

Technical Scope for Optimal Systems

Version 6

Team 10

February 21, 2023

Revision History

|  |  |  |
| --- | --- | --- |
| Version | Description | Date |
| Version 1 | The first version of our scope and vision document includes all the information regarding introduction, business needs, and revenue model. | 2/12/2023 |
| Version 2 | Revised the introduction to make it more concise, and to make sure that the reader gets to the main statement immediately. | 2/13/2023 |
| Version 3 | For the revenue model section, we added a few examples with values to indicate our points with more transparency. | 2/14/2023 |
| Version 4 | Added other sections, like competition analysis, technical objectives, operating environment, and developing tools. | 2/16/2023 |
| Version 5 | Added the rest of the sections, including scope, limitations, and assumptions and dependencies. | 2/18/2023 |
| Version 6 | Reviewed the whole document to ensure all the points are covered using enough details. | 2/20/2023 |

Table of Contents

[1 Introduction 4](#_Toc126584251)

[2 Opportunity and Vision 5](#_Toc126584252)

[2.1 Business Need 5](#_Toc126584253)

[2.2 Revenue Potential 7](#_Toc126584254)

[2.3 Competitive Analysis 8](#_Toc126584255)

[3 Technical 9](#_Toc126584256)

[3.1 Technical Objectives 9](#_Toc126584257)

[3.2 Operating Environment 9](#_Toc126584258)

[3.3 Development Tools 10](#_Toc126584259)

[3.4 Assumptions and Dependencies 10](#_Toc126584260)

[4 Scope & Limitations 11](#_Toc126584261)

[4.1 Scope 11](#_Toc126584262)

[4.2 Limitations and Exclusions 12](#_Toc126584263)

# Introduction

This scope document will provide the foundation for what we are going to do, and why we are doing it. It will be used to clarify the project’s objectives and to properly set the expectations on what is and what is *not* included in the new system.

Technology is useful when it comes to industry operations and business because every business needs at least a basic functionality of electronic gadgets to ensure that their company can grow exponentially. The most common utilization of technology in our daily lives revolves around entertainment, gaming, chatting, and much more. But on the other hand, when it comes to businesses and organizations, they not only utilize technology to do promotions, instead they encapsulate electronic mediums to expand their business in terms of customer acquisition, value potentials, and by providing a user-friendly environment to navigate through their potential business inventories.

In addition, technology will assist businesses to build an accurate solution to the existing problem. Various problems are evolving around technology or software viability that customers must face every day. So, with the help of technology, the business team can build accurate prototypes and objectives that will act as a foundation for their business domain. It is very crucial to have a strong foundation because if the base (requirements) is not detailed, then it can lead to interest fluctuations, and the team will also not be able to transition through all the phases of the software development, resulting in an incomplete project. Thus, with evaluative objectives, the team can boost organizational productivity and security because if the business knows what they must build, then the mapping of resources, time, labor, and cost will get easier, which will result in high optimization of resources and the quality of the software (product) being developed. In addition, businesses with proper software developmental procedures also have a high probability to meet all their target population’s needs and feedback that they have either studied using computer algorithms or through in-person communication.

Thus, the main potential behind describing the relationship between technology and a successful business is that Optimal Systems is a software development company that works for private businesses to help them get equipped with online features, such as websites and apps. So, to align with the ideas presented above, our team is going to build an online HTML website for a private convenient store named Lucky 7.

Mr. Alex owns Lucky 7, which is a private convenient store located on the outskirts of a residential area. The store offers a wide range of products, including food, ice-creams, accessories, lottery, and ATM services to all its valued customers. When reflecting upon the customer traffic, the store is little busy because it is the only all-in-one store that is in that area, and no other store is constructed within that 15-mile radius. So, due to this advantage, customers can find the products that they are looking for without any troubles. Hence, before deciding upon the target business, our team carefully encapsulated the Software Development Life Cycle (SDLC) to gain more insights about the Lucky 7 store. Thus, after detailed research, we can know that since it is the only store located within a 15-mile radius, customers who live within a larger distance find it difficult to travel to the store to grab the items they desire. Then, after interviewing Mr. Alex, we got exposed to many aspects that we were unaware of.

