**Software Test Design Document for Unity Asset Store**

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**1. Document Overview**

This document provides the detailed test design for the Unity Asset Store software development project. It outlines the approach, resources, and schedule for the testing activities. The goal is to ensure that the Unity Asset Store meets its requirements and works as expected.

**2. Test Design Approach**

The test design for the Unity Asset Store will follow a structured approach to ensure comprehensive coverage of all functionalities, performance, security, and usability aspects. The approach includes:

* **Functional Testing**: Validating core operations such as asset browsing, searching, purchasing, and integration.
* **Non-Functional Testing**: Assessing performance under load, security measures, and overall usability.
* **White-box Testing**: Evaluating internal code structures and logic.
* **Regression Testing**: Ensuring that new changes do not adversely affect existing functionalities.
* **User Acceptance Testing**: Verifying that the application meets user expectations and requirements.

**Test Design Process:**

1. **Identify Test Scenarios**: Based on requirements and use cases.
2. **Design Test Cases**: Detailed steps to validate each test scenario.
3. **Review and Approve Test Cases**: By the project team.
4. **Prepare Test Data**: Sample assets, user accounts, configurations.
5. **Execute Tests**: According to the defined schedule.
6. **Log and Track Defects**: Using a defect tracking system.
7. **Analyze Test Results**: Compare expected vs. actual outcomes.
8. **Report and Review**: Test results and metrics.

**3. Test Environment**

**Test Environments:**

* **Staging Environment**: Replica of production for pre-release testing.
* **Production-like Environment**: Simulates real-world conditions for performance testing.
* **Unity Editor Integration Environment**: For testing asset integration with various Unity Editor versions.

**Dependencies:**

* Availability of test assets and user accounts.
* Stable internet connection for testing transactions and downloads.
* Access to necessary testing tools and resources.

**4. Test Data**

Test data will include a mix of synthetic and anonymized real data to simulate various user scenarios. It will cover:

* Different types of assets (free, paid, high-resolution, etc.).
* Various user account types (developer, buyer, admin).
* Diverse purchase flows and configurations.

**Test Data Preparation:**

* Create sample assets with various attributes.
* Generate test user accounts with different roles and permissions.
* Simulate purchase transactions and integration scenarios.

## 5. Test Cases

Test cases will be designed to cover all identified test scenarios, ensuring comprehensive validation of the Unity Asset Store functionalities.

|  |  |
| --- | --- |
| **Test case name** |  |
| **Test case goal** |  |
| **Data** |  |
| **Preconditions** |  |
| **Writer** |  |
| **Date** |  |
| **Prioritization** |  |

|  |  |  |
| --- | --- | --- |
| **Step number:** | **Step:** | **Result** |
| **1** |  |  |

**Test Case ID: 1**

|  |  |
| --- | --- |
| **Test case name** | **Login** |
| **Test case goal** | Verify that user can add asset to the cart |
| **Data** | Valid email address and Valid password |
| **Preconditions** | A Desktop PC with the url to the unity asset store |
| **Writer** | Bahaa Abu Zalaf |
| **Date** | 09-07-2024 |
| **Prioritization** | 1 |

|  |  |  |
| --- | --- | --- |
| **Result** | **Step** | **Step Number** |
| |  | | --- | | Home page is displayed | | |  | | --- | | Navigate to the Unity Asset Store home page | | 1 |
| A menu opened with the Sign in button | Click on the account icon top-right | 2 |
| |  | | --- | | Login page is displayed |   With two inouts: Emaul and password | Click on the "Sign In" button | 3 |
| Text got inserted successfully in the input fields | Enter valid username and password into the login formEnter valid username and password into the login form | 4 |
| |  | | --- | | User is successfully logged in |  |  | | --- | |  | | Click on the "Login" button   |  | | --- | |  | | 5 |
| |  | | --- | | User dashboard is displayed |  |  | | --- | |  | | |  | | --- | | Verify that the user dashboard is shown after login |  |  | | --- | |  | | 6 |

