Michael Redford

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IS316

Unit 4 Project: Define and Document Data

Define and document the data for the individual project information system. Use the CASE software to develop a data dictionary showing all data for functions described in the functional description.

Define data as it is related to:

• system boundaries,

• system interfaces external to the organization,

• system interfaces internal to the organization,

• organizational mission,

• various users in the organization, and

• decisions the system must support.

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# Introduction: Unity Launch

Unity Technologies is a developer of the Unity Game Engine and is looking to develop a video game software distribution platform. Currently it’s engine is on 25 platforms. Games made with the Unity Game Engine are highly popular and have gained decent market share. Creating a distribution platform allows Unity to also publish and make profits on publishing developer’s games.

# System Functionality

Launchpad is designed to act as a Software Distribution Center and Advertising platform for Unity Technologies, maximizing system functionality will provide us with increased profits and a universal system. The following functionality is required:

* Development of a CMS for developers to submit, price, and release their game. See system interfaces for integration details.
* Development of Desktop Software for Windows, Mac, Linux for users to purchase games.

# System Boundaries

* The system will deal with user and customer data on Unity Servers mainly. It will have to interact with external sites for payment processing.

## System Account Data

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| LAST NAME / COMPANY NAME | Record user name or company |
| FIRST NAME | Record user name |
| ACCOUNT TYPE | Allow user to chose between purchasing games and publishing |
| DOB | Date of birth |
| ENABLED | Flag to annotate if the account is enabled |
| PASSWORD | User password for logging in. |

# External System Interfaces

* The system will support multiple Payment System interfaces such as to allow consumers multiple options for payment:
  + PayPal
  + Stripe
  + Amazon Pay

## External System Data

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| METHOD OF PAYMENT | Chose between the payment system (PayPal, Stripe, Amazon Pay) |
| CONFIRMATION | Confirmation number |
| INVOICE NUMBER | Invoice number issued by the system. |
| SERVICE | Text describing game, service, etc. Purchased. |
| INVOICE DATA | Link or flag to where to invoice. |

* The service relies on submissions from Developers for its success. Ensuring that the Customer Management System is functional.
* Developers need tools to submit games and integrate into their continuous deployment dev ops. We will provide an application to allow submission automatically from continuous integration applications such as Travis CI.

## Game Submission Data

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| GAME NAME |  |
| GAME GENRE |  |
| GAME PUBLISHER |  |
| GAME INFORMATION |  |
| GAME LINK |  |
| AGE RESTRICTION |  |
| CI PLATFORM | Interface to implement software updates for users - Continuous Integration |
| RELEASE DATE |  |
| RELEASE TIME |  |
| PUBLIC |  |
| BETA |  |

# Internal System Interfaces

* There will be a need for account interfaces to handle the differences in legacy accounts created for Unity Pro and the expansion to the Launchpad System.
* There will need to be internal systems to manage accounts. There will be issues such as spam accounts. IT will need to be heavily involved to manage the load the servers receive and data must be reviewed for spam accounts.
* Game Submission Moderation system will be needed as well. This will allow Unity games to test games before they go live. This will prevent viruses, etc. from going live and infecting users.

## Legacy Accounts

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| LAST NAME / COMPANY NAME | Record user name or company |
| FIRST NAME | Record user name |
| ACCOUNT TYPE | Allow user to chose between purchasing games and publishing |
| DOB | Date of birth |
| ENABLED | Flag to annotate if the account is enabled |
| PASSWORD | User password for logging in. |

## Game Data

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| GAME NAME |  |
| GAME GENRE |  |
| GAME PUBLISHER |  |
| GAME Description |  |
| GAME LINK |  |
| AGE RESTRICTION |  |
| CI PLATFORM | Interface to implement software updates for users - Continuous Integration |
| DATE APPROVED |  |
| PUBLIC |  |
| LOCKED |  |

# System Relation to Unity Technologies

* Unity Technologies has a lot of systems in place. This system takes the best part and presents a store front. The aim is to target consumers and allows the organization to benchmark this.

## Store Front Data

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| Game Store Slot [1,2,3,4] | List of games being featured on the store page |

# Organizational Decision Support Needed

* Having strong analytics data will help Unity Technologies make well informed decisions. Knowing how developers’ games are selling can allow Unity Technology to reach out with feedback or share data with developers.

## Data that can be exported or analyzed

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| Total Sales |  |
| Platform | Indicate if the game was purchased on Windows, Linux, MacOS |
|  |  |
|  |  |

# Information Processing

**Input**: Data will be coming directly from consumers and developers.

**Process Definition**: The system will have standard pages and systems for:

## New Account Registration

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| LAST NAME / COMPANY NAME | Record user name or company |
| FIRST NAME | Record user name |
| ACCOUNT TYPE | Allow user to chose between purchasing games and publishing |
| DOB | Date of birth |
| ENABLED | Flag to annotate if the account is enabled |
| PASSWORD | User password for logging in. |

## Analytics Dashboard

|  |  |
| --- | --- |
| **Field** | **Purpose** |
| LAST NAME / COMPANY NAME | Record user name or company |
| FIRST NAME | Record user name |
| ACCOUNT TYPE | Allow user to chose between purchasing games and publishing |
| DOB | Date of birth |
| ENABLED | Flag to annotate if the account is enabled |
| PASSWORD | User password for logging in. |

**Output**: Output should reflect the processes above in a visual format. Each Process should be modifiable and tie directly back to one.