

# Business Requirement Document

## Table of Contents

<b>Preface</b>	<b>2</b>
<b>Appendix</b>	<b>3</b>
Personas	3
Students	3
Households	4
Restaurant businesses	5
<b>Strategy</b>	<b>6</b>
<b>SWOT Analysis</b>	<b>7</b>
<b>Segment Profile</b>	<b>8</b>
<b>Market Segment</b>	<b>9</b>
<b>Primary Research</b>	<b>9</b>
Questions	9
<b>User Feedback</b>	<b>9</b>
Feedback as of 9/9/2019	10
<b>User Persona/Stories</b>	<b>10</b>
User Stories	10
<b>Secondary Research</b>	<b>11</b>
<b>Competitor</b>	<b>14</b>
<b>Commercialization Strategy</b>	<b>15</b>
<b>Monetization Strategy</b>	<b>15</b>
<b>Technology Depth/Innovation</b>	<b>15</b>
<b>Solution</b>	<b>16</b>

# Preface


Cooking is essential in everyday life and there's nothing more frustrating than having to go through multiple Google searches as well as a ton of filler text before the actual recipe. Even while cooking, it's easy to forget about the process when things come up. Our product aims to solve the problem of useless text filling up the screen and only focusing on what's important as well as a method to keep users notified. The product allows users to quickly search for recipes with only a simple keyword as well as a simple and interactive UI for easier navigation throughout the cooking experience.


# Appendix

## Personas

- Students

PROJECT: Persona 1

NAME	MARKET SIZE	TYPE
Robert Hopkins	 60 %	Stingy




**Goals**


I would like to graduate with a graduates degree

**Background**

I live in an apartment near my university and living within the middle class. I do not receive too much money for education and work a minimum wage job. Most of my wages goes towards rent, utilities, with food being last on the last of my priorities.

**Demographic**

 Male  years



**Motivations**

Good grades  
High wage job  
Marriage





**Frustrations**

Not enough time for activities  
Limited use with money  
Tons of classes  
Self-dependent



**Quote**

“A product that has a login and bookmark ability so no matter where I log in, I'll have access to the recipes that I have saved and be able to use them whenever they are needed.”

**Technology**

**Browsers**

 Chrome 

- Households

PROJECT: Persona 1

NAME

Marilyn Schultz

MARKET SIZE



30 %

TYPE

Caring



### Goals

To be able to cook a wider variety of fulfilling dishes for me and my family.

### Background

I'm a mother of four, full-time job, living in the suburbs, college graduate and fitness fanatic working her hardest to take care of the family

### Motivations

Raising healthy children  
Cooking new recipes that they'll all love  
Open to trying new things

### Frustrations

Limited time spent for family  
Spends too much money on food  
delivery services/takeout

### Demographic

Female 33 years

United States

Married

Administrative Assistant

\$40,000/yr

### Quote


"I would love a product that features a variety of ethnic foods, options, snack options. Easily accessible for all ages, especially for younger children who are picky eaters."


### Technology



- Restaurant businesses

PROJECT: Persona 1

NAME	MARKET SIZE	TYPE
Roger Wheeler	 <b>10 %</b>	<b>Strict</b>



### Goals

To demonstrate my knowledge and creativity of the culinary world onto my students and help hone their skills towards culinary-related careers.

### Background

I'm a father of 2 sons with a loving wife taking care of them at home. I spent 3 years to hone my skills within a culinary program at a culinary university and went into the industry for 2 years under an apprenticeship before becoming a fully fledged chef for 7 years.

### Demographic

Male  years  
 United States   
 Married   
 Culinary Instructor   
 \$65,000/yr

### Motivations

Passion towards cooking  
 Creativity when it comes to making new dishes  
 Giving a helping hand towards my students who are struggling





### Frustrations





Unable to help students outside of office hours and class time  
 Unable to quickly respond to students immediately outside of class time

### Quote

“I would like to assist my students in any way I can to help them prepare for the growing career in the culinary field, especially outside of class hours when I am unavailable to help them out.”