For example, if we see a store that is filled with customers, we assume that the business would be making a high amount of profit monthly. But Mr. Alex revealed that since they are a private store, they only operate in offline mode, and they are not present online. Thus, being a fully offline business is sensitive because if customers are getting products from other branded stores delivered to their homes, then no one wants to physically travel. After all, ordering products online helps customers to save time by increasing the level of convenience. Mr. Alex elaborated that though their offline sales are currently steady, at the end of the month, after eliminating all the expenses, including electricity bills, salaries, and commissions, the level of profit decreases significantly. In addition, when coming to the winter season months, is often known as the survival period for businesses because due to extreme weather, very less people travel outside. So, during this period, the Lucky 7 store’s sales go behind the standardized curve because the level of expenses gets higher than the profit generated for those months. Moreover, another reason behind steady (fixed) sales is due to lack of online promotions. Meaning, when other branded stores like Walmart and Target utilize their online websites to promote their business by showing promotional deals and sales, it is considered a strategic approach to motivate the customers to buy from their websites. In contrast, the Lucky 7 store is not able to promote its business, which directly results in a decreased level of product exposure to the customers. So, customers can know about various deals only if they visit the store physically. Hence, if in the future if another store opens nearby, then will increase even more competition, which can directly affect such offline business sales.

Therefore, after performing an effective requirement and problem analysis, our team members agreed to collaborate with the Lucky 7 business to boost their sales and reputation by introducing an online shopping website through which customers can buy products virtually, and simultaneously this will also initiate online marketing to attract more online customer traffic.

# Opportunity and Vision

## Business Need

Lucky 7 convenience store is a private store offering a wide range of products and services, including food items, accessories, lottery, and ATM functionalities. In general, when we reflect on a franchise store, meaning a store that has diversified its business through the production of several warehouses and stores all around the country, often integrates its strategic business model into two sectors. The first sector is dedicated to offline sales, meaning the sales that come through the products being sold from a particular store or the same store’s branches. On the other hand, the second sector is preserved towards online sales because repetitive companies acknowledge that to grow a business in the current competitive market, it is vital to get in touch with their valued customers as quickly as possible. After all, if another brand gets established with quality resources and inventory, then this can heavily impact the operational business. Thus, online sales for a business are crucial because they provide more comfort due to the products being delivered at their corresponding locations. In contrast, when reflecting upon the Lucky 7 store, since it is a private store, the store mainly functions through the sales generated by offline traffic. So, due to this reason, the sales of the store are keen to fluctuate monthly because if the store has no e-commerce shopping website available for the customer to explore their inventory, that directly signifies that very less people know about the quality and trust being offered by the Lucky 7 store through their impactful inventory lineup.

In addition to not being able to connect with a larger population, this also affects their online marketing strategies inbuilt because giving promotional deals through e-commerce is considered one of the best approaches to divert customer traffic to the corresponding store because once a customer steps into the store for the first time, it is evident that they will navigate through the store to explore the inventory and price the store is equipped with. Thus, after having a broader understanding of the store, customers often tend to become the store’s regular customers, and along with that they also refer the store to their friends and family. Thus, the main point to analyze is how customer attraction can be gained through e-commerce shopping websites and marketing, which will result in boosting revenue and net profit Mr. Alex generates monthly.

Therefore, with the effective utilization of our e-commerce shopping website, it will help the Lucky 7 convenience store to fulfill its business needs in terms of greater customer exposure, boosting monthly sales, and gaining the trust and satisfaction of its valued customers through logical pricing and product variety. Moreover, our website will feature the sales of the store’s inventory, including food items, accessories, and promotional deals for online marketing. When defining an effective business, it is always noted that business owner who buys an existing branch or store, often keep their primary analysis on the current sales being generated from that store. The main reason behind this phenomenon is that when a business organization invests its assets to attain a certain portion of the equity in the business, they always think about how fast it will be able to recover the investment and climb towards profit sharing. But in reality, having a fixed mindset only reflecting sales is not a logical or future-shadowing approach because when a business is brought, it is important to analyze the sales, but is also crucial to examine the location of the store it is situated in because if a store is situated inside a residential area, then it is evident that being a local store for those residents, the store will have a high level of customer traffic, which helps to keep the sales improve positively each month. On the other hand, if a store is in an isolated area, then it is predicted that the expenses would be higher than the profit sales due to less customer attention.

