##

## <Put title of system here>

Test Plan

Version: <Put number here>

Date: <Date goes here>

Presented by: <Team Name>

|  |
| --- |
| Team Member 1’s Name |
| Team Member 2’s Name |
| Team Member 3’s Name |
| Team Member 4’s Name |
| Team Member 5’s Name |

# Revision History:

<Record all document updates by date and document revision number.>

# This is a generic template of a usability evaluation plan. Information that needs to be added for your specific situation is underlined and should be replaced by your content. It is recommended that you read and follow other content as appropriate.

*Note: The evaluation emphasis is on usability but it will touch on all aspects of the overall user experience.*

# Introduction

This document describes the usability evaluation plan for Project Name. This plan includes the following sections:

1. Purpose and goals of the usability evaluation
2. Target audience
3. Design of the usability evaluation
4. Data collection methodology
5. Deliverables
6. Resources
7. Schedule

# Purpose of the Usability Evaluation

The purpose of a usability evaluation of the Project Name is to predict the expected performance of the actual customer using the current product and materials, as well as detect any serious problems prior to the release of the product. The features that will be tested through the usability evaluation process are list the major features from the SRS that will be evaluated here.

### Usability Evaluation Goals

The goals of usability evaluation include establishing a baseline of user performance for future usability evaluation, establishing and validating user performance measures, and identifying potential design concerns to be addressed in order to improve the efficiency, productivity, and end-user satisfaction. Specific usability goals allow for the creation of evaluation scenarios and tasks that will let us evaluate the extent that you are meeting those goals, and what measures can help us determine if in fact the participants are having trouble completing the tasks. Consider any areas of the design where you may have particular usability concerns.

This evaluation will be based on the following usability goals:

List high level measurable usability goals (memorability, learnability, understandability, efficiency, satisfaction) for the usability test. Start with the usability requirements in the Interactive Design Requirements Specification. You may need to refine or elaborate those requirements. You should have a minimum of 4-5 goals. These goals should also be reflected in the UX target table in **Appendix B**. The ones below are *examples, don’t copy verbatim.*

* Users will be able to complete tasks or locate specific information within specific time limits.
* Users will learn how to navigate across menus within expected time frame without receiving assistance.
* Users will make no more than two errors in completing specified tasks.
* Users learn how to use shortcuts effectively after the expected number of iterations.

We will also use a questionnaire to determine pre and post-test subjective information such as emotional reactions. Note: Each questionnaire should have 3-4 questions. Document them in **Appendix C**. The ones below are ***examples*,** *don’t copy verbatim.*

* Have users used an app like this before?
* Users feel that the pictures used on the icons are recognizable and do facilitate system use/understanding?
* Users feel that the grouping of objects on the screens are understandable.
* Users feel the on-line help provides them with all of the information necessary to use the system.
* User feel error messages are understandable.
* The users feel the overall user experience was satisfying.

# Target Audience

### Subject Selection Criteria

The selection of participants whose background and abilities that are representative of the products intended end user is a crucial element of a successful usability evaluation. The evaluation will be valid only if the people evaluated are typical end users of the product, or as close to a selected set of characteristics as possible.

The participants' responsibilities will be to attempt to complete a set of representative task scenarios presented to them in as efficient and timely a manner as possible, and to provide feedback regarding the usability and acceptability of the user interface. The participants will be directed to provide honest opinions regarding the usability of the application, and to participate in post-session subjective questionnaires and debriefing.

The following list shows the key characteristics of the end users that are considered as critical differentiators for successful adoption, and use, of Project Name. These characteristics are the basis for participant selection for the usability evaluation.

Describe how the team will select eight test participants to meet stated requirements. Explain work responsibilities and the level of experience, skills, domain knowledge, abilities, and personal traits potential participants should possess (should be based on with the work roles in the requirements document).

# Design of the Usability Evaluation

Individual evaluation sessions will take place in the following order:

* A performance evaluation in which each participant is asked to perform a series of real-life tasks
* A questionnaire and an interview after each performance evaluation to gather additional insights about Project Name and demographic information from the participants.

## Evaluation Team Roles

The roles involved in a usability test are as follows. An individual may play multiple roles and tests may not require all roles.

Trainer

Provide training overview prior to usability testing

Facilitator

* Provides overview of study to participants
* Defines usability and purpose of usability testing to participants
* Assists in conduct of participant and observer debriefing sessions
* Responds to participant's requests for assistance

Data Logger

Records participant’s actions and comments

Test Observers

* Silent observer
* Assists the data logger in identifying problems, concerns, coding bugs, and procedural errors
* Serve as note takers.

## The Evaluation Process

The usability evaluation process is as follows:

### Participant Greeting

Each participant will be personally greeted by the evaluation facilitator and made to feel comfortable and relaxed. The issue of confidentiality will be explained and the participants will be asked to sign the consent form indicating their agreement to volunteer in the evaluation.

### Orientation

The participants will receive a short, verbal scripted introduction and orientation to the evaluation. This material will explain the purpose and objective of the evaluation, and additional information about what is expected of them. They will be assured that the product is the center of the evaluation and not themselves, and that they should perform in whatever manner is typical and comfortable for them. The participants will be informed that they are being observed.