### Technology

# Strategy

Problem	Solution	Value Proposition	Unfair Advantage	Customer Segment
Finding recipes online can be lengthy, and people have a hard time following the instructions when recipe pages are full of filler text	Creating an application that quickly searches recipes based on keywords and allows easy navigation through the instructions	This would allow people to easily search for any recipe they want and be able to follow the instructions easily through the simple navigation UI, thus saving them a lot of time	Our segment is small and none of which do what our product is capable of.	Customers consist of: Students, households, restaurant businesses
	Key Metrics		Channels	
	<ul style="list-style-type: none"> <li>- Daily User Count</li> <li>- Number of recipes viewed</li> <li>- Recipe that is viewed the most to keep it the most popular in other searches</li> </ul>		The best path is social media. If there are only a couple users, it would be able to compete against the other kitchen aids in the Chrome store.	
Cost Structure			Revenue Stream	
Users can purchase this application as a Google Chrome Extension for a low price			We could charge a negligible subscription fee such as 0.99 to 1.99 after a trial period.	

# SWOT Analysis

Strengths	Weaknesses
<p>Provides an all-in-one recipe lookup as well as an interactive UI to help with concentration and time management.</p> <p>Large amount of recipes to choose from.</p> <p>Competitive since there are a lack of Kitchen aid extensions.</p>	<p>Reliance on recipe database API for searches.</p> <p>Difficult to put all necessary info in a compact list without leaving some details out.</p>
Opportunities	Threats
<p>Expand to other platforms.</p> <p>Be able to work on other recipe like instructions.</p> <p>Encourage others to give home-cooking a try.</p>	<p>Unsupported API.</p> <p>User not allowing notification.</p>

## Segment Profile

Geographic	Demographics	Behavioral	Buyer Power
Unrestricted to one place	People that like to cook	Be able to identify trends from searches and if the user enjoys the interface.	Judging from the rating of the extension store, people tend to go for extensions that save recipes in addition to simpler recipe display.
Size		Growth Potential	
This segment is very small, only amounting to 16 extensions when sorting by Kitchen Companions		Looking at all the extensions in the store, our product won't be competing against much	
Competitive Activity		Risk	
From the Chrome Web Store, there are not many competitors that do exactly the same thing that our product does. However, there are multiple extensions that do part of our product. Like adding a manual timer and clipping recipes. Our biggest competitor would be Pinterest. Although Pinterest isn't exactly what our product delivers, a lot of people use it to find recipes.		Since the only competitor is Pinterest, it should not be too hard. Though Pinterest is no laughing product, Pinterest and our product do different things.	
Approach			
Most of the extensions in this category only do simple things. If we are able to combine the timer and recipe clipper in addition to adding our own stuff into the mix like an easy-to-follow recipe UI, we would be able to surpass the other products.			



## Market Segment

- Our main demographics would be students or anyone in the education field living on their own. According to the National Center for Education Statistics about 19.9 million students will attend colleges and universities in the fall 2019. The New York Times reports that 87% of students in the New York area alone live off campus. Meaning that they all have access to kitchens which can significantly reduce food expenses.
- Aspiring cooks can also use our software. Culinary school can cost tens of thousands of dollars and our software can help those people learn to cook, so well in fact that they might be able to do entry level line cook jobs which would be the start of a professional resume.

## Primary Research

### Questions

- How often do you or someone in your family cook meals at home?
- Have you ever searched up recipes in preparations of a dish?
- Have you or a family member ever used a delivery service (ie. Grubhub, Postmates, DoorDash) or pre-prepped meal kits (ie. Blue Apron, Green Chef, HelloFresh)?
- What would be some important features that you would like to see in this type of application?

Google Survey - <https://forms.gle/hyPaa8xxXMaE93xHA>

### User Feedback

- A common pattern was noticed when questioning our users: users most often would state that they rely on others to cook in their family as it is often very intimidating to learn to cook something new and others are often times too busy to teach them thoroughly.
- Some stated that there is also a daunting amount of sources to look at as well which is very discouraging in terms of finding which source to learn from.

Feedback as of 9/9/2019



## User Persona/Stories

### User Stories

- a. User
  - i. As a user, I want easy accessibility and readability of the recipe so that I don't have to search hard for what I need. (21 points)
  - ii. As a user, I want to be able to sign up for an account to utilize the application. (13 points)
  - iii. As a user, I want to be able to login into the system to use features of the application. (13 points)
  - iv. As a user, I want to be able to explore recipes and pick a recipe to begin cooking right away (21 points)
  - v. As a user, I would like no distractions or pop-ups that get in the way of my recipe instructions so that I can have a smooth cooking experience. (5 points)

