Software Testing Foundations: Test Planning

with Mike Fine



Explore California Alpha Test Plan

Alpha Test - Executive Summary

Product Name	Explore California	
Product Description	connected single-source application and mobile app for tours, travels, maps, and estaurant reservations, for visitors planning a trip to California	
Test Codename	Yosemite	
Test Objective	Evaluate the stability of the product and its functions and features. Stability acceptance is the user evaluation of the product stability, which includes quality, performance, reliability, and functionality of product topics.	

Test Phases

Prep Two weeks of preparation for the test, which includes setting up the key system for test	
Test	Test plan execution and agile delivery of test results
Closure	Final report of the findings of the alpha stage of testing

Schedule

Week	Period	Topics/Activity
1	Prep	Finalize test plan, team review, workspace setup, and test case setup
2	Prep	Phone configuration, credit card system setup, API simulation, and database integration
3	Test	Air, Land, Sea
4	Test	Room, Food, Fun
5	Test	Sport Tour, Search
6	Test	Plan, Vend, Settings
7	Test	Hardware, software, regression
8	Closure	Reporting, analysis, and presentation

Results Measurement

Feedback Type	Objectives	
Bug Reports	Test quality, interoperability, and real-world performance	
Suggestions	Measure acceptance, prioritize backlog, and generate new ideas	

Test Notes

Notes

Staging of web application and mobile application will happen in week five should all database connections and API links be completed.

App distribution will be completed using TestFlight for iOS and Google Play.

Test Budget

Cost	Note	Estimated Price (USD)
Mobile phone service and test devices	Android and iPhone	\$2,427.00

Test Change Log

Date	Change Description	Author	Version
19.11.03	Final draft for team review	J. Reyes	0.5
19.11.07	Quality team updates	J. Reyes	0.6
19.11.09	New API additions	J. Reyes	0.7
19.11.20	Team approval	J. Reyes	1.0

Note: Once this plan is finalized, any deviations from the plan will be logged here. The plan will not be further modified.

Definitions

The following key terminology is used throughout this plan.

Alpha Test	A product test in real-world circumstances in real environments looking to evaluate the stability of a product			
Test Manager	The Customer Validation employee who will serve as your primary point of contact for all topics and issues related to this test. This person is responsible for successfully executing your test, responding to all requests from your team, managing the Test Support team, and presenting all relevant data and reports.			
Test Support Team	The staff assigned to supporting this test. This typically includes a Test Manager, Recruitment Lead, and Tester Lead.			
Product Owner	The primary point of contact within your organization for this test. This stakeholder will be responsible for deliverables and answers required to successfully execute this test.			
Technical Lead	The primary technical stakeholder within your organization capable of acting as second- tier support resource for testers experiencing blocking issues.			
Centercode Platform	The proprietary system leveraged for managed tests. Our platform enables us to recruit targeted candidates, select ideal testers, execute tester agreements, distribute test content, collect feedback, coordinate activities, monitor participation, generate custom reports, and more.			
Feedback Objectives	Tests are designed to achieve the Feedback Objectives designated by the Product Owner. Objectives come in three forms: (1) Topics are met via directed activities (including Surveys, Task Lists, and Calls); (2) Ongoing Objectives are met by Ongoing Feedback (Bug Reports, Suggestions, Discussions, and Private Journal) collected throughout the test period; and (3) Reactive Objectives are created throughout the test based on unanticipated results.			
Feedback Contexts	All Feedback Objectives are assigned a Context, which are typically Technical. The Context determines the Tester Segmentations, which should be used as the second data series for reports. For example, bug reports typically have a technical (quality-driven) Context, therefore a chart which breaks down bugs by severity would likely include platform (for example, iOS vs. Android) as its second series.			
Feedback Score	The value of Ongoing Feedback (such as Bug Reports or Suggestions) is measured based on a collection of custom weighted factors including Severity, Topic, Objective, and Popularity (such as Votes, Duplicates, or Comments). Each of these values are assigned a Weight with 1.0 being the baseline, and higher or lower numbers pulling their value up (more important) or down (less important). This results in an Impact Score for each individual piece of feedback, which is designed to help prioritize your test results.			

Test Overview

Product Details

Product Name	Explore California
Product Description A connected single-source application and mobile app for tours, travels and restaurant reservations, for visitors planning a trip to California	
Product URL	http://explorecalifornia.org/
Est. Product Release Date	TBD

Test Details

Test Codename	Yosemite	This term will be used internally for discussing this phase of the project
Total Test Period	5 Weeks	The period where quality will be testing the product and providing feedback

Test Stages and Phases

Stage/Phase	Start Date	Duration	Test Cases	Hardware Testing	Total
Prep Period	TBD	2 Weeks	n/a	n/a	n/a
Alpha 1 Test Period	TBD	5 Weeks	15	-	15
Closure Period	TBD	1 Week	n/a	n/a	n/a

Stakeholders

Customer Validation Team

The following team will be assigned to this project and is responsible for the successful execution of this test.