### Performance evaluation

The performance evaluation consists of a series of tasks that are evaluated separately and sequentially. The individual participants complete the tasks while being observed by the usability specialists. The scenario is as follows:

* After the orientation, the participants will be asked to sit down at the computer. The evaluation administrator will give the participants the task scenario packet and instruct them on the use of the task scenarios, where the participant will complete the tasks one at a time in the order provided in the packet.
* After the participants begin working through the evaluation scenario, they will be encouraged to work without guidance except for the provided material and the product itself. The evaluation administrator may ask the participant to verbalize his or her thoughts if the participant becomes stuck or hopelessly confused. These occurrences will be noted by the evaluation administrator, and will help to pinpoint the cause of the problem.

### Participant debriefing

After all tasks are complete or the time expires, each participant will be debriefed by the evaluation facilitator. The debriefing will include the following:

* Completion of a brief post evaluation questionnaire in which the participants share their opinions on the product’s usability, appearance of application screens, and general impressions of the product
* Participant’s overall comments about his or her experience
* Participant’s responses to probes from the evaluation facilitator about specific errors or problems encountered during the evaluation

The debriefing session serves several functions. It allows the participants to say whatever they like, which is important if tasks are frustrating. It provides important information about each participant’s rationale for performing specific actions, and it allows the collection of subjective preference data about the application and its supporting documentation.

After the debriefing session, the participants will be thanked for their efforts, and released.

## Logistics

Describe the physical logistics for the test; the location, target systems, any supporting hardware, furniture, measurement devices, recording devices, evaluator material, participant material such as the debriefing questionnaire, ambient environment, power, and so forth. Note, document scenarios for the five core tasks to be used in testing in **Appendix A**. *These are usage scenarios of each task to be performed. If the user needs to enter specific data at a step you will need to have this information written down for them on separate index cards or sheets of paper.*

# Data Collection Methodology

Data will be collected through the use of a “thinking aloud”/verbal protocol, observation of behavior, and a timer. We will use the UX target table in **Appendix B** for reporting quantitative and qualitative measurement data. Document the measurements you identify below in the table.

Measures to be collected include the following:

*Note: The following are* ***examples****, don’t copy verbatim.* ***Edit*** *to match your project or invent your own. Collected data should be adequate to evaluate that your usability goals have been met. Avoid collecting data that won’t be relevant.*

1. The mean amount of time to complete each task
2. The percentage of participants who finished each task successfully
3. The number of cases in which the participants were not able to complete a launch due to an error from which they could not recover
4. The number of times the participant used the help or on-line documentation for each task
5. The number of positive or critical statements about the on-line help documentation
6. Number of and types of errors, including:

*Observations and comments*. The evaluation facilitator notes when participants have difficulty, when an unusual behavior occurs, or when a cause of error becomes obvious.

1. *Non-critical error*. A participant makes a mistake but is able to recover duringthe task in the allotted time.
2. *Critical error*. A participant makes a mistake and is unable to recover and complete the task on time. The participant may or may not realize a mistake has been made.
3. The number of indications of frustration or joy from the participant
4. The number of subjective opinions of the usability and aesthetics of the product expressed by the participants

# Deliverables

At the completion of the usability evaluation, a formal analysis will be performed. A final evaluation report will be included in the project presentation. The analysis will detail the significant problems and observations detected during the usability evaluation, and recommendations to address the findings.

# Schedule

The usability evaluation will be conducted in date range. The following is an estimate for the total schedule.

|  |  |  |  |
| --- | --- | --- | --- |
| **Activity** | **Person Responsible** | **Time (Hours)** | **Date(s) Conducted** |
| Planning for the evaluation, including creation of evaluation materials |  |  |  |
| Arranging logistics |  |  |  |
| Piloting the materials and procedure |  |  |  |
| Running the evaluations |  |  |  |
| Analyzing data |  |  |  |
| Preparation of final report and peer review |  |  |  |
| Preparation of final presentation |  |  |  |
| Total Time |  |  |  |

# Appendix A – Task Scenarios

These are the usage scenario descriptions of each task to be performed. These tasks should form the basis for the measuring instrument in the UX target table.

# Appendix B – UX Target Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **User Role** | **UX Goal** | **UX Measure** | **Measuring Instrument** | **UX Metric** | **Baseline Level** | **Target Level** | **Observed Results** |
| Ex. Ticket buyer | Walk Up Ease of use | Initial user performance | Buy special event ticket | Time on task | 3 min as measured at the kiosk | 2.5 min | 3.5 min |

User Role – user category, work role

UX Goal – high level UX usability design objective

UX Measure – UX usability characteristic to be measured; e.g., learnability

Measuring Instrument – the benchmark task(s) or survey question to generate test data

UX Metric – test measurement values to be collected; e.g., error count

Baseline Level – performance of current system if relevant

Target Level – minimum value for success

Observed Results – measured values

# Appendix C – Questionnaires

Pre Questionnaire for User Role

1. Ex. Have you used a system to determine careers you may be interested in before?
	1. Yes
		1. Were you satisfied with the results? (Did you get results you did not like?)
	2. No

Is there a reason you have not

Post Questionnaire for User Role

1. Ex. How would you rate your overall experience with the system on a scale of 1 to 10, 1 being the lowest and 10 the highest?