**CS691 - Computer Science, Fall 2021**

**Project Initiation Document**

**Inwood Bagels**

**Project: Inwood Bagels Web**

**Project Manager: Gaëlle Gilles**

Table of Contents

[**Document Purpose - Gaelle Gilles**](#_4axpwpnpxq9v) **4**

[**Background to the Proposed Work**](#_w7d9fo3o70dc) **- Nandu Devarasetty 4**

[**Vision - Brindavani Pathuri**](#_vet7b1i6xqpp) **4**

[**Project Objectives - Brindavani Pathuri**](#_te7kdn1ys3tk) **5**

[**Project Scope - Noah**](#_d6v3yz9glv6a) **5**

[**Business Case - Gaelle Gilles**](#_8bk2ntdlg7bu) **5**

[**Assumptions - Charlie Adams**](#_yvr7qzthpef9) **10**

[**Constraints - Masha Obaturova**](#_k3cbbfxa4doy) **10**

[**Risk Management Strategy - Charlie Adams**](#_1u6rnfefu46x)**,Nandu Devarasetty 11**

[**Deliverables - Charlie Adams**](#_wuql74ik4mix) **11**

[**Stakeholders - Charlie Adam**](#_17dp8vu)**, Nandu Devarasetty** **12**

[**Project Team - Hemaswi Gorrela**](#_db0qabbb5beq) **13**

[**Project Plan - Masha Obaturova, Abhilash Gubbala**](#_k1lsbk7ur19h) **15**

[**Project Controls - Abhilash Gubbala**](#_o6txsvq9czs3) **16**

[**All project aspects will be maintained in English, including, but not limited to, communications, documents, and source code.**](#_hsmklmg5ori8) **16**

[**Communication Plan -Charlie Adams**](#_6d5j7krayfmc) **16**

Document Details

|  |  |  |  |
| --- | --- | --- | --- |
| **Version** | **Modifications** | **Author** | **Date** |
| **1.0** | Initial PID Document | Charles Adams | 09/22/2021 |
| **2.0** | Improved RACI/Project Plan/Risk Management | **Gaelle Gilles** | 10/04/2021 |
|  |  |  |  |
|  |  |  |  |

Approvals

This document requires the following approvals:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Name** | **Role** | **Signature** | **Date** | **Version** |
| **Prof. Yuri** | Approver |  |  | 1.0 |

Distribution - Charlie Adams

This document has been distributed to:

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Role** | **Date of Issue** | **Version** |
| Gaëlle Gilles | Project Manager | 10/04/2021 | **2.0** |
| Masha Obaturova | Lead Developer | 10/04/2021 | **2.0** |
| Hemawsi Gorrela | Developer | 10/04/2021 | **2.0** |
| Charles Adams | Product Owner | 10/04/2021 | **2.0** |
| Nandu Devarasetty | Lead Business Analyst | 10/04/2021 | **2.0** |
| Noah Ponticiello | DBA | 10/04/2021 | **2.0** |
| Abhilash Gubbala | Lead QA Analyst | 10/04/2021 | **2.0** |
| Brindavani Pathuri | Tester | 10/04/2021 | **2.0** |

# 

# Document Purpose - Gaëlle Gilles

The purpose of this document is to go over the details of the project. The project will be a website for the bagel shop Inwood Bagels, located in New York, NY. The website will be called inwwodbagelsny.com. The aim of this project (creating a website for a business that is lacking one) needs to be completed as the customer of the product will need it to help improve his business. This document will state:

• The roles of each member in the group along with their responsibilities

• The project objects and its scope

• How this project will benefit both the business and its customers through the business case

• The risk management strategy and any risks that comes along with this project

• Any details concerning the functionality of the website

This document will help the team manage the project effectively, and in a timely manner. This document is subject to change from now until the completion of the project.

# Background to the Proposed Work-Nandu Devarasetty

Inwood Bagels has been serving the Inwood community for several years, but is currently lacking a website. With a website, Inwood Bagels will have a larger web presence--a necessary addition for the business. Inwood Bagels currently uses Grubhub and UberEats so people can order food from the bagel shop online for either delivery or pickup. With the website, users will no longer need to go to Grubhub or UberEats (as online orders can be done on the website) but Inwood Bagels will still be using them for delivery. The website will help Inwood Bagels manage its inventory, as--along with clover--the website will help keep track of the amount of items being sold.

