Vision and Scope Document

for

Food Takeout Application

Version 1.0 approved

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Team One

10/6/2022

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Revision History

Name	Date	Reason For Changes	Version
Dawson	10/9/2022	Reviewing and changing select data after meeting	1.0a

1. Business Requirements

<The business requirements provide the foundation and reference for all detailed requirements development. You may gather business requirements from the customer or development organization's senior management, an executive sponsor, a project visionary, product management, the marketing department, or other individuals who have a clear sense of why the project is being undertaken and the ultimate value it will provide, both to the business and to customers.>

In summary – what aspects (broad areas) of the business should the final software system be able to help with.

1.1. Background

<This section summarizes the rationale for the new product. Provide a general description of the history or situation that leads to the recognition that this product should be built.>

The food industry can be very overwhelming. From one side, you have a flurry of incoming orders, that can take on different attributes that come from customers who also have their own set of preferences and personal descriptions. On the other hand, you have employees with varying roles who need access to different levels of information and need to be able to alter and notify others of that information.

We seek to simplify that.

In summary – on the need of such a system.

1.2. Business Opportunity

<Describe the market opportunity that exists or the business problem that is being solved. Describe the market in which a commercial product will be competing or the environment in which an information system will be used. This may include a brief comparative evaluation of existing products and potential solutions, indicating why the proposed product is attractive. Identify the problems that cannot currently be solved without the product, and how the product fits in with market trends or corporate strategic directions.>

This application is seeking to streamline and increase convenience for ordering food for takeout. Allowing customers to interact with a technological system to order food instead of ordering in a restaurant with a cashier reduces business costs and is in general more scalable.

A succinct description of the system functions and performance criteria.

1.3. Business Objectives and Success Criteria

<Describe the important business objectives of the product in a way that is quantitative and measurable. The value provided to customers is described in section 1.4, so this section should focus on the value provided to the business. This could include estimates of revenue or cost savings, return on investment analysis, or target release dates. Determine how success will be defined and measured on this project, and describe the factors that are likely to have the greatest impact on achieving that success. Include things within the direct control of the organization, as well as external factors. Establish measurable criteria to assess whether the business objectives have been met.>

1: Allow customers to order food
2: Allow staff to accept the order

We would consider ourselves successful if the customer was able to submit an order and the restaurant could receive the order and produce an expected time.

A take-on expected results from the use of the system in each timeframe.

1.4. Customer or Market Needs

<Describe the needs of typical customers or market segments, including needs that are not yet met by the marketplace or by existing systems. You may wish to describe problems customers currently encounter that the new product will (or will not) address and how the product would be used by customers. Identify the customer hardware and software environment in which the product must operate. Define at a high level any known critical interface or performance requirements. Avoid including any design or implementation details. Present the requirements in a numbered list so that more detailed user or functional requirements can be traced to them.>

-The restaurant will need to see the orders on time. Accessibility is also a concern; for example, the system should avoid using color schemes that are problematic for the colorblind.

A few examples of difficulties encountered by specific user types and how the system can help reduce these issues.

1.5. Business Risks

<Summarize the major business risks associated with developing this product, such as marketplace competition, timing issues, user acceptance, implementation issues, or possible negative impacts on the business. Estimate the severity of the risks and identify any risk mitigation actions that could be taken.>

-Issues giving correct estimated time on orders.
-Lack of willing restaurants
-Incorrect tax information is calculated
-Customer orders an out-of-stock item
-Customers not comfortable with technology may struggle to adapt to the new system.
-Kitchen doesn't correctly update system

Risks w.r.t. to the final system in the dynamic business environment.

2. Vision of the Solution (Kevin)

<This section establishes a long-term vision for the system to be built to address the business objectives. This vision will provide the context for making decisions throughout the course of the product development life cycle. The vision should not include detailed functional requirements or project planning information.>

Long term strategic vision of the system w.r.t. to the business needs.

2.1. Vision Statement

<Write a concise vision statement that summarizes the purpose and intent of the new product and describes what the world will be like when it includes the product. The vision statement should reflect a balanced view that will satisfy the needs of diverse customers as well as those of the developing organization. It may be somewhat idealistic, but it should be grounded in the realities of existing or anticipated customer markets, enterprise architectures, organizational strategic directions, and cost and resource limitations.>

When using this application restaurants will be able to have a much more reliable way of taking orders from customers. The restaurant will also be able to give the customers timely information about what food is available at the time of ordering. Any customer will be able to choose what they would like to order and have confirmation that the order will be ready when they go pick it up.