Hence, the main point being the importance of location is that the Lucky 7 store is also a store which is situated in an isolated area, meaning the level of residency is low in that area. Since location is a unique challenge for Mr. Alex, this is directly reflected in their offline sales because only the customers who have been visiting the store are their potential customers, meaning the rates of repeat customer is higher than new customer traffic. So, due to this, the store witnesses a few months, where the expenses of the store, employee salaries, inventory cost, electricity cost, and insurance costs are significantly higher than the revenue being generated. This suggests that Mr. Alex must pay out of pocket to fulfill all the expenses due to minimal profits. Moreover, customers currently must travel to the store to fetch food and other products because as mentioned the store is fully offline.

Hence, the integration of our e-commerce website software will improve both the customer’s and owner’s experience. First, when discussing the potential customer, it is evident that having an online shopping platform for customers will help to save transportation time and cost. In addition, having an online shopping platform will also help the store to reach a vast sector of the population because though it is in a non-residential area, with the online component implementation, customers who live miles far can also navigate through the store’s effective pricing and inventory lineup to get exposure with the store. So, once the user’s trust initiates through our online site and promotional deals, it is noted that the customer will start ordering products online as needed because now the challenge of traveling several miles is converted into convivence and comfort. In addition to inventory exposure, customers can also use our website to lookup for certain products that they would not find in other stores because instead of ordering from another retailer, they will order that product, along with some other essentials from the Lucky 7 store.

So, the online website can also be utilized as a price matcher and incrementor in terms of profit. Similarly, Mr. Alex will also witness the same amounts of improvements as their customers because the online website will boost sales in parallel with online marketing of the store through promotional deals offered through the shopping site. In addition, with the help of online platform involvement, the challenges faced by the store’s location will also be reduced by half because now customers do not have to travel, instead, they just must place orders online, regardless of how far they reside. For example, from the customer's perspective, if a customer wants to purchase earphones of a particular brand, it is noted that they will first check the online inventory of all the stores. So, here by the integration of the online platform, now customers have a new online inventory to check for products, and once they find their match, they can order it through the Lucky 7 e-commerce platform.

Our primary customer for whom the website is being designed is the Lucky 7 store’s business owner Mr. Alex. The business owner is our main approach because we will be selling our software to Mr. Alex to help him integrate the online sector into his business model. Our team went through the foundational phase of the project, which is requirement collection and analysis because any software project to be successful must have a strong base in terms of requirements and objectives clearly stating the current problems for which the software is being developed. Thus, after collecting all the requirements from Mr. Alex, our team initiated the analysis process to explicitly state the problem at a higher level because our solution will be used to resolve the issue being faced by the Lucky 7 business owner. When starting with the problem stated, Mr. Alex mentioned that the fluctuations of monthly sales and high expenses are the current major issue being witnessed. So, evolving this issue, the owner requires to integrate technology into the business workflow, meaning Mr. Alex is committed to introducing a new online e-commerce platform for their Lucky 7 store to help boost sales. In addition, the other requirement of the business is regarding online marketing because currently, the store has no marketing strategies in-built due to its offline structure. After all, now the business is expanding through internal references. So, when summarizing the requirements of the business, one evolves around introducing e-commerce in the business's current workflow, generating online promotions through that online platform, and the other additional requirements in favor of their customers is that the owner wants to save time their customers and to build their trust by keeping effective online pricing and products.

Moreover, when reflecting Mr. Alex’s customers, it will be all those individuals who will be visiting their store either through offline or online mediums because the owner will be generating profit from them by selling quality products and offering a wide range of services.

