Risk assessment for LameDucks Coffee Cart System

Version: 1
Revision: 2

Overview

This document describes the risks involved and their mitigation throughout the development process of the LameDucks Coffee Cart system. The risks will be ordered by greatest threat and will explain the description, likelihood, impact and mitigation strategy of each risk.

Risks

Business Risk: VIP card adoption

Threat Level: High

Description

This is a new system and a new business process. The adoption of a new business process ultimately can define the success of the software system as well.

Likelihood

The likelihood of the reward system will be reliant upon the clients ability to market and grow the business process.

Impact

If the VIP rewards card is not needed or adopted by the clients customers than the system could be deemed disposable.

Mitigation Strategy

None

Technical Risk: Network connectivity for Android devices can be unreliable

Threat Level: High

Description

The application will need to be in-sync with the other coffee cart locations. Unreliable network connectivity could make syncing problematic.

Likelihood

The likelihood of network connectivity being unreliable is dependent upon the location of the coffee cart.

Impact

If network connectivity is unavailable for a significant amount of time there could be rewards that go unaccounted for. This could also lead to pre-ordered items being over ordered or not accounted for.

Mitigation Strategy
A set of instructions on how to verify network connectivity by location could be created. There is also ways to enable Android devices to use a Locally connected internet connection which is more reliable than depending on cellular or other wireless technologies. We can also implement a hybrid approach to store data locally until a network connection is made and then the data will be synced.

Business Risk: No realtime interaction with LameDucks inventory and Point of Sale Systems

Threat Level: High

Description
Since the application mainly tracks the orders and pre-orders via the application. Any pre-orders placed outside the system will be unaccounted for. This could lead to inventory mismatch in case of best seller items.

Likelihood
The likelihood of the occurrence is very likely. It can happen if multiple systems are used to take orders at LameDuck establishments.

Impact
If most of the orders are placed outside the system, this could lead to potential bad incorrect results for users adopting the mobile application.

Mitigation Strategy
As there is a more adoption of the application, future versions can implement a real-time view into the inventory and point of sale systems.

Technical Risk: Android feature fragmentation.

Threat Level: High

Description
Android is a widely used platform that has thousands of compatible devices. Having consistent hardware and API level can be a challenge when designing this system.

Likelihood

The Likelihood of our hardware and API level being different is fairly high as the Android platform is so widely used.

Impact
Having inconsistent hardware and API level can cause a disarray of expected outcomes to features within the system. In some cases it could render the system unusable.

Mitigation Strategy
Having the client purchase a specific device, or subset, will allow our team to design to test against a specific API level and hardware.

Technical Risk: Third Party Platform Dependency

Threat Level: Moderate

Description
Using a third party platform to manage our backend syncing will save time on the development time needed for the project, but will increase the risk in the event the third party company ends support in the future.

Likelihood
The likelihood of our third party ending support is fairly low as it's their main product and they have many users who depend on their product.

Impact
The backend syncing will have to be migrated to a new platform or rewritten by the team. This could also result in some refactoring depending on the new platforms requirements.

Mitigation Strategy
Select a third party platform who is reputable and active. Selecting a platform that is open sourced would also allow the team to fork the platform in the event the third party decides to end support for the platform.

Business Risk: Inadequate Training for Managers to use the system

Threat Level: Moderate

Description
Manager may be unfamiliar with use of smart phones, the Android system, or how to use and navigate the app. They may also not know what to do in the event of technicals problems or bugs.

Likelihood
The likelihood of inadequate training is common in implementations of new systems and will be the responsibility of LameDucks.

Impact
If the app is not correctly used or not used because it is seen as too much trouble then the system could be deemed disposable.

Mitigation Strategy
Recommend training for Managers to LameDucks.