# **SOFTWARE TEST PLAN:**

# **Harel Travel**

# Approvals:

Approved By:	Signature	Date

## **Document Control**

Name	Harel Travel STP
Doc. Ref. No.	STP_HT_000
Document Status	Approved
Date of Issue	31/12/20

# **Change History**

Doc. Version	Author	Date	Description / Change
000	Eilon Yifrach	30/12/20	First version of the document

## **Distribution List**

Name	Role
Harel Travel agency	Director
Harel Travel agency	IT team
Harel Travel agency	Agent Managers
Development company	Developers and testers
Development company	Head of testing team

### 1 Introduction

The product under test is software that assists an aviation agency in managing vacation bookings. The product allows the agency's customers to search for and book vacation packages, and the company's agents to manage the orders and vacation packages sold.

Further details on the product and its features can be found in the SRS document attached in section 4.

### 2 Scope

In light of the requirements, we will perform an inspection of all parts of the software, with the emphasis on the main modules in the software which are search and purchase of the order by the customer, and management of orders and packages by the agent.

# 3 Test Plan Identifier and Document Change Control

STP\_HT\_000

### 4 References

https://github.com/orgs/Harels-	SRS
Tours/projects/1	
https://github.com/orgs/Harels-	Test Case
Tours/projects/1	
https://github.com/orgs/Harels-	Use Case
Tours/projects/1	
https://github.com/orgs/Harels-	DFD 1

Tours/projects/1	
https://github.com/orgs/Harels- Tours/projects/1	DFD 0
https://github.com/orgs/Harels- Tours/projects/1	The code

## 5 Test Items

Test Item Name	Test Item Version No.
Harel Travel System	1.0

## 5.1 Features to be Tested

Feature	Parent Component / System	Overview
Login	Login is parent system	The customer and the
		agent can log in. If the
		customer is not in the
		system, he is asked to
		register
Package filtering	Package filtering is a	The agent filters packages
	parent component of Find	
	a vacation	
Order	Order is a parent	The customer orders
	component of login as	packages
	customer and parent	
	system for payment	
Contact	Contact is a parent	The customer can contact
	component of login as	the agent
	customer and as agent	
	too.	

Payment	Payment is a parent	The customer can make a
	component of order.	payment
Order status	Order status tracking is	The customer can track
tracking	parent component of login	the status of the order,
	as customer	
Package	Package management is	The agent will be able to
management	parent component of login	add /remove/edit
	as agent	packages
Find a vacation	Find a vacation is a parent	The customer will be able
	component of login as	to search by specific terms
	customer	via package filtering or to
		see all the packages in DB
Wish list	Wish list is a parent	The customer will be able
	component of login as	to add specific packages
	customer	he like to the wish list

### 5.2 Features not to be Tested

In the task requirements we were asked to check all the features of the software

# 6 Testing Risk Register

Risk ID No.	1
Summary	Remote work can shorten communication
Probability of Occurrence	Medium
Customer Impact	High
Trigger	Scheduling update appointments at too long intervals
Mitigation Action	Set regular and close dates for updating the staff
Contingency Action	When a team member feels there is a shortage in communication he should

immediately update the rest of the team and
the team should consider whether it is
necessary to schedule an immediate update
meeting

Risk ID No.	2
Summary	Participating in a first-time testing process can
	lead to unexpected difficulties and poor time
	evaluation
Probability of Occurrence	High
Customer Impact	High
Trigger	Lack of knowledge of theoretical knowledge
	and estimation of times is too optimistic
Mitigation Action	Repeat the theoretical material before starting
	the tests and setting a pessimistic schedule
	as much as possible
Contingency Action	In case a deviation from the times is
	identified, a re-evaluation of the times must
	be performed and re-prioritized

Risk ID No.	3
Summary	Hardware or software issues may delay
	testing
Probability of Occurrence	Low
Customer Impact	Low
Trigger	Using inappropriate hardware, or using older
	software versions
Mitigation Action	Before starting the tests, make sure that each
	team member has the most up-to-date
	software files. Also make sure that the files
	are running on his computer without any
	glitches
Contingency Action	In case a problem is discovered with one of

the team members, immediately update the
team on the delay in your schedule and see if
the fault can be addressed. If the problem is
not resolved, join another team member and
work together on one computer

Risk ID No.	4
Summary	Delay in a team member's task may result in
	another team member's delay
Probability of Occurrence	High
Customer Impact	High
Trigger	Building a work plan that involves high
	interdependence
Mitigation Action	Build a division of labor that allows for as
	much independent work as possible among
	team members
Contingency Action	Immediate update of a team member in case
	of delay, and assistance of the team in order
	to reduce the gap

# 7 Test Approach (Strategy)

The tests performed will be manual only.

We will start with functional tests where each function is tested separately, and then we will continue with tests of each module on its own and finally tests of the whole system.

In light of the requirements, all the functions will be checked, but first the core functions of the system (search and purchase, order management and packages management) can be prioritized then the contact options and finally the wish list.