## Revenue Potential

Since our team is working towards the integration of an e-commerce platform for the Lucky 7 store, our product (software) is categorized into a monetizable product. The shopping website that we are implementing is for the expansion of the store because only operating offline is not helping Mr. Alex recover all the store-related expenses. Thus, with the assistance of an online medium to sell and expose inventory to a larger audience, the percentage of customer traffic will rise due to online marketing, shopping, and promotional deals offered when purchasing through the online store. So, our product’s revenue will not be analyzed through the number of users or cost per item because since it is an e-commerce website, it is evident that keeping the count of the number of active customers and keeping track of each customer’s product cost can get a bit complex. So, to simplify the revenue model, Mr. Alex will encapsulate our newly built Lucky 7 shopping website to increase their monthly business sales, and from that total monthly revenue acquired, Mr. Alex and our team agreed upon receiving 10% of the total revenue earned during each month.

In addition, when reflecting upon our software’s financial model, we did not want to enforce a base revenue for the store, meaning our team’s revenue generated by the Lucky 7 business is not a static figure because it is noted that a business will not earn the same amount of revenue each month. Thus, instead of stating a fixed figure, it is beneficial for both our team and Mr. Alex to operate financial revenues based on the profit earned during each month. This rule will help our team to gain profits, and parallel to that, the owner will also be able to manage all the expenses effectively to ensure that expenses do not overload the total financial revenue. So, we decided to collect 10% of the total accumulation of money earned each month. For example, instead of collecting a fixed amount of $2,000 each month, if in the month of January, the store earns total revenue of $35,000 through the mixture of both online and offline sales, then 10% of the total figure of $35,000, which is approximately $3,500 will be collected by our team as our potential software utilization revenue. In addition, if in the preceding month, the total revenue of the business is $29,000, then 10% of it, which is around $2,900 will be acquired as our team’s potential profit.

## Competitive Analysis

There are a few websites builder already available through the internet, including Square Space and Go Daddy. When reflecting upon both competitive platforms, they offer similar functionalities in terms of website templates, cloud servers, and the monthly financial cost to get the license for the software. When reflecting on Square Space, they offer a wide range of designs for every type of business, including templates for restaurants, hotels, e-commerce platforms, informational webpage templates, and much more. In addition, they also offer flexible portfolios, meaning users can customize galleries and add password-protected pages to share private work with various clients. On the other hand, Go Daddy also offers a wide range of templates and in-build services along with hosting, email, and marketing options to grow business on the web. But to use both Square Space and Go-Daddy, users need to have technical skills regarding website development because though they mention no coding skills are required, to make a website without code also needs minimal technological knowledge on structuring and designing a website in a way in which it will attract more customers. In addition, both platforms are not free, meaning each platform has its unique packages. Square Space has four different packages for individualized use. For example, the packages are named Personal, Business, Commerce Basic, and Commerce Advanced. But for our scope, we will focus on the business package because it starts from $23.00 monthly, so for 1 year it will be roughly $276. In this business package, the users will only get limited features like mobile-optimized websites, templates, free custom domains, and advanced website analytics. Similarly, Go Daddy is also divided into four sectors, including basic, premium, commerce, and commerce plus. So, if we choose commerce plus, the price is $29.99 per month, which is roughly $359.88 yearly. Thus, in this extensive package, users get functionality like website builder, custom domains, website security, marketing, website chat support, and much more.

But after analyzing both competitors, we believe that our product is still appealing to the Lucky 7 business owner Mr. Alex because the owner has no technological knowledge. So, if he chooses Square Space or Go-Daddy, then it will get difficult for him to build the site even without coding because a person at least needs to know the structure and how it will be incorporated into the website to ensure that users have a smooth experience through their website. So, to resolve this technology challenge, he will have to hire a technology expert who can do all the coding, structuring, planning, and management of his website. Thus, now Mr. Alex must pay for both the technology expert and the software license, which will eventually increase the number of additional expenses. In addition to expenses, the expert he hires might not be willing to give personal attention and detail because he is not making this website for himself, instead, he is building this for the Lucky 7 owner. So, regardless of how much sales happen through the website he builds, the technology expert will keep getting his fixed monthly salary. Moreover, if assistance is needed while making the site, the individual must communicate through call or chat which will increase the time of reaction.

