

# Roopairs: Vision and Scope

Rooio

*Computer Science Department  
California Polytechnic State University  
San Luis Obispo, CA USA*

October 3, 2019

# Contents

<b>Credits</b>	<b>2</b>
<b>Revision History</b>	<b>3</b>
<b>1 Business Requirements</b>	<b>4</b>
1.1 Background . . . . .	4
1.2 Business Opportunity . . . . .	4
1.3 Business Environment . . . . .	4
1.4 Business Objectives and Success Criteria . . . . .	5
1.5 Customer or Market Needs . . . . .	5
1.6 Business Risks . . . . .	5
<b>2 Vision of the Solution</b>	<b>5</b>
2.1 Vision Statement . . . . .	5
2.2 Major Features . . . . .	6
2.3 Assumptions and Dependencies . . . . .	6
<b>3 Scope and Limitations</b>	<b>7</b>
3.1 Scope of Initial and Subsequent Releases . . . . .	7
3.2 Limitations and Exclusions . . . . .	7
<b>4 Business Context</b>	<b>7</b>
4.1 Stakeholder Profiles . . . . .	7
4.1.1 Roopairs Team . . . . .	7
4.1.2 Small Business Restaurant Owners . . . . .	7
4.2 Project Priorities . . . . .	8
4.2.1 Beta (Release 0) . . . . .	8
4.2.2 Release 1 . . . . .	8
4.2.3 Release 2 . . . . .	8
4.3 Operating Environment . . . . .	9
<b>5 Competitive Analysis</b>	<b>9</b>
5.1 Overview . . . . .	9
5.2 Competitor 1 - Humrun . . . . .	9
5.3 Competitor 2 - TylerNet . . . . .	10

## Credits

<b>Name</b>	<b>Date</b>	<b>Role</b>	<b>Version</b>
Logan Lawson	October 1, 2019	Document Owner, Lead Author of Business Requirements	1.0
Karla Sunjara	October 1, 2019	Lead Author of Vision of the Solution	1.0
Jessica Chang	October 1, 2019	Lead Author of Scope and Limitations	1.0
Yusuf Bahadur	October 1, 2019	Lead Author of Business Context	1.0
Luke Reckard	October 1, 2019	Lead Author of Competitive Analysis	1.0

## Revision History

<b>Name</b>	<b>Date</b>	<b>Reason for Changes</b>	<b>Version</b>
Logan Lawson	October 1, 2019	Initial baseline	1.0
Karla Sunjara	October 1, 2019	Initial baseline	1.0
Jessica Chang	October 1, 2019	Initial baseline	1.0
Yusuf Bahadur	October 1, 2019	Initial baseline	1.0
Luke Reckard	October 1, 2019	Initial baseline	1.0
Jessica Chang	October 3, 2019	Sections 2.2, 3.1, 4.2	1.0

# **1 Business Requirements**

## **1.1 Background**

The primary sector of the restaurant industry is plagued with the problem of finding an equipment repair professional on short notice when essential restaurant equipment breaks down during operating hours. Their "go to" list of service professionals is usually only a small percentage of the actual local populations of possible technicians. If their usual service providers are busy, then the restaurant managers are forced to shut down and thus lose potential revenue. Furthermore, in order to find another service provider to fix the equipment, they are forced to go through a long list of potential providers and contact each one individually, wasting more time and missing out on more potential revenue.

## **1.2 Business Opportunity**

Developing an application that can integrate with a restaurant's existing POS (Point of Service) platform will allow employees to access a large database of available service professionals. The ease of this app will make the searching and requesting for immediate service smoother and more efficient for restaurants. By streamlining this process restaurants will reduce down time and effectively save money.

## **1.3 Business Environment**

In the dynamic environment that businesses operate in, there are a number of external influences that affect Roopairs. The demographic of restaurant owners is changing, as older Generation X owners are retiring and the younger millennials are filling in their place. Millennials have vastly outpaced older generations in technological adoption and technology literacy. As such, Roopairs faces a positive external customer influence, as a growing number of restaurant owners will understand how to use Roopairs' application. In addition as technology continues to improve, Roopairs will be able to continuously adapt their service application to become more user friendly and become accessible to a wider customer market.

## 1.4 Business Objectives and Success Criteria

BO-1	Develop an app for equipment service requests.
BO-2	Smooth integration with restaurant POS system for ease of use.

SC-1	Reduce process time of finding an equipment service professional.
SC-2	App is perceived well and is recommended by restaurant owners/managers.

## 1.5 Customer or Market Needs

CN-1	App is simple to use.
CN-2	Generic integration with restaurant POS systems.

## 1.6 Business Risks

No known business risks at present.

# 2 Vision of the Solution

## 2.1 Vision Statement

The solution involves creating an integration with a restaurant POS platform, such as Toast or Square. The integration will allow restaurants to seamlessly send service requests whenever an appliance malfunctions. The user-interface and design of the software is left open-ended for the team to decide whether they want to follow Roopairs' pre-established template or create their own.

## 2.2 Major Features

FE-1	Customer will request service from repair services when the restaurant's equipment breaks down.
FE-2	Customer will log and keep track of their restaurant's equipment.
FE-3	Past jobs on a restaurant's equipment will be available for the customer to look back on.
FE-4	Customer can view the invoices of all past service jobs.
FE-5	Application will allow customers to keep track of their restaurant's kitchen layout.
FE-6	Customer will receive analysis from all their equipment and past services in order to help the customer make informed decisions in the future.
FE-7	Application will have different levels of permissions for staging service requests depending on a customer's position at the restaurant.