A succinct vision statements.

2.2. Major Features

<Include a numbered list of the major features of the new product, emphasizing those features that distinguish it from previous or competing products. Specific user requirements and functional requirements may be traced back to these features.>
FE-1: Allow customers to order food and have confirmation for their order. (Priority: Must)
FE-2: Allow manager to update menu with food information. (Priority: Must)
FE-3: Allow cooks to update stock of ingredients and confirm food orders. (Priority: Should)
FE-4: Allow the cashier to update the order when it is ready. (Priority: Should)
FE-5: Allow customers, managers, and cooks to login to application. (Priority: Must)
FE-6: Run on an average computer. (Priority: Must)
FE-7: Be able to serve about 5 customers at a time. (Priority: Should)

Broad areas served by the system – borrowed from opportunity statement (note you are scoping the system).

2.3. Assumptions and Dependencies

<Record any assumptions that were made when conceiving the project and writing this vision and scope document. Note any major dependencies the project must rely upon for success, such as specific technologies, third-party vendors, development partners, or other business relationships.>

- *Depends on the relationship with the restaurant.*
- *Assumes customer has device to run application.*
- *May rely on other technology to process payment if implemented.*
- *Assumes cooks and managers understand how to use the system.*

Hardware, software, and network dependencies and needs presumed available for deployment.

3. Scope and Limitations

<The project scope defines the concept and range of the proposed solution. It's also important to define what will not be included in the product. Clarifying the scope and limitations helps to establish realistic expectations of the many stakeholders. It also provides a reference frame against which proposed features and requirements changes can be evaluated. Proposed requirements that are out of scope for the envisioned product must be rejected, unless they are

so beneficial that the scope should be enlarged to accommodate them (with accompanying changes in budget, schedule, and/or resources).>

Any specific aspects described in the opportunity but not within the scope addressed by the undertaken project.

3.1. Scope of Initial Release

<Describe the intended major features that will be included in the initial release of the product. Consider the benefits the product is intended to bring to the various customer communities, and generally describe the product features and quality characteristics that will enable it to provide those benefits. Avoid the temptation to include every possible feature that any potential customer category might conceivably want some day. Focus on those features and product characteristics that will provide the most value, at the most acceptable development cost, to the broadest community.>

Feature	Release 1	Release 2	Release 3
FE-1	*Fully implemented*		
FE-2	*Fully implemented*		
FE-3	*Implemented if time permits (medium priority)*	*Fully implemented*	
FE-4	*Implemented if time permits*	*Implemented if time permits*	*Implemented if time permits*
FE-5	*Fully implemented*		
FE-6	*Fully implemented*		
FE-7	*Fully implemented*		

Initial list of actors and uses and system characteristics – part of first release.

3.2. Limitations and Exclusions

<Identify any product features or characteristics that a stakeholder might anticipate, but which are not planned to be included in the new product.>

LI-1: Need to make sure that customers pay before the business starts to make their food.
LI-2: The system will only be run by restaurants or businesses that want to use the system.

Those from list actors uses and system excluded from the project.

4. Business Context (Martin)

<This section summarizes some of the business issues around the project, including profiles of major customer categories, assumptions that went into the project concept, and the management priorities for the project.>

4.1. Stakeholder Profiles

Description of Actors and their needs.

<Stakeholders are individuals, groups, or organizations that are actively involved in a project, are affected by its outcome, or can influence its outcome. The stakeholder profiles identify the customers for this product and other stakeholders and state their major interests in the product. Characterize business-level customers, target market segments, and different user classes, to

reduce the likelihood of unexpected requirements surfacing later that cannot be accommodated because of schedule or scope constraints. For each stakeholder category, the profile includes the major value or benefits they will receive from the product, their likely attitudes toward the product, major features and characteristics of interest, and any known constraints that must be accommodated. Examples of stakeholder value include:

Though no universal-accepted author is known, a common business practice is to create a SWOT (Strengths, Weaknesses, Opportunities, and Threats) Analysis when assessing a business's fit in the marketplace. Often attributed to Albert Humphrey, the SWOT analysis is an excellent methodology for addressing business issues. To address the issues of **Food Fast** entering the marketplace, first we must examine the strengths of the business.