Therefore, to solve all these issues, the best option available for Mr. Alex is to collaborate with Optimal Systems because if he signs the contract with us, all the tasks from website planning, structuring, and management will be done by our team. In addition, we are also open to implementing all the additional features that Mr. Alex wants the website to have because he knows his customers well in terms of their requirements. Another advantage is that our software is completely free, and users will have unlimited access to resources, including live team support, technical advice, and will closely support to grow their sales. So, if Mr. Alex needs assistance, then instead of doing a chat or call, our members will be present physically to take detailed notes about the issue and try to fix that issue as quickly as possible, so it does not affect the online customer traffic. Our team will also provide greater attention to statistics of website, marketing, and sales because since we are taking 10% of the profit every month to use our software, our team will implement advanced algorithms that are unique, so more customers will be attracted to buy the product from the Lucky 7 store, which will ultimately increase both business and our team’s profit. Finally, our software will save money and time because the owner does not have to worry about which website package to select, nor must pay different monthly installments. After all, we combined all our profit into one segment.

# Technical

## Technical Objectives

The technical objectives for our project are that we are making an e-commerce website for Lucky 7 using HTML even though no members in our group are familiar with HTML and JavaScript programming. The group members are only familiar with the Java environment, so this will be the first time when our group will use HTML and JavaScript simultaneously to build a dynamic website. The main reason for using HTML is that our team is interested to learn HTML because every website we use is almost implemented utilizing HTML and JavaScript. In addition to a new programming environment, our team is also unfamiliar with MySQL database utilization through the PHP-My-Admin domain. Since we are making a dynamic website, all the information present and circumvented through the website will be processed to our global database to ensure that all the sensitive data is securely stored in one place effectively. Hence, first, our group will learn the basics of using the database, including how to create entities and tables. In addition, when users will see the inventory online, interact with our website by adding items to the cart, or when checkout products, then statements regarding updates, insertion, and deletion will be required to process all the data. So, we will also learn how to establish various database connections to ensure that what the customer does on the website gets stored in the database for further analysis. Therefore, the two technical objectives or new learnings for our team will come through HTML programming and MySQL.

## Operating Environment

The operating environment that our website evolves around is HTML (Hyper-Text-Markup-Language). We chose to integrate HTML as a medium because our main goal was to make this website available for every user, regardless of the type of technology they inherit. So, by using HTML, our website (software) can be assessable from all operating systems, for example, Windows, MacOS, IOS, and Android. When reflecting upon the hardware components, users can access our sites through their smartphones, tablets, and laptops. When reflecting upon the fluctuations of the business sales for the Lucky 7 store, it is evident that the store requires more sales to balance out their expenses because currently, Mr. Alex must pay out of pocket to settle all the expenses that cannot be recovered from the profit generated during that month. Thus, to resolve this issue, our main goal is to develop an online platform to influence more customer traffic because if more people are aware of the store and inventory, more products will be brought. Hence, in this case, if we decide to build an app for either IOS or Android, then this approach would not be considered effective because the increment in the monthly sales, especially in the online sector would remain the same, or just increase by a very small margin. For example, there are more than 1.5 billion active IOS users (2023), and the android population is roughly 133.4 million.

So, it is noted that if our website is built with operating system restrictions, then our website would only be able to influence the percentage of the population who have a comparable device, like a phone or tablet to run the e-commerce app. In addition, the percentage of repeat orders will only oscillate between 5 to 10% according to the particular operating system. Thus, to resolve this barrier of compatibility, our team decided to go universal, meaning we chose to implement our software as a website utilizing HTML functionalities. So, by using an online website, all the users of either IOS, Android, Windows, or Linux machines can be able to access our website with any version of the software installed on their respective devices. Hence, with the increment in the user population, it is evident that more customers will be able to navigate and interact with the Lucky 7 website, which will ultimately result in increased monthly profit. When reflecting upon the negative aspects of our revenue model, using a universal HTML website can cause a few issues because to access the site, our customers will require high-speed data or wi-fi. So, if the users are not equipped with high-speed data, then they will not be able to load the site in their web browsers, which will result in the fluctuation of overall business sales. In addition, our team’s revenue earned from the overall sales can see a drop.