# Vision - Brindavani Pathuri

A website for customers to order food directly from Inwood Bagels either for pickup or delivery. Delivery will still be provided through a third-party service (Grubhub or UberEats). The website should also help Inwood Bagels manage inventory and increase revenue for the business.

# Project Objectives - Brindavani Pathuri

* To provide a website for Inwood Bagels that will allow its customers to order food
* The owner of the restaurant can manage their deliveries efficiently.
* Provide a user friendly experience.
* Target the appropriate audience by Search Engine Optimization.
* Receive feedback from the customers and improve the quality of food.

# Project Scope - Noah

Our scope is to create a Bagel shop website which deals with the following scope categories.

* Ordering through the website for pick up or delivery
* Send delivery orders to the provided third-party service
* Manage the menu by being able to add/remove items
* Customers can create account to easily reorder
* Consistent customers will earn points by going through the app in which they can get a coupon or deal (perk membership)
* The owners will be able to manage the inventory

The project will impact:

* Inglewood Bagels presence on the internet
* Help manage bookkeeping
  + Financial questions(ie. knowing what inventory is going in and out, the amount of sales, and the amount of sales per item)
* Loyal customers who reorder through the app
  + Rewards
  + Preset orders
* Inwood Bagels’ ability to maintain its logistics
  + Keeping record of on-demand supply
  + Reordering

# Business Case - Gaelle Gilles

The website for Inwood Bagels will allow customers to easily order food from the bagel shop for either pick up or delivery. This will save money for the customers as they won’t have to pay extra fees purchasing the food through Grubhub. Customers will be able to create their own account, see previous orders and favorite menu items as well. Bagel shop owners will be able to see daily/yearly/monthly/weekly sales through an admin account. Owners will also be able to update business hours, menu items, and more.