## 2.3 Assumptions and Dependencies

AS-1	The integration will work in the environment of the chosen POS platform.
AS-2	The restaurants using our integration will already be using the POS platform for their business.

DP-1	The POS system needs to have third party app support.
------	---

## 3 Scope and Limitations

### 3.1 Scope of Initial and Subsequent Releases

Feature	Release 1	Release 2
FE-1	Fully Implemented	
FE-2	Fully Implemented	
FE-3	Fully Implemented	
FE-4	Fully Implemented	
FE-5	Not Implemented	Fully Implemented
FE-6	Not Implemented	Fully Implemented
FE-7	Not Implemented	Fully Implemented

### 3.2 Limitations and Exclusions

LI-1	Restaurant-side customers must have a POS that will allow our application to integrate with it.
EX-1	TBD

## 4 Business Context

### 4.1 Stakeholder Profiles

#### 4.1.1 Roopairs Team

The primary stakeholder for the capstone project is Roopairs. Within Roopairs, Alexander Kavanaugh sits as the Chief Technology Officer and oversees the development of the Roopairs Application. As such, all development through the Rooio consulting team, must be approved and directed by Mr. Kavanaugh.

#### 4.1.2 Small Business Restaurant Owners

Small business restaurant owners are a secondary stakeholder as they are positively affected by the development of the Roopairs application. The average restaurant owner spends much of their time supervising employees, directing operations, and finding ways to adapt to customers and industry trends. Most restaurant owners spend well over 40 hours a week dealing with the ever-changing needs of their business. As such, in the status quo

restaurant owners have a strong interest in Roopairs as they do not have the time nor energy to manually find a service technician.

## 4.2 Project Priorities

### 4.2.1 Beta (Release 0)

The fundamental reason to use the Roopairs application, on the restaurant side, is to request service for equipment malfunctions. As such, the Beta to satisfy restaurant owners is FE-1: Customer will request service from repair services when the restaurant's equipment breaks down. This feature alone will ensure restaurant owners see a clear value in using Roopairs, as it saves them both time and effort. The Beta should be released by the end of Quarter 2.

### 4.2.2 Release 1

Release 1 should be released by the end of Quarter 2.

FE-1	Customer will request service from repair services when the restaurant's equipment breaks down.
FE-2	Customer will log and keep track of their restaurant's equipment.
FE-3	Past jobs on a restaurant's equipment will be available for the customer to look back on
FE-4	Customer can view the invoices of all past service jobs.

### 4.2.3 Release 2

Release 2 should be released by the end of Quarter 3.

FE-5	Application will allow customers to keep track of their restaurant's kitchen layout.
FE-6	Customer will receive analysis from all their equipment and past services in order to help the customer make informed decisions in the future.
FE-7	Application will have different levels of permissions for staging service requests depending on a customer's position at the restaurant.



### 4.3 Operating Environment

OE-1	The Roopairs application should be within the POS System
OE-2	The Roopairs application should be compatible with the Roopairs API
OE-3	The Roopairs application should transfer all repair or customer related information via the API to a Roopairs database

## 5 Competitive Analysis

### 5.1 Overview

In the restaurant software market, there are a growing number of applications for POS platforms that help reduce the stress of management, payroll, and customer satisfaction. While most of the applications have similar overlapping features, next to none offer fast access to equipment repair services. Most applications are integrations using an API provided by a major POS system, and focus around the guest and employees. Only one application was found with the exact same mission as the Roopairs product, but is no longer active for new customers.

### 5.2 Competitor 1 - Humrun

**Mobile Platforms:** iOS

**Dashboard:** Third party dashboards for iOS.

**Pricing:** Free

**Ease of use:** Unknown

Humrun is an Atlanta based company that provides a communication application for iOS which quickly connects restaurants with qualified service providers. As advertised, the Humrun app features are having preloaded industry specific jobs and equipment categories, custom job identification, image documentation, equipment tracking, time stamps, notifications, preferred vendors, and multiple location and user support. They also boast of an online administration and reporting dashboard.

On the Humrun website, they have displayed a message that states "Humrun is no longer accepting new customers. For white label or licensing inquiries

please contact”. This implies that Humrun is looking for another company to purchase their product and potentially rebrand it as their own.

Downloading the app on the app store yields a similar result, as it requires an existing customer login to access the services.

Humrun should not be viewed as a direct competitor unless it is purchased and rebranded.

### 5.3 Competitor 2 - TylerNet

**Mobile Platforms:** None

**Dashboard:** Web version

**Pricing:** Not free

**Ease of use:** Medium

TylerNet is a POS cloud application that has a multitude of features for a company ranging from payroll and inventory software to service features that allow service providers to be contacted for in-store repairs.

The company website states that features of the software is its ability to set up repairs, monitor labor, and schedule efficiently. The repairs feature involves quick work orders for service/installation needs at the business. This can then be monitored as the app allows for tracking the parts and labor for the complete process, with the added functionality of a technician adding comments about the work completed. Finally, appointments can be scheduled through a Centralized Delivery app or third party service.

TylerNet needs to be installed by the service providers of the company, and according to many reviews the user interface is difficult to train new employees. It also appears rudimentary, with an old windows style that has become outdated for point of sale software.

TylerNet should be viewed as a direct competitor.