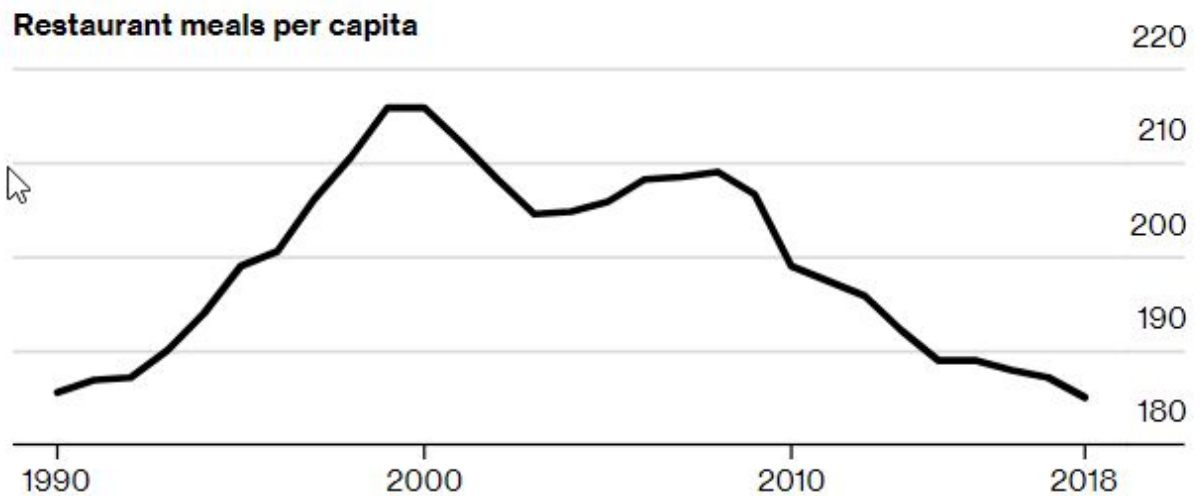
- vi. As a user, I would like to view recipes sorted by multiple categories (culture, calories approximations, the time required, meal types, etc) in order to easily search for certain recipes. (21 points)
- vii. As a user, I would like to view the approximate calorie count of the meal that I am making in order to keep track of my daily caloric intake. (5 points)
- viii. As a user, I want to view the cooking utilities that I would need in order to complete the specified meal. (13 points)
- ix. As a user, I want to save recipes that I like into a list in order to view and use them again in the future. (3 points)
- x. As a user, I want to be able to see possible recipes I can make based on the ingredients I already have in order to get recipe ideas. (5 points)
- xi. As a user, I want a friendly and visually appealing UI in order to have a nice cooking experience. (13 points)
- xii. As a user, I would like to see a simple menu for sorting out different cultural foods as well as a sorting feature for cooking time in order to categorize which kinds of recipes I'd like to make. (8 points)
- xiii. As a user, I want a method to tell how difficult the recipe is to make in order to help decide which recipes I can make based on my skill level. (3 points)
- xiv. As a user, I want to see large-displayed pictures for the recipe in order to help me decide which recipe to make at a glance. (3 points)
- xv. As a user, I want a system that gives alternate ingredient suggestions in order to be more flexible with a recipe in case I don't have specific ingredients. (8 points)
- xvi. As a user, I want to have food suggestions based on what I cooked in order to try other foods similar to ones that I've just made. (5 points)
- xvii. As a user, I want a sorting system of allergies so that I can avoid recipes I may be allergic to. (5 points)
- xviii. As a user, I want to be able to track more than one recipe at a time in order to cook multiple recipes efficiently. (5 points)

## Secondary Research

- Cooking is shifting from using traditional cookbooks to digital and online recipes. Many people, more specifically millennials, are choosing to bring their tablet, phone, or other electronic devices into the kitchen with them over printing out recipes. These people generally start their recipe search online with broad terms like “healthy recipes”, or turn to Youtube to find cooking tutorials on certain dishes. The use of electronic devices allows people to cook more efficiently and easily by utilizing online features such as text-to-speech recipe instructions or simply following along a video tutorial, in contrast to having to shift through physical books and paper just to follow the recipe instructions.  
Link:

<https://www.thinkwithgoogle.com/consumer-insights/cooking-trends-among-millennials/>

- One of the biggest factors that plays a role when it comes to cooking at home versus fast-food/restaurant delivery would be money. This puts you in control of healthier ingredients, reasonable portion sizes, and in this case, money. According to research done by the NPD Group Inc., an American Market Research company, 82% of American tend to prepare meals at home rather than eating out. The highest peak of restaurant meals would be in 2000 and that number has been steadily alternating but more so decreasing.



