information and transaction status.

Top Screenshot: Company Information (公司资料)

- Header:** Navigation bar with 'Company Information' (公司资料), 'Business Model' (商业模式), 'Transaction Status' (交易正在), and 'Investment Status' (投资状态).
- Main Content:**
 - Company Name:** 绿山科技 (Lushan Technology)
 - Address:** 北京市海淀区 (Haidian District, Beijing)
 - Contact:** 010-12345678
 - Website:** www.lushan.com
 - Business Model:** 商业模式 (Business Model)
 - Transaction Status:** 交易正在 (Transaction Status)
 - Investment Status:** 投资状态 (Investment Status)
- Right Sidebar:** 'Risk and Credit Assessment' (风险及信用评估) section, mentioning 'Green Mountain' (绿山) and 'Investment Status' (投资状态).

Middle Screenshot: Business Model (商业模式)

- Header:** Same navigation bar as the top screenshot.
- Main Content:**
 - Company Name:** 绿山科技 (Lushan Technology)
 - Address:** 北京市海淀区 (Haidian District, Beijing)
 - Contact:** 010-12345678
 - Website:** www.lushan.com
 - Business Model:** 商业模式 (Business Model)
 - Transaction Status:** 交易正在 (Transaction Status)
 - Investment Status:** 投资状态 (Investment Status)
- Right Sidebar:** 'Risk and Credit Assessment' (风险及信用评估) section, mentioning 'Green Mountain' (绿山) and 'Investment Status' (投资状态).

Bottom Screenshot: Transaction Status (交易正在)

- Header:** Same navigation bar as the top screenshot.
- Main Content:**
 - Company Name:** 绿山科技 (Lushan Technology)
 - Address:** 北京市海淀区 (Haidian District, Beijing)
 - Contact:** 010-12345678
 - Website:** www.lushan.com
 - Business Model:** 商业模式 (Business Model)
 - Transaction Status:** 交易正在 (Transaction Status)
 - Investment Status:** 投资状态 (Investment Status)
- Right Sidebar:** 'Risk and Credit Assessment' (风险及信用评估) section, mentioning 'Green Mountain' (绿山) and 'Investment Status' (投资状态).



UC010 Bond trade

Module Name	Bond trade		Tester	Zheng Weilin	
Test Code File	bondtrade.vue		Test Time	2017-09-09	
Functions	The user operates the process of dealing with the bond on this page				
Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
Claims issued	Test information input validity and posting to partner dynamics	The information input is valid and posted to the circle of friends	The information input is valid and posted to the circle of friends	none	
Creditor market	Screening claims and buying bonds	The information input is valid and posted to the circle of friends	The information input is valid and posted to the circle of friends	none	
See details of your claims transaction	View details and correct the operation	Successfully view the details and trade a series of operations	Successfully view the details and trade a series of operations	none	





Test page

front-end x front-end x 债权交易 x 博客地址 x CSDN博客 x weimiumu x 编程交易 x ByTrain's L x

localhost:8080/business

合作伙伴 • 借贷业务 • 债券交易 • 担保业务 华为科技

请填写债券信息，获得债权匹配企业推荐结果

企业关于对于 企业应收账款 0 万人民币的债权出售

融资主体： 华为科技

注册地址： 1

所属行业： 采矿业

债务主体名称

债权金额 0 万人民币

债权期限 0 月内

持有债权的来历

front-end x front-end x 债权交易 x 博客地址 x CSDN博客 x weimiumu x 编程交易 x ByTrain's L x

localhost:8080/business

合作伙伴 • 借贷业务 • 债券交易 • 担保业务 华为科技

债券名称	融资企业	对应公司	债券期限	债券金额	出售价格	
辣鸡华为	华为科技	淘宝商城	12个月	200000元	120000元	购买
辣鸡项目	华为科技	淘宝商城	12个月	180000元	100000元	购买





UC011 Guarantee business

Module	Guarantee		Tester	Zheng Weilin	
Name	business				
Test Code	guarantee.vue		Test Time	2017-09-09	
File					
Functions	The user performs a guaranteed process on the page				
Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
Guarantee business information to fill out	Test information input validity and posting to partner dynamics	The information input is valid and posted to the circle of friends	The information input is valid and posted to the circle of friends	none	
Willing to provide warranty information	Test information input validity	Each information input is valid	Each information input is valid	none	
Business details view	View details of the business application	View the corresponding business information and friends made the application	View the corresponding business information and friends made the application	none	





Test page

front-end x front-end x 债权交易 x 博客地址 x CSDN博客 x weimiumu x 编程交易 x ByTrain's L x

localhost:8080/business

合作伙伴 • 借贷业务 • 债券交易 • 担保业务 华为科技

请填写债券信息，获得债权匹配企业推荐结果

企业关于对于 企业应收账款 0 万人民币的债权出售

融资主体： 华为科技

注册地址： 1

所属行业： 采矿业

债务主体名称

债权金额 0 万人民币

债权期限 0 月内

持有债权的来历

front-end x front-end x 债权交易 x 博客地址 x CSDN博客 x weimiumu x 编程交易 x ByTrain's L x

localhost:8080/business

合作伙伴 • 借贷业务 • 债券交易 • 担保业务 华为科技

债券名称	融资企业	对应公司	债券期限	债券金额	出售价格	
辣鸡华为	华为科技	淘宝商城	12个月	200000元	120000元	购买
辣鸡项目	华为科技	淘宝商城	12个月	180000元	100000元	购买





UC012 Message Center

Module Name	Message center		Tester	Zheng Weilin	
Test Code File	messageMain.vue		Test Time	2017-09-09	
Functions	Users can view information about friends and business applications on this page				
Test Condition	Test Content	Expected Test Result	Actual Test Result	Problems	Amendment
View friends to apply for a message and proceed with it	View information and operational correctness	Successfully view the application information and agree or deny the operation	Successfully view the application information and agree or deny the operation	none	
View the business application information, and operate	View information and operational correctness	Successfully view the application information and perform a series of operations	Successfully view the application information and perform a series of operations	none	





Test page





3. 2 Management System

The management system is the manager's stool to manage and maintain the website. Through the management system, manager can verify the register, can verify users' transactions and automatically generate transaction code if trade succeed, can verify users' guarantee or other applications, can view the historical transaction records on the platform and view all users' information. After testing, the above functions turn out to be normal.

3. 3 Compatibility

Browser	Test Result
Firefox	Success
Chrome	success
Opera	Success





4. Test conclusion and analysis

4.1 Capacity

The developers should understand the demand and should judge and trade with the logic relationship among demands in the procedure of system's development. They must keep the balance between functions and technology. They can learn the new technology to solve the new problems and can realize the functions in demand.

4.2 Defect and limit

The environment of test may be different from the realistic. A large number of machines can't access the database at the same time in test environment. Test environment can't supply a large scale of data. It can't guarantee that users get good experience in this system on any operating system.

4.3 Evaluation

In general, this system can satisfy all the demand. It looks beautiful, friendly, easy on the design of the interface and the detail of using. Also, it satisfies the demand for profit of the financial institution and achieves the desired effect. So, it is deliverable.

5. Test resource consumption

Resource consumption can be ignored, technicians must have adept computer skills, the consumption of machine-hour also can be ignored.

