Future Credit Testing Plan

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01	Future Credit Testing Plan	Hui Hantao, Li Xiaodong	2016/8/20

Aims

- Make an arrangement for the time, resources, environment and tools in the testing work of Future Credit, the college credit loaning system.

1. Testing Aim

- Insure that the functions of demand management module can satisfy the appointments in *Requirements Specification.*
- The system can be used normally according to *User's Manual.*

2. Testing Requirements

- Functional requirements: Users can achieve the service such as loaning, repayment and investment.
- Non-functional requirements: The feedback time of ordinary functions like login and check will be less than 10 seconds.

3. Testing Type

3.1 Functional Testing

3.1.1 Testing Aim

- Insure that the functions of demand management module can satisfy the appointments in *Requirements Specification.*

3.1.2 Testing Range

Functional testing:

- Whether the project can be initialized
- Whether the users can register and login smoothly
- The input of personal information from users
- The loaning requirement from users
- The repayment service for users
- The investment service for users

3.1.3 Testing Methods

Do the correct and wrong input separately to execute each function and process of the system. Then verify the functions as follows:

- Make sure that the system won't be crashed no matter what the condition is
- The system can give correct prompt when the input is invalid
- The system can execute the relevant function when the input is valid

3.1.4 Completion Standards

- Finish all the planned testing

- Solve all the defects that are found

3.1.5 Testing Environment

- Hardware configuration
  - CPU: 1,000 GHz or faster
  - Internal storage: 1GB or larger
  - Available space of hard disk: 1GB or larger
- Software configuration
  - Operation system: Windows 7 or a higher version; MacOS 10.11.6 or a higher version.
  - Database: Mysql 5.6 or a higher version
  - Applications: Chrome / Safari / Firefox
- Network configuration

  10MB/s of bandwidth or more

3.1.6 Testing Tools

- Qunit
- Pyunit

3.2 Non-functional Testing

3.2.1 Testing Aim

- The feedback time of ordinary functions like login and check will be less than 10 seconds.

3.2.2 Testing Range

- The request of feedback at all of the function points.

3.2.3. Testing Methods

Do the correct and wrong input separately to execute each function and process of the system. Then verify the functions as follows:

- Make sure that the system can give a feedback no matter what the condition is.
- The system can give correct prompt when the input is invalid.
- The system can execute the relevant function and give feedback in time when the input is valid.

3.2.4 Completion Standards

- Finish all the planned testing
- Solve all the defects that are found

3.2.5 Testing Environment

- Hardware configuration
  - CPU: 1,000 GHz or faster
  - Internal storage: 1GB or larger
  - Available space of hard disk: 1GB or larger
- Software configuration
  - Operation system: Windows 7 or a higher version; MacOS 10.11.6 or a higher version.
  - Database: Mysql 5.6 or a higher version
  - Applications: Chrome / Safari / Firefox

- Network configuration

  10MB/s of bandwidth or more

3.2.6 Testing Tools

- Manual test.

4. Temporal Planning/Resource Allocation

4.1 Standard Reference

- Information technologies, software packages, quality requirements and testing of GB/T 17544-1998; operation instruction of T0305.
- Sample software requirement specification of T0305.

4.2 Testing Scheduling

Testing activity	Start time of the plan	End time of the plan
Make the testing plan	2017-9-2	2017-9-3
Design the testing case	2017-9-4	2017-9-6
Do the testing	2017-9-7	2017-9-10
Evaluate the testing	2017-9-11	2017-9-12
Complete the testing document	2017-9-13	2017-9-13

4.3 Testing Resources

4.3.1 Human Resource Arrangement for Functional Testing

Character	Name	Specific obligation / Annotation

Testing principal	Wang Youyun	Supervise the testing process and getting familiar with software business.
Testing analyst	All members in the testing group	Getting familiar with the software business and initialize data.
Testing designer	All members in the testing group	Design the testing scheme and test case; environment configuration.
Tester	All members in the testing group	The achievement and execution of test case; write the system testing analysis report.

4.3.2 Human Resource Arrangement for Non-functional Testing

Character	**Name**	**Specific obligation / Annotation**
Testing principal	Wang Youyun	Supervise the testing process and getting familiar with software business.
Testing analyst	All members in the testing group	Getting familiar with the software business and initialize data; environment configuration.
Testing designer	All members in the testing group	Design the testing scheme and test case.
Tester	All members in the testing group	The achievement and execution of test case; write the system testing analysis report.

5. Test Procedure Monitoring

- Using the document *Test Case* and the scheduling part in *Test Plans* to do

the track testing for the project. Then we can find and record the defects, then correct them in time.