|  |  |
| --- | --- |
| **Application Name** | Inwood Bagels Website inwoodbagels.com |
| **Type of business model** | Examples:  Direct sales, platform, etc. *See the document "Types of Business Models"*    It’ll be a freemium and direct sells business model. This will allow consumers to create a free account, and purchase food for either delivery or pickup. Consumers can also sign up for a perk membership which will allow them to earn points for every dollar they spend. This will also allow the owners of the business handle customers and deliveries easily. |
| **Target audience of external users**  **(Customer Segments)** | For whom are we creating value?    We are creating value for both the business and the customers who primarily order online. Both parties will be able to save money with the development of this website.    Who are our most important customers?    Existing and potentially new customers. This will primarily target customers who order food from Inwood bagels on Grubhub, and customers who would rather order online and pickup their food, versus ordering their food in person. Ordering from the website will allow the business to save money as they won’t need to pay the 30% marketing fee on each order placed through Grubhub. The restaurant will just need to pay the 10% delivery fee for using Grubhub’s delivery services. This will also help save customers money because if a customer orders delivery from GrubHub, they are charged additional fees on the item they are purchasing). |
| **Groups of internal stakeholders, business users** | *Indicate who will be using the system.*  Do we need a product development group? No. The bagel shop has that covered already.  Do we need a sales group? No  Do we need a finance group (accounts payable, receivable)? No. The bagel shop can cover all finances.  Do we need a customer support team? No  Do we need an advertising management group? No, the business will cover the advertising.    The people will be using the system are the owners of the business and customers. The owners of the business will have access to the website through an administrative account where they will be able to make updates to menu, see sales, and more. |
| **Value propositions** | What value do we deliver to the customer?  1. The ability to order online through the website instead of Grubhub.  2. The ability to see the location of the bagel shop through google maps using Google Maps API  3. The ability to make an account  4. The ability to order food for delivery or pickup  5. Ability to see customer reviews on website  6. Ability to see pictures of menu items  Which one of our customer’s problems are we helping to solve?  1. There will now be a go to website for information about the business and its menu items. No need to wonder what the exact price of a bacon egg and cheese on a bagel will be, as the official website of the business will be able to inform the customer of such.  2. The website will be constantly updated by the business owners with store hours, when it’ll be closed for vacation, etc.  3. Ordering online will be made simpler  4. A major bonus of ordering off the business website for delivery versus Grubhub is the price of the menu items. The cost of the menu items go up in value on Grubhub (roughly between 7 and 25 percent) when service and delivery fee is included. If a customer orders food for delivery from the business’s website, the customer will save money. A good example is TGI Friday’s. A whisky glazed burger cost $12.59 before tax, service fees and delivery fee is added when purchasing on the TGI Friday’s website. $12.59 is the actual cost of the burger (In NJ, prices may differ in other states). An additional $4.89 is added to the bill (service and delivery fees) bringing the total (before tips are added) to $17.43. Whereas on Grubhub, if someone is ordering the same meal, the item cost $16.32 BEFORE taxes, and service and delivery fees are added. When taxes, service and delivery fees are added (around $2.82) the total cost comes to $19.14 (this does not include tip). So, if a customer orders from a restaurants website versus an outsource delivery company like Grubhub, the customer saves around $2.00 or more per meal.  5. Because the customer is saving money ordering from the restaurants’ website versus Grubhub, the customer is more likely to come back and order again.      Cost of a whisky glazed burger at TGI Fridays for delivery ordered on the TGI Fridays website:  Cost of a whisky glazed burger at TGI Fridays for delivery ordered on Grubhub:          What bundles of products and services are we offering to each Customer Segment?  1. Customers who love shopping online: The ability to save money using Inwood Bagel’s website vs. Grubhub  2. For all customers: To see pictures of menu items (not shown on Grubhub)  3. Products include breakfast sandwiches, lunch sandwiches, pancakes, coffee, bakery items, and more.    Which customer needs are we satisfying?  1. People who are unable or unwilling to travel to the bagel shop and would rather order something for delivery  2. People who would rather order online than wait in line at the store and pick up their food on their way to work or their next destination |
| **Key resources** | * What Key Resources do our Value Propositions require? * 1. Developers * 2. Pictures of the shop, its food, and other items it sells * 3. Menus * Our Distribution Channels? * 1. Store front * 2. Grubhub – (for delivering the food only) * 3. Website * Customer Relationships? * · We want a long-term relationship with the customer, meaning we want the customer to come back on a regular basis. * Revenue Streams? * · Sales revenue or transaction-based revenue: With the addition of the website, the bagel shop will not just earn money from people physically walking into the store, but also people ordering food for pickup and or delivery |
| **How the system is used** | What are the main business use scenarios?  The main use for this website will be ordering food (either for pickup or delivery), followed by the ability to create an account, and the ability to see where the location of the bagel shop is on google maps on the website itself.    Also, the website will allow the owners to have an account of their own. This will allow them to see daily/weekly/monthly/yearly sales made online.    They use Clover as a POS system which tracks credit card and cash sales. This can be integrated with the website and show the inventory in real-time. We can use the Smart Online Order for clover for this. It will help with online orders.    More information on it found here:<https://wordpress.org/plugins/clover-online-orders/> |

# Assumptions - Charlie Adams

|  |  |  |  |
| --- | --- | --- | --- |
| Assumption | Validated by | Status | Comments |
| Being able to properly connect with API for food website |  |  |  |
| Not all members can make every weekly meeting |  |  |  |
| Site can mark for order out of stock items |  |  |  |
| Authorization keys may expire |  |  |  |
| Site downtime |  |  |  |
| Reduction of costs by 20% |  |  |  |
| Customers who come back frequently will create an account, others can use guest checkout online and won’t need to create an account |  |  |  |
|  |  |  |  |
|  |  |  |  |

# Constraints - Masha Obaturova

This section outlines the things needed to be taken into consideration during the delivery of the project; this may include, but is not limited to:

* Time. Time differences as well as the schedules of team members can be a sensitive issue. As a team, we must take the time to individually work on this project, as well as participate in group discussions and be a valuable part of the team.
* Blockers. Communication is the most important part of a team's and project's success. We ask for help before the deadline and are always ready to offer help.
* Deadlines. Despite the lack of time, we strive for the success of the team and do our best to meet the deadlines.
* Cost (Data storage limitations, users’ authentications storage, APIs limitations). At the moment, we agree to use free versions of all technologies required for the project. This can be changed if necessary.
* Requirements. We agree to do our best to fulfill the requirements set for this project by the Customer and Product Owner.