Source: NPD Group

1. The rise of millennials, who are starting families. The impact of student debt caused many new millennials, who are starting their own families, become conscious of their spending, causing supermarket prices to become more appealing.
  2. The influences of Netflix/home-stay entertainment, pre-made/pre-prepped meals & ingredients, and online grocery shopping are also possibilities that impacted the rise of home cooking  
<https://www.bloomberg.com/news/articles/2018-09-11/fast-food-s-got-a-netflix-problem-as-americans-prefer-to-dine-in>  
<https://www.foodnetwork.com/fn-dish/news/2018/9/americans-are-cooking-more-meals-at-home--eating-out-less>
- Another study featuring home cooking versus restaurant meals share similar results to the previous study. According to the results of Peapod's national survey, an online American grocery delivery service, regarding home cooking:

- 73% of adults currently make dinner at home at least 4 nights a week with Millennials being the most contributing factor of that percentage due to the desire of saving money
  - Over half of those surveyed (~52%) stated that healthier eating habits was the reason for it.
  - Roughly a third (~43%) of those surveyed stated that cooking at home resulted in more quality time with family, with Millennials being the most supportive of this (48%)
- Kids/Teen Factors:
    - % Teenagers (79%) surveyed desire the need of wanting their parents cooking more often
    - 59% of teens enjoy the cooking process with their families
    - 32% of teens reported that express a desire to help their family eat healthier

<https://about.peapod.com/peapod-releases-annual-meal-planning-predictions-millennials-and-families-to-drive-rise-in-home-cooking-in-2018/>  
<https://www.foodnavigator-usa.com/Article/2018/12/11/Consumers-prefer-and-prioritize-cooking-at-home-Peapod-finds>

- A survey also shows the reasoning why people favor cooking at home instead of eating out. In the age of social media, many people share photos of their home-cooked dishes, and this has proved to be sources of inspiration for people and makes them want to cook at home. In this survey the following results were gathered:
  - 22% of cooks and 44% of millennials would post pictures of their finished home cooked dinners
  - 17% of the respondents say that they've gotten inspiration from what they found in cookbooks, but 34% of the respondents say that their inspirations came from social media
  - 50% of the respondents typically turned to social media such as Instagram for their cooking inspirations

Link: <https://www.foodandwine.com/news/american-dining-habits-survey-plated>

## Competitor

- Pinterest: The main competitor is Pinterest. Pinterest is a more of an image sharing social site than a kitchen aid. Although most people do use Pinterest to find cooking ideas and to get recipes, it is not the same product that ours is.

## Commercialization Strategy

1. Target audience to sell the product
  - a. Students
  - b. Aspiring chefs
  - c. Stay-home parents
2. Sales and Promotions:
  - a. Website launch
  - b. Advertisements
  - c. Product presentations to companies that may be enticed by such a product

## Monetization Strategy

1. One method could be to charge a negligible amount such as one dollar a month for access to our database of recipes and software after a free trial period of a month.
2. Another method could be selling it to culinary schools as a way to market their own course curriculum as an “online culinary school” or an extension of their services.

## Technology Innovation/Depth

In order for the users to search for their desired recipes, we must design a way that allows us to accept their input, parse it into our recipe database, then present the output in a simplistic yet easy-to-understand model. In order to do this, one of our earliest ideas would be to differentiate key words, build up a database of words, then use to examine whether or not a certain string would fall under the category of being a recipe step. By building up this database, we'll have a vocabulary of recipe keywords that allow us to differentiate between a recipe and non-recipe sentence. This would be the first step in our endeavors as recognizing keywords based on the user's search would greatly allow us to fetch their desired recipe as accurately as we can. As of right now, we have a python script that allows us to parse big paragraphs, split them into individual words, then adds them into a text file. Any duplication will add onto the number count of the word and this would help us create our database vocabulary would future usage for this functionality. Future iterations of this code would include a scoring system to determine the priority of keywords.

# Solution

1. A streamlined teaching experience that makes it easy for new people to follow any recipe while remaining interactive and engaging.
2. A way for users to not become bogged down by anecdotes and other extra information. This makes the recipe easily digestible as opposed to a webpage that's stagnant and littered with extra information.
3. Solution alternatives and trade-offs: