## **Team Software Project Test Process**

**1.Test plan:**

The test procedure of our group team can be divided into three stages in accordance with time. Our first sprint is from 2 to 4 week and weeks 5-7, 8-10 are the second and third sprint in turn.In order to ensure that the testing process goes smoothly,the test developers usually queried and learned the various functions in the project functionality in the API document.Besides, in general, sprint cycles are divided into two categories:Feature Sprint and Release Sprint.To be specific, feature sprint mainly involves the development of new features and various types of testing.In comparison to the feature sprint, release sprint becomes a little more complicated.At first, release sprint needs to determine the function of new version combined with the plan.Secondly,our test developer s test the new functions.

1.1 The responsibilities of tester

In agile software development, the responsibilities of testers have three main aspects:

(Define Quality)：This should be the basic duty of software testers in the objective of the agile tests encourage testers how to communicate with the developers, mutual Communication set quality requirements for product function defect

(Communication) : agile process emphasizes the Communication of team developers often focus on the important function and novel, testers should seize the details, looking for the missing in the design of feel. In addition, developers use unit tests to ensure the basic quality of the product, and testers can use Acceptance tests to identify inconsistencies between customer needs and actual results

(Feedback): The agile process emphasizes simplicity and efficiency. The tester needs to feedback the current quality problems of the product in time. In this way, the team can start to solve it immediately. If the traditional process is to summarize the status once a week, the agile process requires daily quality issues to be summarized. In our project, the internal test report will be displayed on the internal site in the form of a web page. Every team member can get it at any time. In addition, our test framework provides Self-assistant Test: By clicking on a specific use case in the test case list, developers can reproduce the defect without interrupting the tester's work.

1.2 Estimate acceptance test time

In general, our first sprint is from 2 to 4 week and weeks 5-7, 8-10 are the second and third sprint in turn.There is a week of free time between iterations for developers to learn and review the knowledge and techniques used in the project, as well as for testers to record problems encountered during testing

Design test cases and prepare test data for 2 days

Load the data set and record for 1 day

Perform tests and communicate with developers for 2 days

In total: 5 days

All test cases are based on the user stories.In our user stories,there are nine tasks to complete for software developers.In addition to this, as a rule of thumb,testing usually accounts for about a third of a project's development time.For example,if a project is estimated to take 30 days to develop,test developers need to spend ten days to test the program.Below is how much time each test case takes.

**2. Test Documentation**

There are nine test cases to complete and below is the concrete description about the test cases.

Test case1

Test Scenario:User input

First Sprint

|  |  |
| --- | --- |
| Task ID | Function test case |
| 1 | Can users input the destination and departure place, and the number of people as well? |
| 2 | Can users choose the activities more than one on the first page? |
| 3 | Can the system recommend an appropriate flight or price. Show the flight name and date, the duration of the flight, and the departure and arrival airport information on the second page? |
| 4 | Can the system show the details of the recommended hotel with a suitable price on the second page? |
| 5 | Can the system show the day's allocations details on the second page according to the user's input? |

|  |  |
| --- | --- |
| Task ID | UI test case |
| 6 | Is the font color and size suitable for reading? |

|  |  |
| --- | --- |
| Task ID | Performance test case |
| 7 | Is the interface jumps and responds fast? |
| 8 | Will the page will crash or lose service during use? |

Second Sprint

|  |  |
| --- | --- |
| Task ID | Function test case |
| 1 | Can users choose the start date and the end date on the first page? |
| 2 | Can user Input email in the box and the button ‘send’ can be clicked? |
| 3 | Can the system Generate a pdf and send it to the user's input email? |

|  |  |
| --- | --- |
| Task ID | Performance test case |
| 7 | Is the interface jumps and responds fast? |
| 8 | Will the page will crash or lose service during use? |

Third Sprint

|  |  |
| --- | --- |
| Task ID | Function test case |
| 1 | Can the system show the details of transportation? Including budget, distance, and price of tickets according to the user's choice on the second page. |
| 2 | Can users choose the newly added activities on the first page? |
| 3 | Can the system divide the transportation into more detailed steps ? Including which departure stop to walk, what is the arrival stop for each step, transit ways, time cost and distance for each step. |

|  |  |
| --- | --- |
| Task ID | UI test case |
| 10 | Is the UI beautiful? Does it have some pictures or icons? |

|  |  |
| --- | --- |
| Task ID | Performance test case |
| 7 | Is the interface jumps and responds fast? |
| 8 | Will the page will crash or lose service during use? |

**3. Test Results**

These test results are the results from test cases above.

Function test case results in the first sprint

|  |  |  |
| --- | --- | --- |
| Task ID | Function test case | Pass/Fail |
| 1 | Can users input the destination and departure place, and the number of people as well? | pass |
| 2 | Can users choose the activities more than one on the first page? | pass |
| 3 | Can the system recommend an appropriate flight or price. Show the flight name and date, the duration of the flight, and the departure and arrival airport information on the second page? | pass |
| 4 | Can the system show the details of the recommended hotel with a suitable price on the second page? | pass |
| 5 | Can the system show the day's allocations details on the second page according to the user's input? | pass |

|  |  |  |
| --- | --- | --- |
| Task ID | UI test case | Pass/Fail |
| 6 | Is the font color and size suitable for reading? | pass |

|  |  |  |
| --- | --- | --- |
| Task ID | Performance test case | Pass/Fail |
| 7 | Is the interface jumps and responds fast? | pass |
| 8 | Will the page will crash or lose service during use? | pass |

Function test case results in the second sprint

|  |  |  |
| --- | --- | --- |
| Task ID | Function test case | Pass/Fail |
| 1 | Can users choose the start date and the end date on the first page? | pass |
| 2 | Can user Input email in the box and the button ‘send’ can be clicked? | pass |
| 3 | Can the system Generate a pdf and send it to the user's input email? | pass |

|  |  |  |
| --- | --- | --- |
| Task ID | Performance test case | Pass/Fail |
| 7 | Is the interface jumps and responds fast? | pass |
| 8 | Will the page will crash or lose service during use? | pass |

Function test case results in the third sprint

|  |  |  |
| --- | --- | --- |
| Task ID | Function test case | Pass/Fail |
| 1 | Can the system show the details of transportation? Including budget, distance, and price of tickets according to the user's choice on the second page. | pass |
| 2 | Can users choose the newly added activities on the first page? | pass |
| 3 | Can the system divide the transportation into more detailed steps ? Including which departure stop to walk, what is the arrival stop for each step, transit ways, time cost and distance for each step. | pass |

|  |  |  |
| --- | --- | --- |
| Task ID | UI test case | Pass/Fail |
| 10 | Is the UI beautiful? Does it have some pictures or icons? | pass |

|  |  |  |
| --- | --- | --- |
| Task ID | Performance test case | Pass/Fail |
| 7 | Is the interface jumps and responds fast? | pass |
| 8 | Will the page will crash or lose service during use? | pass |