

Test Plan

*LINE Celebrate the year
2021 [Phase1]*

VERSION HISTORY

Version #	Write By	Revision Date	Approved By	Approved Date	Outline
1.0	Pitipat Anegkamol	2021-02-20			Create test plan + add all test activities of phase 1

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1 INTRODUCTION

The test plan of celebrate the year 2021 is designed to describe the scope of project, approach, schedule of testing activities, resources, risk Issue, features to be tested and not to be tested, test tools and environment requirement.

1.1 Background

Currently, customer experience and digital transformation have become an important for organizations in order to create customer satisfaction of 47 million LINE users in Thailand. LINE Thailand Development Teams is dedicated to building a variety of excellent product which including celebrate the year 2021

To celebrate the year 2021, there will be a campaign to any purchases on stickers, emojis and melodies. Every purchase will get the prize and those whose met the specific rule will get the big prize.

In Phase1 of celebrate the year 2021 there are **get big prize**

1.2 Test objective

To ensure that quality is embedded in development process and product.

1.2 Acronyms and Definitions

1.2.1 Acronyms

- Customer	Line user
- SIT	System acceptance testing
- UAT	User acceptance testing
- PM	Project Manager

2 TEST STRATEGY

2.1 Scope of Testing

2.1.1 Feature to be tested

All the feature of Line celebrate the year 2021 which were defined in software requirement specs <filename_phase1_version> are need to best

Feature Name	Applicable Roles	Description
get big prize	Customer	Customer: ทุกออเดอร์การใช้จ่ายของลูกค้า จะถูกส่งมาที่พีเจอร์ เพื่อตรวจสอบว่าสามารถที่จะได้รับ big prize หรือไม่

2.1.2 Feature not to be tested

Features outside of phase 1 and these items are not be tested because they not include in the software requirement specs

- UI
- Database logical

2.2 Test Type

In the project celebrate the year 2021, there are 2 types of testing should be conducted.

2.2.1 Functional Testing: To evaluate functions that the system should perform

- นำมาใช้ในการทดสอบฟีเจอร์ get big prize ว่าสามารถทำงานได้ตรงกับที่ระบุใน requirement หรือไม่

2.2.2 White-box Testing: To measure code coverage (on component testing level)

กำหนดให้มีการทำ White-box Testing และทั้งหมดจะถูกนำมาตรวจสอบใน ส่วนที่แยกออกมาทดสอบได้ (separately testable) ซึ่งได้แก่

- จะถูกนำมาใช้ในการทดสอบ function ที่ทำการตรวจสอบเงื่อนไขของ order number เพื่อเช็คความถูกต้องที่ควรเป็นไปตาม requirement

- จะถูกนำมาใช้ในการทดสอบ function ที่ทำการตรวจสอบเงื่อนไขของวันที่และเวลาว่าอยู่ในช่วงของ 7 วัน และเป็นเวลาที่กำหนดหรือไม่

2.2.3 Change-related Testing: To confirm that the changes have corrected the defect or implemented the functionality correctly

- **Confirmation Testing or Re-testing:** After a defect is fixed, the system must be tested with all test cases that failed due to the defect

- **Regression Testing:** To confidence that changes, whether a fix or update one part of code, have not broken existing system or service.

Confirmation testing and regression testing are performed at all test levels.

2.3 Test Level

In the project celebrate the year 2021, there are 3 level of testing should be performed.

2.3.1 Component Testing or unit testing: To correctly validate of logic on components that are separately testable.

2.3.2 Integration Testing

- **System Integration Testing (SIT):** To focus that the interactions between integrated systems is correct and correspond to system specification.

2.3.3 System Testing: เพื่อตรวจสอบส่วนของ Non-functional testing

- เพื่อยืนยันว่าจำนวน transactions ที่เข้ามาในปริมาณมาก ๆ แล้ว ระบบจะสามารถทำงานต่อได้ (และเพื่อตรวจสอบว่าสามารถรองรับได้ 70,000 transaction/day)

2.3.4 Acceptance Testing

- **User Acceptance Testing (UAT):** To ensure that the users can use the system to meet their needs.

2.4 Test Techniques

2.4.1 Decision Coverage (White-box Test Techniques): This technique must be applied with section 2.2.2

2.4.2 Equivalence Partitioning (Black-box Test Techniques): This technique must be applied with section 2.3.1 and 2.3.2

2.5 Risk and Issues

Risk	Mitigation
เนื่องจากทาง QA ทีมต้องล่าช้าทรัพยากร ไว้ให้กับทาง ทีมอื่นด้วย จึงมีโอกาสที่จะทำการ test ไม่ได้ตาม แพลนที่วางไว้	ในทีมต้องมีการอัปเดตกันตลอดเวลา เพื่อประเมินความเสี่ยงของการไม่ได้ test งานในแพลน

2.6 Test Logistics

2.6.1 Who will test?

Test level	Test by
Component testing or unit testing	Developer
Integration testing - SIT	QA, Tester
System testing	QA, Developer
Acceptance testing - UAT	PM

2.6.2 When will test occur?

Test level	When
Component testing or unit testing	After separately testable component is created
Integration testing - SIT	After all component is integrated as system and is available for testing
System testing	After SIT is done
Acceptance testing - UAT	After System testing is done

3 TEST CRITERIA

3.1 Suspension criteria

If the team members report that there are 30% of test cases failed, suspend testing until the development team or developers fixes all the failed cases.

3.2 Resumption criteria

After development team fixes all the defects.

3.3 Exit criteria

Specifies the criteria that denote a successful completion of a test phase 1

- Run rate is mandatory to be 100% unless a clear reason is given.
- Pass rate is 80%, achieving the pass rate is mandatory

4 RESOURCE PLANNING

4.1 System Resource

No.	Resource	Descriptions
1.	Smartphone (iPhone, Android)	Smartphone for testing 3 iPhone and Android device each
2.	Test tool	Use test tool which can auto generate the test result to the pre-defined form and automated test execution
3.	Line account	Line account is tested

4.2 Human Resource

No.	Member	Tasks
1.	QA	รับผิดชอบในการ System integration test และ system testing
2.	Developer	รับผิดชอบในการ develop ฟังก์ชัน
3.	PM	รับผิดชอบในการ User acceptance test

5 TEST ENVIRONMENTS

The Test Environment should be setup as figure below

<< Picture >>

6 SCHEDULE & ESTIMATION

6.1 All test task and estimation in phase 1

Task	Members	Estimate effort
Create the test specification, test scenario and test case	QA	3 mandays
Perform test execution (not include component testing)	QA	10 mandays
Test report	QA	2 mandays
Test delivery	QA	5 mandays
Total		20 mandays

และ spare อีก 10 mandays ที่เหลือไว้ให้กับโปรเจคอื่น

6.2 Schedule to complete these tasks

<< table schedule >>

7 TEST DELIVERABLES

Test deliverables are provided as below

7.1 Before testing phase

- Test plans document
- Test cases documents
- Test scenario documents
- Test design specifications

7.2 During the testing

- Test Tool
- Simulators
- Test Data
- Test Trace-ability Matrix (RTM): A document that demonstrates the relationship between requirements and test case. It's used to prove that requirements have been fulfilled
- Error logs and execution logs

7.3 After the testing cycles is over

- Test results/reports
- Defect report/Risk report
- Installation/ Test procedures guidelines
- Release notes