## Development Tools

To build our Lucky 7 e-commerce shopping website, we decided to encapsulate various development tools, including API libraries, Visual Studio Code, HTML, CSS, JavaScript, and MySQL database. When starting with the foundation used to initiate our programming, we chose VS code because it provides a wide range of programming languages support, and alongside, every member of our programming team has quality experience using the environment. So, choosing a familiar environment is important because when it comes to coding, it will require collaboration when certain functions do not compile as intended. Thus, by using VS code, we chose to implement our website using HTML and JavaScript. We chose HTML formation because it will open this website to a larger percentage of the population to help the business generate profit, which will ultimately raise the revenue that we will earn. With HTML and JavaScript, most of our coding takes place, including building a dynamic interface and showing food items, accessories, and prices. In addition, for styling and making our website stand out, we also integrated CSS files to elaborate all the designing parts of the code, including headers, colors, and sizes of items and pictures.

When reflecting upon the data circumvention, we agreed to utilize the MySQL database, which will be accessed through My-PHP admin. In our Lucky 7 database, we will design a way, so that all the information regarding the store's inventory, including products, prices, and quantities will be stored systematically. In addition, there will also be a unique category for promotional deals currently present in the online platform. In the MySQL database, each sector will be addressed as entities, for example, our database will contain an broad entity named products, and this main entity will be encapsulated by two sub-classes. One sub-class will be for food items, and the other for accessories. We chose to implement sub-classes because there are a few data sets that are only viable for food items, and not for accessories. Moreover, each product item will be given its unified primary key as a serial number, which will help to circumvent the database and products directly from the HTML interface (UI). Finally, our team will also utilize API library support because our website will encapsulate voice searching AI feature. With the help of this voice search implementation, our website will incorporate AI features to help increase the level of responsiveness and consistency. Therefore, these are all the developing tools that will assist our team in the website (software) developmental process to attain the quality and trust of the valued customers.

## Assumptions and Dependencies

The assumption that could affect our project’s success is related to product delivery services and MySQL database. Since we are using MySQL to hold all the inventory and customer data, we assume that SQL will be able to hold all the data because if it does not hold, instead if SQL losses the data, then the data being lost can include sensitive information regarding the customer. Thus, in this case, this can affect the success of our project. In addition, when customers checkout products from an e-commerce platform, then usually sites like Walmart provide the user with two options, either to get delivered to a certain address or to have a pickup from the local store. In our case, the Lucky 7 site only features a delivery option because Mr. Alex preferred to get products delivered to the user’s location, rather than having them come for pickup, which can increase time complexity for customers. Thus, only having a delivery option can affect our business success because we assume that if Mr. Alex is not able to set up an effective delivery strategy due to a lack of employees, then the products cannot be delivered to the customers on time. When discussing the lack of delivery employees, problems could arise when Mr. Alex is not ready to pay the hourly rate that the employee wants, and in this case, there will be no person available to do the delivery. If the products are not delivered, then this can impact our online sales because though the online site has hundreds of various items, if it lacks delivery services, then it will automatically reduce customer satisfaction and trust. In addition to having drivers, the delivery service is also dependent upon a car rental agency called ACE, which will provide the business with four delivery cars. Transportation is very important because our business has signed an agreement with car rentals to provide us with cars at a monthly rental cost. But for delivery, Lucky 7 decided to rent SUV car models, so in the future, no problems would arise regarding inefficient carload capacity. According to the agreement, renting a single SUV cost must be higher than an average sedan car, so the ACE company will charge Lucky 7 $15 per day for each SUV rented. In addition, the agreement even includes that payments will be made monthly, so according to $15 per day, the monthly cost for one single car would be around $450, and for all four cars, the total car rental cost for each month would be roughly $1800. So, if in the future, ACE company plans to increase the rental cost of each car registered by the Lucky 7, then Mr. Alex can get into complications because he is already operating on a tight profit margin. So, an increase in expenses would not be appreciated and can lead to the cancellation of the rental contract. Thus, in this case, without delivery cars, having enough employees will not be justified because they will still not be able to deliver products due to no transportation services available through the Lucky 7 store.