Strengths

Though there are food delivery apps available in the current marketplace, there are only minimal options available in Winona, Minnesota and for Winona State University students who do not want to drive or who do not have a car. This means one of the strengths of **Food Fast** is that it will be available in Winona and surrounding communities. There are restaurants in Winona who cater to the campus community, but do not have delivery services or apps of their own to compete with the national companies who are also doing business in Winona.

Next, we must address the weaknesses of the business to best understand the fit of **Food Fast** in the marketplace.

Weaknesses

The **Food Fast** business and app are relatively new to the marketplace. Thus, they are almost unknown. One of the weaknesses of **Food Fast** is that they need to further develop business relationships with local restaurants and national food chains in Winona. Additionally, they need to hire drivers to deliver the restaurant food to local residents and college students.

Opportunities are the third item to be addressed in a SWOT Analysis. Thus, we must address the opportunities available to **Food Fast** in Winona.

Opportunities

There are limited food service apps available in Winona, but there are a number of residents and college students who would like to either have their food delivered or who would like to receive a discount for their purchases, if they are willing to pick it up themselves. It is difficult for the two apps currently operating in Winona to keep up with the demand of all of the restaurants and customers, especially during times of peak ordering. To best serve the Winona community, **Food Fast** will need to get local and national food service businesses (restaurants) to sign up as customers for the app. If there are businesses willing to hire **Food Fast** or to promote their businesses on the **Food Fast** app, then the business can gain market share from the other delivery app companies in Winona. If businesses and students/residents are willing to give the new app a try, then it would be advantageous for local businesses to offer discounts to their customers for carryout too. Not all residents or college students will want to pay a delivery fee. So, to gain more business for local

restaurants, they can advertise within the app with discounts for people who want to pick up their own food from the restaurant.

In the marketplace, there are always threats to a business. This is especially true for a new business. Therefore, threats to a business must be addressed as the fourth piece to a SWOT analysis.

Threats

In Winona, there are currently two food service apps operating. Doordash and Uber Eats have a corner on the market because they are already in operation and they are well-known. These two national chain apps will present a threat to **Food Fast's** app because they operate on a national level and they have name recognition already within the community. Though there is some marketshare still available, these two companies will present a threat to a new food delivery app that is a startup within the community. This is a significant threat considering the amount of money made by each company in the past year.

- *improved productivity*
- *reduced rework*
- *cost savings*
- *streamlined business processes*
- *automation of previously manual tasks*
- *ability to perform entirely new tasks or functions*
- *conformance to current standards or regulations*
- *improved usability or reduced frustration level compared to current applications*

Example:>

Stakeholder	***Major Value***	***Attitudes***	***Major Interests***	***Constraints***
executives	*increased revenue*	*see product as avenue to 25% increase in market share*	*richer feature set than competitors; time to market*	*maximum budget = $1.4M*
editors	*fewer errors in work*	*highly receptive, but expect high usability*	*automatic error correction; ease of use; high reliability*	*must run on low-end workstations*
legal aides	*quick access to data*	*resistant unless product is keystroke-compatible with current system*	*ability to handle much larger database than current system; easy to learn*	*no budget for retraining*

Stakeholder	***Major Value***	***Attitudes***	***Major Interests***	***Constraints***

Executives/ Management	*increased revenue*	*see mobile and web app product as avenue to assume 33% or more of the market share*	*Increased income; improved feature set over competitors' apps; time to market their product(s) to local businesses*	*maximum budget = $1.5 Billion; size of the market they intend to enter*
Designers/ Creators	*Ease of app use; more efficient; fewer errors*	*Positive outcome expectations; desire high usability*	*ease of use; highly reliable; efficient; easy to adapt or change*	*must run on low-end workstations and user mobile devices*
Marketing/ Public Relations	*Product will be easy to promote and cause few issues for PR to address*	*resistant to product that does not function well or causes issues for end-users*	*Personal data will not be sold or shared; tracking will be minimal; easy to learn*	*Limited promotional budgets*
Restaurateurs	*Product will be easy to use; minimal cost; promote their businesses*	*Positive to promote local businesses on food delivery app; but skeptical toward increased income*	*Increased income; easy to use; promotion of local businesses and franchises*	*Extra funds to advertise on app*
Customers/ Consumers	*Product will be easy to use; takes up minimal space on device; timeliness*	*Willing to try 'something new' looking for a way to get their food faster during peak times; enjoy discounted rates*	*Personal data will not be sold or shared; tracking will be minimal; easy to learn*	*Space on their devices; personal data/tracking*

4.2. Project Priorities

Any prioritized needs (functional as well as non-functional) that are considered a priority.