In the functional tests the main approach will be a "black box" approach, if a bug is detected at a high level of severity the tester will switch to a "white box" approach and the bug will be investigated in code and recorded in detail. There are types of tests that we cannot perform, but if it were possible we would perform load tests on the system (both the maximum amount of users in the system at the same time, and load tests on the system speed increase in the maximum mode) We would also like to perform system information security tests to ensure the protection of the business information of the travel agency and of the customers who use the site.

#### 7.1 Test Data

The information we will need for all the tests is three files: an agents file, a clients file, and a packages file, each containing a number of objects for the tests.

Each software tester will be required to save the three files on his computer for testing

Of course we will need to hold three blank parallel files, for cases where we want to simulate a case of an empty database.

Sometimes we will remove the files from the project to simulate cases where there are problems opening the files and check the behavior of the software in these cases

#### 7.2 Test Environment

Every software tester will be required to download the software files (found in GitHub) to his computer. Our test environment will be a computer with a monitor, and on it is installed visual studio 2019 software that will run the software files. There is a high priority for the test computer to have a memory of at least 8 GB RAM, in order to allow a fast run of the tests without delays.

#### 8 Personnel

Name	Role	Responsibility
Dvir Dishi	Software engineering	Module tests: logging in,
		managing orders, sending
		messages
Michael Harush	Software engineering	Module testing: Package
		search and ordering
Aviva Malako	Software engineering	Module tests: logging in,
		managing orders, sending
		messages
Eilon Yifrach	Software Testing Team	Managing the test team,
	Manager	division of labour, and
		integration between team
		members.
		Module testing: Package
		search and ordering
Alex Serudkov	Software engineering	Module tests: logging in,
		managing orders, sending
		messages
Omer Alali	Software engineering	Functional tests of the functions
		related to the database

# 9 Management and Metrics

### Management and indices:

The director of testing will be Elon. The distribution will be made as follows: All tests related to the packages and the customer will be performed by Michael Harush and Elon Yifrah, the tests related to the agent will be performed by Aviva Malko, Alex and Dvir Dishi and the tests related to the interface with the database will be performed by Omar Alali

There is one version of the code, all the developers are working on this version and each group is responsible for its own testing.

Meetings to present progress and products are scheduled every two day for half an hour, in addition to which there are regular updates in the WhatsApp messaging app regarding questions that arose during the work.

#### 9.1 Test Estimation and Schedule

Meeting date	Meeting content
17/12/2020	Coordination of expectations, explanation of the task and division of labor
20/12/2020	Status update regarding unit tests (functionality)
24/12/2020	Summary of unit tests and start of module tests
26/12/2020	Update status regarding module tests
28/12/2020	Completion of module tests and start of system tests
30/12/2020	Final update and preparation for the show

## 9.2 Test Phase Entry and Exit Criteria

### 9.2.1 Integration Test Phase Entry Criteria

- Completion of unit testing phase.
- High priority bugs found during unit testing has been fixed and closed.
- Integration plan and test environment to carry out integration testing is ready.
- Each module has gone through unit testing before the integration process.

### 9.2.2 Integration Test Phase Exit Criteria

- 100% of the integration tests are performed
- All high priority bugs have been addressed and closed
- Less than 5 medium priority issues remained open

Less than 10 low priority issues remained open

### 9.2.3 Acceptance Test Phase Entry Criteria

- Successful completion of system testing phase.
- High priority bugs found during previous testing activities has been fixed and closed.
- Functional and Business requirement has been met.
- Acceptance testing environment is ready.
- Test cases are available.

### 9.2.4 Acceptance Test Phase Exit Criteria

- Successful performance of user acceptance tests.
- The business requirements were met.
- No critical defects remained.
- There are no more than ten low-level bugs in the system
- The customer signed an acceptance check.

#### 9.3 Suspension and Resumption Criteria

During the tests we may need to make changes to the system and change functionality so the test will be stopped until a decision is made.

When there is a shortage of time and there are higher importance tests that have not yet been tested, the current tests will stop and the more important tests will be performed immediately.

The test will be resumed when the block that caused the stop was removed in the first place. In addition, the test can be taken into account for other reasons, such as whether we changed what we wanted in terms of functionality or were instructed to continue the test we stopped.

### 10 Test Deliverables

The test results will include the following:

- 1. Work plan.
- 2. Schedules for performing the tests.
- 3. Work plan for specific testing.
- 4. Detailed information on all tests performed.
- 5. A file that contains all the tests performed.
- 6. A form containing a summary of the tests with the requirements

## 11 Communication Plan

Name	Role	Contact Details
Elon yifrah	Test Team	Email: elonyifrah@gmail.com
	Leader	Phone :0544445176

Communication Aspect	Purpose
One meeting every two days	Review important issues and plan tasks for the future
closing meeting	Consolidation of products and going over all the required steps successfully performed
	required stope edecectrally performed

# 12 Glossary

Term	Meaning
DB	Data base
SRS	Software Requirements Specification
DFD	Data flow diagram
Windows	Operating system
Pc	Personal computer