**Test Case ID: 2**

|  |  |
| --- | --- |
| **Test case name** | **Add To Cart** |
| **Test case goal** | Verify that user can add asset to the cart |
| **Data** | Asset |
| **Preconditions** | A Desktop PC with the url to the unity asset store and logged in user with a paid asset |
| **Writer** | Bahaa Abu Zalaf |
| **Date** | 09-07-2024 |
| **Prioritization** | 1 |

|  |  |  |
| --- | --- | --- |
| **Result** | **Step** | **Step Number** |
| |  | | --- | | Home page is displayed |  |  | | --- | |  | | |  | | --- | | Navigate to the Unity Asset Store home page |  |  | | --- | |  | | 1 |
| |  | | --- | | User is successfully logged in |  |  | | --- | |  | | |  | | --- | | Log in using valid credentials |  |  | | --- | |  | | 2 |
| |  |  |  |  | | --- | --- | --- | --- | | |  | | --- | | 3D section page is displayed | |  |  |  | | --- | |  | |  |  | | --- | |  | | |  | | --- | | Click on the category or section for 3D assets |  |  | | --- | |  | | 3 |
| Asset details page is displayed | Click on the desired asset from the search results | 4 |
| Asset is added to the cart and the cart popup window show in the top-right. | Click on the "Add to Cart" button | 5 |
| Asset is listed in the cart | |  | | --- | | Verify that the asset is present in the cart |  |  | | --- | |  | | 6 |

**Test Case ID: 3**

|  |  |
| --- | --- |
| **Test case name** | **Verify Related Keywords for Selected Category** |
| **Test case goal** | To ensure that the related keywords section on the asset details page contains the chosen sub-category after selecting it from the section of the Unity Asset Store. |
| **Data** | |  | | --- | | Sub-categories to test: Dungeons, Fantasy, Historic, Industrial, Landscapes, Roadways, Sci-Fi, Ur A Desktop PC with the url to the unity asset store ban |  |  | | --- | |  | |
| **Preconditions** | A Desktop PC with the url to the unity asset store |
| **Writer** | Bahaa Abu Zalaf |
| **Date** | 09-07-2024 |
| **Prioritization** | 3 |

|  |  |  |
| --- | --- | --- |
| **Result** | **Step** | **Step Number** |
| |  | | --- | | Home page is displayed |  |  | | --- | |  | | |  | | --- | | Navigate to the Unity Asset Store home page |  |  | | --- | |  | | 1 |
| |  | | --- | | User is successfully logged in |  |  | | --- | |  | | |  | | --- | | Log in using valid credentials |  |  | | --- | |  | | 2 |
| 3D section page is displayed. | Navigate to the 3D section by clicking on “3D” | 3 |
| Assets related to the sub-category are displayed. | Click on the desired sub-category (e.g., Dungeons, Fantasy.) | 4 |
| Asset details page is displayed. | Click on an asset from the displayed results. | 5 |
| "Related Keywords" section is found. | |  | | --- | | Scroll down to the "Related Keywords" section on the asset details page. |  |  | | --- | |  | | 6 |
| Chosen sub-category is present in “Related Keywords”. | Verify that the chosen sub-category is listed in the "Related Keywords" section. | 7 |

**Test Case ID: 4**

|  |  |
| --- | --- |
| **Test case name** | **Add a free asset to the “my assets”** |
| **Test case goal** | To verify that a free asset can be successfully added to "my assets" in the Unity Asset Store. |
| **Data** | Free asset to be added |
| **Preconditions** | A Desktop PC with the url to the unity asset store and logged in user with a paid asset |
| **Writer** | Bahaa Abu Zalaf |
| **Date** | 09-07-2024 |
| **Prioritization** | 1 |

|  |  |  |
| --- | --- | --- |
| **Result** | **Step** | **Step Number** |
| Home page is displayed | Navigate to the Unity Asset Store home page | 1 |
| User is successfully logged in | Log in using valid credentials | 2 |
| 3D section page is displayed. | Navigate to the 3D section by clicking on “3D” | 3 |
| Free assets are displayed. | Click on free asstes in the bottm-left | 4 |
| Asset details page is displayed with the “Add to My Assets” button | Click on the asset | 5 |
| A pop-up appears asking the user to Acceot or cancel to the terms of service. | Click on "Add to My Assets" button | 6 |
| A pop-up appears at the top saying: “Added to My Assets”. | Click on the “Accept” button | 7 |
| The page of my assets get displayed and all the assets to that user are there. | Navigate to “My Assets” by cliking on the my assets tab at the top | 8 |
| The asset’s title is there with the option to “Open in Unity”. | Validate that the asset you added is there by its title | 9 |