<Describe the priorities among the project's requirements, schedule, and budget. The table below may be helpful in identifying the parameters around the project's key drivers (top priority objectives), constraints to work within, and dimensions that can be balanced against each other to achieve the drivers within the known constraints. For more information, see chapter 2 of Creating a Software Engineering Culture *by Karl E. Wiegers (Dorset House, 1996). Examples:>*

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
Schedule	*release 1.0 to be available by 10/1, release 1.1 by 12/1*		
Features			*70-80% of high priority features must be included in release 1.0*
Quality			*90-95% of user acceptance tests must pass for release 1.0, 95-98% for release 1.1*
Staff		*maximum team size is 6 developers + 4 testers*	
Cost			*budget overrun up to 15% acceptable without executive review*

Dimension	Driver (state objective)	Constraint (state limits)	Degree of Freedom (state allowable range)
Schedule	*release 1.0 to be available by 10/1, release 1.1 by 12/1*	*Ability to create and test product within the limited timeframe*	*If the app is unavailable for a beta test market by 10/1, it should at least be available by 10/31; If app 1.1 is unavailable by 12/1, it should at least be available by 12/25.*
Features	*75% of Winona restaurants' menus, cooks, & cashiers on app for release 1.0*	*Ability to connect with restaurants in the set timeframe*	*70-80% of high priority features must be included in release 1.0 to test viability of product*
Quality	*Run on average computer/mobile device; able to serve 5 customers at a time*	*Product may not be able to handle 5 customers at a time in beta test (1.0) mode*	*90-95% of user acceptance tests must pass for release 1.0, 95-98% for release 1.1*
Staff	*Produce a quality app and experience for 1.0 release*	*maximum team size is 6 developers + 4 testers*	*Minimum team size to achieve goals/standards is 4 developers + 2 testers*
Cost	*Complete product within or under budget projections*	*Feasibility issues of budget constraints, should any malfunctions issues arise*	*budget overrun up to 15% acceptable without executive review*

4.3. Operating Environment

System, software, hardware, and network requirements in anticipation of scalable and extensible system.

<Describe the environment in which the system will be used and define the major availability, reliability, performance, and integrity requirements. This information will significantly influence the definition of the system's architecture. Consider questions such as:

- *Are the users widely distributed geographically or located close to each other? How many time zones are they in?*
- *When do the users in various locations need to access the system?*
- *Where is the data generated and used? How far apart are these locations? Does the data from multiple locations need to be combined?*
- *Are specific maximum response times known for accessing data that might be stored remotely?*
- *Can the users tolerate service interruptions or is continuous access to the system critical for the operation of their business?*
- *What access security controls and data protection requirements are needed?>*

Actors will be locally available to the restaurant. Users can access the system any time, but especially customers will need to be informed of the establishment it closed. Data (menu and stock information) is generated by kitchen staff in a database form. Downtime will be disruptive to customers, as they will not be able to submit orders. Likewise, kitchen data may fall out of date without the kitchen itself updating it. Access to data like menu and stock will need user authentication.

Users of **Food Fast's** application services will be in Winona to start. Therefore, they are close to each other and within the same time zone. Though users across the city of Winona and some close surrounding communities will need to access the system at the same time, these factors will have already been addressed by the time version 1.1 is released. Plus, the locations will not be far apart, and the number of users will be minimal for most food delivery/service apps. Data is generated and used locally. Tracking information will not be shared or sold, and personal information will not be available outside the app. Restaurant to customer response time via the app should be limited to between 2 and 10 minutes for proper customer service and app responsiveness. Users may be able to tolerate minimal service interruptions, but interruptions should be limited to maintain the reputation of local restaurants and franchises.