# Risk Management Strategy - Charlie Adams,Nandu Devarasetty

Diagram

Description automatically generated

Risks Identification

Find what can go wrong in the development of the application.  Those things that are found should not overlap each other. Risk identification is an iterative process in that risks can be added or removed on each iteration.  Risks can be associated with the development of the application or the application in production. These risks can include:

* Weekly assignments not finished on time
* Poor Communication between team members
* Restricted access to documents/Coordinating deliverables between team members
* Coding bugs
* Order is not ready by the time the application suggested
* Departure of Team member/members
* Lack of pre requisite skills

Risk Analysis

This process assigns a value to each risk identified in step one.  Assigning value can be done in many ways.  The assessment of the value is crucial to determining priority in the cases that multiple risks are realized.  These values change over time.

|  |  |  |
| --- | --- | --- |
| **Risk** | **Probability** | **Impact** |
| Weekly assignments not finished on time | 50% | High |
| Restricted access to documents/Coordinating deliverables between team members | 25% | Very High |
| Poor Communication between team members | 20% | Very High |
| Coding bugs | 10% | High |
| Order is not ready by the time the application suggested | Unknown | Medium |
| Departure of Team member/members | Unknown | Varies |
| Lack of pre requisite skills | Unknown | Varies |

Planning Risk - Avoiding and Contingency

Risk avoidance and contingency plans are the pinnacle of risk management.  The previous steps are in order to complete this section; identification and analysis.  Ultimately, we do not want risk to occur, but in the event that it does we need to understand how to lessen the impact.  This section is crucial to both of those.  When an identified risk occurs, mitigation steps need to be in place and practiced in order to properly control the risk.  When an identified risk is identified, the best case scenario, the proper channels should be executed and/or notified.

|  |  |  |
| --- | --- | --- |
| **Risk** | **Mitigation Method** | **Contingency** |
| Weekly assignments not finished on time | Project manager has daily check-ins with members who have assignments due. | Project manager speaks with the team member experiencing issues with late assignments. Identify what is causing the late assignments. Escalate issue if needed.  May need to refer now to RISK - “Departure of Team member/members”. |
| Restricted access to documents/Coordinating deliverables between team members | Ensure early in the week that deliverables are posted so all team members can access and edit.  And those people who are assigned are notified of their responsibility. | Make a second document, add those unable to access original to be able to edit. |
| Poor Communication between team members | Set notifications for Slack on your mobile device.  Use email, text message or phone call if necessary. | In the worst case, team members with the requisite skills can make up the work. |
| Coding bugs | Version control.  Test more often.  Keep it simple. | Relay the issue to the project manager. Project manager should evaluate the impact of the current issue and decide whether to escalate or take a loss. |
| Order is not ready by the time the application suggested | Over estimate on time.  Or don’t suggest time? | Send updates for backed up orders.  Offer coupons for late orders. |
| Departure of Team member/members | All the remaining team members should get familiar with the activities of member/members who left to be able to replace them in case of their departure | Identify the skills we lost.  Identify who remaining that possess the skills lost.  Evaluate who can take on the work load.  Assign the lost work load to selected candidates. |
| Lack of pre requisite skills | All members of team should start practising of required role skills in the very early stage of project | Identify who lacks skills and which skills need improving.  Offer work to help improve those skills or assign those parties to skills they do possess.  In the worst case find outside help. |

Monitoring Risk

The purpose of risk monitoring is to determine if:

1.Risk responses have been implemented as planned.

2.Risk response actions are as effective as expected, or if new responses should be developed.

3. Project assumptions are still valid.

4.Risk exposure has changed from its prior state, with analysis of trends.

5.A risk trigger has occurred.

6.Proper policies and procedures are followed.

7.Risks have occurred or arisen that were not previously identified.

# Deliverables - Charlie Adams

|  |  |  |
| --- | --- | --- |
| **Date** | **Item** | **Owner** |
| Sept 21 | Project proposal | Project Manager |
| Sept 28 | PID Document | Project Manager |
| Oct 5 | Project Plan, RACI | DBA |
| Oct 12 | Requirement Types | Product owner |
| Oct 19 | Analysis Diagram | Lead Developer |
| Oct 26 | User Requirement | Lead BA |
| Nov 9 | RCT | Lead BA |
| Nov 16 | Functional Requirement | Lead Developer |
| Nov 23 | DB model, ER Diagrams | DBA |
| Nov 30 | Architecture Diagrams | Lead QA |
| Dec 7 | UML Design Diagrams | Product Owner |
| Dec 14 | Test Documentation | Lead QA |
| Dec 21 | FINAL PRESENTATION | Project Team |