6. Risk Analysis

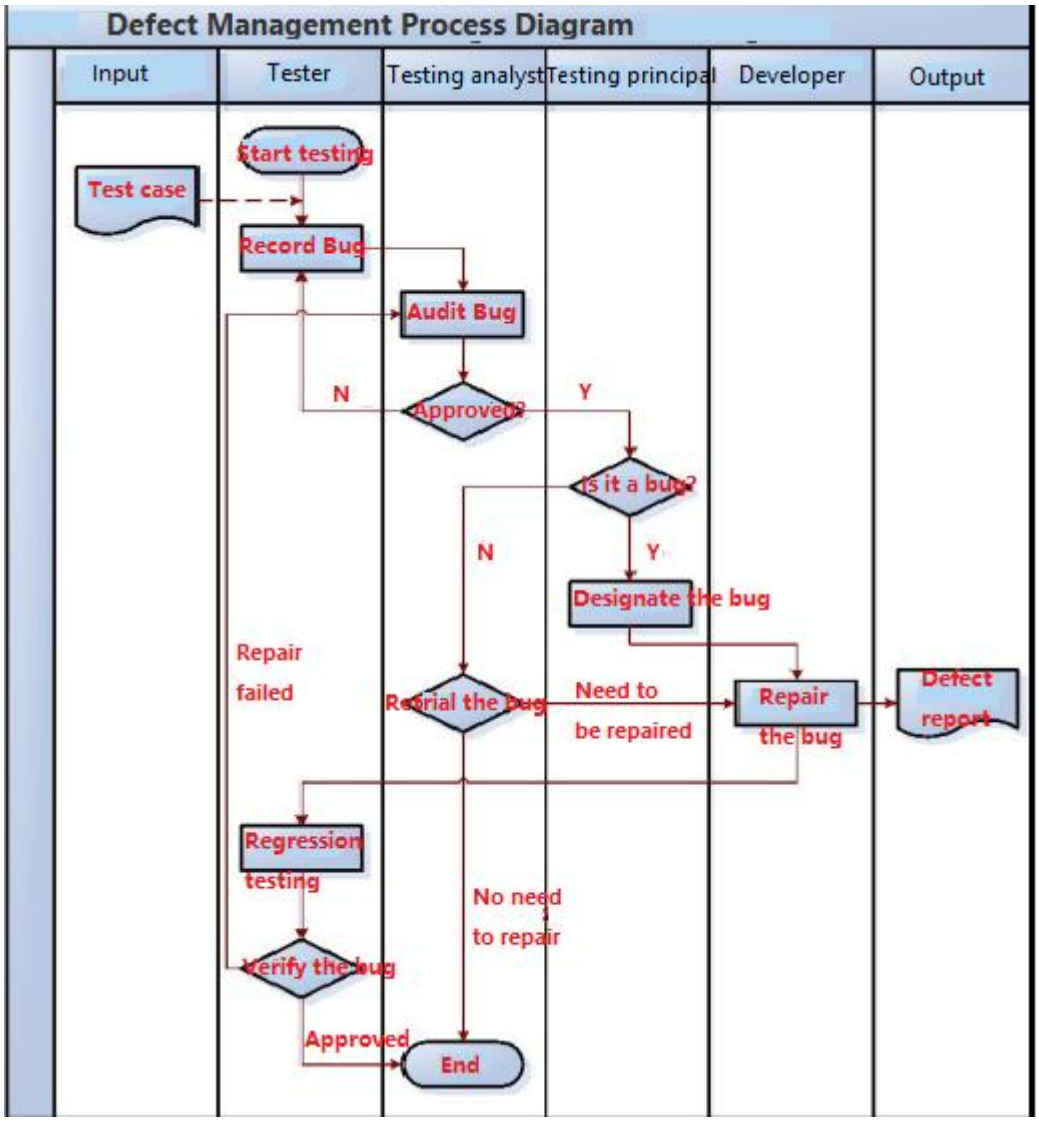
No.	Risk Description	Probability	Class	Avoiding measures	Person in charge
1	Testers are not familiar with the rules and restrictions of the problem domain, which results in an outcome bias.	50%	High	Emphasize that everyone should audit the rules and restrictions strictly on the stage of requirement.	Wang Youyun
2	Testers have tested strictly according to test cases, but the testing is still not all-sided.	70%	High	Trace and perfect test cases continually.	Wang Youyun
3	Errors in test cases, which leads to functional errors.	20%	High	Audit the correctness and the consistency with requirements	Wang Youyun

				of test cases strictly.	

7. Defect Management and Correction Plan

7.1 Defect Management Process

7.1.1 Process Diagram



7.1.2 Process Description

- Input → Testers record the Bugs → Testing analysts audit the Bugs → Developmental engineers repair the Bugs → Form the defect report

7.2 Correction Plan

Future Credit System Defect Report

Future Credit System Testing Analysis Report