# Scope & Limitations

## Scope of Initial Release

The main scope of our initial release is to provide the Lucky 7 store with an immersive e-commerce platform to boost their sales, from which we will be generating monthly revenue. Since the store now is fully offline, by the utilization of our online platform, they can get the initiative to step into the digital world. When reflecting upon how the website is structured, it is an online e-commerce shopping website, so it will display food items, accessories, and promotional deals that the user might be interested to take part in. But all these products can only be showcased on the website only if it is appealing and integrates effective functionality and features. So, the major features that our website will incorporate include a dynamic website, meaning it will encapsulate the use of the MySQL database to load, update, and store data securely in one given place for easy reference. In addition, we are also integrating the AI feature of voice search which will allow our users to search through the inventory by just utilizing their voice, which ultimately reduces the time of typing keys into the keyboard. The website will also offer various promotional deals daily which will act like a feature in our website because it is mainly used to attract customers to buy from the Lucky 7 online platform. To add products to check out, we have added a dynamic cart webpage and add-to-cart buttons under each product to ensure that the customer has the functionality to add products to the cart, and to remove or change any item from the existing cart before the final checkout, including all the payments and taxes. Therefore, these are the major features and functionalities that our website will encapsulate at the initial release state.

## Scope of Future Release

When reflecting upon the future scope of the e-commerce website, we have planned many computerized features. In the future, it is evident that the adaptation of technology will increase because almost every industry will be equipped with some degree of automation. So, when associating this with the business field, the chances will become high that the competitor stores, including Quick Mart, Speedy Mart, and J Convenience Store will also elevate their business models by introducing e-commerce websites or partnering with franchise stores to increase the level of trust and reputation for customer attraction. Thus, for future scope, our team is planning to implement inclusive AI features, like a QR code scanner to scan products to find them in the inventory present, and by adding more digital payment methods because right now we are only implementing cash-on-delivery and debit/credit card payments. So, in the future, adding bitcoin, Paytm, and gift cards would be examples of a few payment alternatives that will be made available through future releases.

Hence, once our website becomes the most preferred website for private store shopping, then for expansion of population we will also introduce mobile applications to support compilation for IOS and Android devices so that the users can have their personalized version of the app, where all their card information can be stored securely through two-factor authentication and other in-built services like Keychain for IOS environment. In addition, it is noted that the population who will utilize this e-commerce software will be belonging to different cultures and religions. So, to make the software interactivity simpler, our team will be working towards developing the software to support all the native languages currently present, so all the users can experience their shopping interface with their preferred language. For example, we will have the software support many languages, including Hindi, English, Spanish, and much more, so no customer feels isolated if they are unfamiliar with a particular language. Therefore, all these additions are reflecting our future scopes, which will be delivered systematically through further software releases and updates.

## Limitations and Exclusions

When users utilize an e-commerce website, they often assume that the platform will integrate a QR code scanner to scan inventory items. But since it is the initial release, our website will not have a QR scanner because our main goal is to implement voice search first so that our customers can navigate through the site by just utilizing their voice, which will as a result decrease the amount of tying. Having a QR code scanner is very essential in shopping platforms because an inventory can feature hundreds of items, and without a QR code scanner, the user would have to look for the item manually by scrolling through all the possible inventory present. In addition, having a QR code scanner, customers can scan the bar codes of the product to add them to their cart for final checkout. Doing this ultimately will save the searching time and increase the level of efficiency. Hence, our website will not feature a QR scanner, but in future releases, we are planning to implement that feature because we do not want any of our valued customers to get diverted to other shopping stores just because our website does not have effective AI functionalities. In addition, to the QR code scanner, our website does not have an option for pickup at the local store. Pickup means when customers order products online, then instead of delivering them to the customer's house, they will be kept ready for pickup for the customer at the Lucky 7 store. So, our software only has the option for delivery, and currently will not integrate the pickup option. Therefore, the Lucky 7 e-commerce website will not feature a QR code scanner and pickup option for delivery.