# Stakeholders - Charlie Adams, Nandu Devarasetty

|  |  |
| --- | --- |
| **Stakeholders** | **Interests** |
| Third-Parties | GrubHub and UberEATS (third party delivery services). These two companies will still make money from Inwood Bagels as the shop will use them for delivery services. |
| Business Owner | Business owners will save money as the owner will no longer require users to use Grubhub to order from the store. Owner pays about 30% per transaction for customers to order food and have it delivered. That cost will drop to 10% once the product is finished. |
| End Users | Loyal and new customers that will order from the website |
| Payment Handling Merchant | Organization to handle, update, expect and refund the funds. Clover will be used for POS systems as that is what the business has. |

# 

# Project Team - Hemaswi Gorrela

This section will include:

* Project governance – with details on escalation
* Organization – demonstrating reporting lines within the project team (usually in the format of an organization chart)
* Roles and responsibilities, include a RACI table

Governance -

* In the event that a team member must be away. We must identify that team member with similar skills and appoint him/her the responsibilities of the away team member.

The project team includes the following roles:

* Project Manager – Gaëlle Gilles
* Product Owner – Charles Adams
* Lead Developer – Masha Obaturova
* Developer - Hemaswi Gorrela
* Business Analyst – Nandu Devarasetty
* QA Lead – Abhilash Gubbala
* Tester – Brindavani Pathuri
* DBA – Noah Ponticiello

Roles and Responsibilities of the team roles are defined in the RACI Table below:

# Graphical user interface, application, table Description automatically generated

# Project Plan - Masha Obaturova, Abhilash Gubbala

We will use SCRUM as our delivery system. Each team member will rotate every two sprints (each sprint lasts two weeks) to act as a SCRUM master. Agile boards will be created in JIRA or on the GitHub project. All code and tickets will be linked to the pull requests. Sprint planning meetings as well as weekly SCRUM of Scrums meetings and Retrospective will be planned accordingly.

The plan for this project is to create a website for a bagel store. The main goal is to sell food to the customers of Inwood Bagels. The website will be a user-friendly website, allowing customers to easily create an account, order food, save their favorite dishes, and more. The website will be created with React.js for front end, and Node.js and Express.js for back end. As for the database management, we will use Firebase and Firebase Store. For the Authentication purposes and Database Security we will use Firebase Auth as well.

Milestones:

MS1: Initial Project Plan (09/21/2021)

MS2: Requirements Completed (10/12/2021)

MS3: Design Completed (11/20/2021)

MS4: Coding Completed (11/23/2021)

MS5: Testing Completed (12/07/2021)

MS6: Project Presentation (12/21/2021) Table

Description automatically generated

# Project Controls - Abhilash Gubbala

* Entire project will be done in english.
* All the source code and project ideas,everything related to the project are kept in google drive for easy remote access to everyone in the team.
* There are weekly meetings for discussing the project. Meetings can happen once or twice a week, depending on necessity.
* Meetings can be done either in person or in zoom calls. Slack is used for discussions. For now meetings will be done over Zoom as one of our team members is not in New York
* Meetings are held at convenient timings for every team member, in case someone cannot attend the zoom meeting, which is recorded, will be sent to the.
* Project manager will keep track of deadlines and make sure everything is completed on time
* Tasks are divided equally among team members and will be completed within the allocated time.
* Every team member's opinion is taken into consideration when making a decision in the project.
* Meeting minutes are documented and sent to the professor
* Documents are peer reviewed before sending to the professor via email.

# 

# Communication Plan -Charlie Adams

|  |  |  |  |
| --- | --- | --- | --- |
| **Stakeholder** | **Frequency** | **Type** | **Purpose** |
| **Project Manager** | Daily | Slack,personal meetings, phone, zoom | Assign tasks, coordinate tasks based on due date, monitor tasks, evaluate progress. |
| **Project Team** | Daily | Slack, personal meetings, phone, zoom | So everything is done correctly and on time or if any member is struggling. |
| **End Users** | Potentially during the testing phase and after release. | Email, online testing sessions | Get feedback on features. |
| **Quality Management Team** | Daily | Email, Zoom | To ensure the product is good enough to provide to the major stakeholders. |
| **Business Owner** | As often as he wants | Phone, Email, Zoom | Report on progress and give feedback. |
| **Third Party Delivery Services** | Sporadically | Email, Web chat | Answer dev questions |