Name	Role	Responsibilities
Jessa Reyes	Test Manager	Test plan and case design, test management, schedule maintenance, team participation, and test operations
Oliver McNeil Tester Lead		Test case operation, test performance, bug tracking, bug submission, and suggestion submission

Product Team

Team members will be invited to the platform and receive reports and status updates.

Name	Project Role	Email Address	Phone Number	Time Zone
Sharon Wu	Product Manager	swu@explorecalifornia.org	866.555.2554	PST
Victor Gonzales	Technical Lead	vgonzales@explorecalifornia.org	866.555.3336	PST

Lynn Nguyen	Development Manager	lnguyen@explorecalifornia.org	866.555.6887	PST
Steve Jones	Application Developer	sjones@explorecalifornia.org	866.555.4250	PST
Devon Harris	API Relationship Manager	dharris@explorecalifornia.org	866.555.3002	PST

Test Objectives

Test Requirements

All testers must meet the following base requirements to be considered a candidate for this test.

Requirement (all of these)	Phase
Measure the reliability of each of the different product features for information accuracy and presentation	1
Test the API connectivity and ensure that data is available and meets speed thresholds	1
Assess database integrity by adding and removing records throughout the application	1
Establish performance benchmarks for accessing data and measure across each feature	1
Enter and remove vendor and user plan data with periodic random edits and see system responses	1
Run random data access test cases and measure accuracy, speed, and reliability	1
Test against the top five browsers on Windows, macOS, iOS, and Android	1
Validate reliability and security of credit card/commerce API	1
Validate app installation and account setup procedures	1

Browser Segmentations

Testing will be grouped into the following operating systems and browsers by popularity.

Segment	Requirement (one of these)	Quantity
Windows	Chrome, Brave, Edge, Mozilla Firefox, Opera, Safari, Slimjet, Maxthon, Netscape	5
MacOS	Safari, Chrome, Brave, Mozilla Firefox, Opera, Vivaldi	5
iOS	Safari, Chrome, Brave, Opera, iCab, Aloha, Firefox Focus	5
Android	Android, Chrome, Brave, Edge, Opera, Safari, Puffin, Firefox Focus, Vivaldi	5

OS Segmentations

Testing will be grouped into the following operating systems.

Segment	Requirement (one of these)	Builds
Windows	Windows 10 or later	ALL
macOS	Version 10.12 or later	ALL
iOS	Version 12.x or later	ALL
Android	Version 9.x or later	ALL

Payment Segmentations

Testing will be performed against the following financial platforms.

Segment	Requirement (one of these)	Builds
Visa	Test for compatibility with numbering, expiration, CVV, address, and zip	ALL
Mastercard	Test for compatibility with numbering, expiration, CVV, address, and zip	ALL
American Express	Test for compatibility with numbering, expiration, CVV, address, and zip	ALL
Discover	Test for compatibility with numbering, expiration, CVV, address, and zip	ALL
PayPal	Test for account linking	ALL

Test Cases and Activities

Test Cases and Activities utilizes an approach to gather insights on prioritized features of the product. This approach lays topics out as a map of the product. Cases are created on key features of the product. Issues encountered during testing are filed. Through analysis, actionable and insightful recommendations are provided in reports and weekly meeting.

Торіс	Description	Activity	Size	Weight	OS
Week 1					
Air	Measure airline connectivity and booking elements	 Enter airline information and confirmation numbers Search existing airlines Verify local airports 	L	2.0	ALL
Land	Check existing rental and ride share APIs against database results	 Make reservations with rental agencies and ride share Cancel, change, and update ride information 	L	2.0	ALL

Sea	Check existing rental and cruise APIs against database results	Book a cruise, search for cruises, and identify rentals	М	1.5	ALL
Week 2					
Room	Check existing hotel and home share APIs against database results	 Reserve a room and search for a room Make a reservation, cancel and change that reservation 	L	2.0	ALL
Food	Check existing restaurant and review APIs against database results	 Reserve a room and search for a room Make a reservation, cancel and change that reservation 	L	2.0	ALL
Fun	Check existing event and ticketing APIs against database results	 Verify events showing are only during visit window Book tickets and cancel, change, and update tickets 	L	1.75	ALL
Week 3					
Sport	Check existing rental and ticketing APIs against database results	 Reserve rentals and cancel, change, and update rentals Verify events showing are only during visit window Book tickets and cancel, change, and update tickets 	L	1.75	ALL
Tour	Check existing tour and review site APIs against database results	 Verify events showing are only during visit window Book tickets and cancel, change, and update tickets 	М	1.5	ALL
Search	Search on each section, randomly verifying data integrity	Search on all areas of topic and verify accurate and linked responses	L	2.0	ALL

Week 4	Week 4				
		Enter plan dates, travel information, personal information, and credit card data		2.0	ALL
Plan	Measure calendar, commerce, and user	Erase, cancel, change, and update data	L		
T tun	registration performance	Request PII removal	_	2.0	
		Change dates and add multiple trips			
		Test credit card transactions			
		Enter business data			
	Measure information search,	Review business categories exist and correlate to search			
Vend	correlation, and data input performance	Manage, change, erase, update, and suspend vendor data	М	1.75	ALL
		Verify booking connected API operates			
Settings	Verify adjusted settings effectiveness and responses	Adjust all settings and verify desired response operates in spec	S	1.0	ALL
Week 5					
Hardware	Test against varying phone and tablet interfaces to verify compatibility	Measure hardware compatibility and performance using required devices	L	2.0	ALL
Software	Verify across all compatible operating systems and browsers	Measure browser and operating system compatibility and performance	L	2.0	ALL
Regression	Review all existing entered issues and close all verified corrected issues and respond to open issues	Review system and build history and verify viability for beta testing	L	NA	ALL

Additional Product Topics

These are not specifically covered in Test Activities but are used for categorization of reports and establishing common terms between stakeholder groups.

Topics	Details	Weight
Database	Issues related to database performance or accuracy	1.75
User Interface	The design elements of the application and their related usability	2.0
Performance	Speed and responsiveness related to application functionality	1.5
Links	Identify connections in the application reach associated links	1.5
Text	Grammar, spelling, and other text elements in the application	1.0
Commerce	Any and all materials related to the commerce aspects of the application	2.0
Privacy	Systems regarding front-end access to security, personal identifying information, etc.	2.0
Legal	Items regarding legal, legal statements, and California law compliance	2.0
Other	Other areas of the product not covered by the above topics	1.0

Weight: A value of 1.0 will not impact the Feedback Score. Higher values signify more importance while lower values signify less. This results in identifying higher priority issues and ensures we gather sufficient feedback on key topics.

Bug Reports

Testers will be expected to report detailed accounts of any negative issues they experience as Bug Reports. Once filtered by the Customer Validation team, existing Bug Reports are available to other testers in order to collaborate and collect additional details.

Bug Report Fields

Name	Description
Summary	A single line summary of the issue
Steps to Reproduce	Detailed steps to reproduce the issue
Test Platform	A profile of the device the problem was experienced on
File Attachments	Any associated files (such as screenshots or logs)
Topic	The impacted area of the product (see Topic list)
Severity	See Bug Report Severities
Status	Choices: New, Need More Info, Sent to Client, Closed
Closure Reason	Choices: Incorrect Feedback Type, Support Request, Invalid or Inappropriate

Client Resolution	Choices: Not Started, Tester Reproduced, Reproduced, Can't Test, Cannot Reproduce
Reproduction	Defines current issue reproduction status (see Bug Reproduction)
Blocking Issue	Issues preventing the tester from further testing
Comments	A collection of comments including additional file attachments

Bug Report Field: Severity

Label	Description	Weight
Critical	Defect causes failure of essential operation of the system. A problem with a major Topic that exhibits itself frequently. A workaround may exist, but its use is not feasible for normal use. Item is affecting other items or systems not directly related to the test.	2.5
Major	Defect causes failure of noncritical aspects of the system, within a primary Topic. A problem with non-primary Topic that exhibits itself frequently	1.2
Minor	Nonessential operations are disrupted. A satisfactory or easy workaround exists to an otherwise Major severity. Problem is noncritical and not easily duplicated or does not reoccur often.	1.0
Trivial	No significant impact on operations. Defect does not impact performance.	0.5

Suggestions

Suggestions collect ideas or requests based on the live product experience. Suggestions are collaborative in nature, allowing the tester team to drive discussion toward popular Suggestions.

Suggestion Fields

Name	Description
Summary	A single-line summary of the issue
Description	A detailed overview of the idea
File Attachments	Any associated files (such as screenshots or mock-ups)
Topic	The impacted area of the product (see Topic list)
Status	Choices: New, Need More Info, Sent to Client, Closed
Closure Reason	Choices: Incorrect Feedback Type, Support Request, Invalid or Inappropriate
Client Resolution	Choices: Need More Info, Outside Scope, Existing Suggestion, Considering, Planned
Comments	Discussion surrounding the requested suggestion, including additional file attachments