

**Project Plan**  
**Brightlink Systems**  
**SWE3312**

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<b>Team Organization</b>	BrightLink Systems
<b>Members/Roles</b>	Yeonkuk Woo      - Programmer Kevin Nolan      - Database Manager Thewodros Abebe - Quality Assurance Keilah Bonaby    - Software Design
<b>Project Manager</b>	Keilah Bonaby
<b>Resumes</b>	(See Attachments)

**KEILAH VERONICA BONABY**

Atlanta, GA, 30346 | 561-506-5615 | kbony@gmail.com

**SUMMARY OF QUALIFICATIONS**

- Adaptable to any computer operating system, software program, database system or CRM
- Exceptional organizational and communication skills
- Ability to manage multiple tasks simultaneously while maintaining a strong client service orientation
- High level of patience and attentiveness
- Self-motivated and driven to complete assigned tasks with quality within the specified timeframes
- Advanced user in Microsoft Office Applications
- Great working independently and in teams to accomplish goals and objectives
- Ability to de-escalate issues in a professional manner providing options and suitable solutions.
- Experience in a manufacturing/ Operations environment
- Comfortable analyzing and interpreting datasheets and system architecture

**WORK EXPERIENCE**

Support Engineer Intern

*LiveVox Inc.*

- Queried databases and performed configuration changes when required to restore service for a client
- Participated in weekly meetings to discuss technical challenges and collaborate on new ways to resolve and prevent system issues at their root.
- Assisted account managers in identifying areas of opportunity to improve client services
- Analyzed system components, source code, configurations, server data and debug logs
- Ensured that all processes and procedures were completed daily and support tickets were escalated to the appropriate engineering team
- Proactively identified, prevented and troubleshooted issues in accompany with fixes and possible solutions.

R2/EHS Management Assistant

*Two Rivers Recovery, Doraville GA*

- Assisted with the preparation and completion of regulatory and compliance documents.
- Ensured contractual requirements were met and in compliance with federal and state regulations.
- Responsible for the development, implementation and facilitation of employee trainings to ensure that all SMA facilities are compliant with internal and external Environmental, Health, Safety requirements.

Project Management Intern

*Two Rivers Recovery*

- Oversaw projects dealing specifically VOIP devices.
- Assisted with electronic liquidation and removal of sensitive client information
- Verifying bill of materials, reports and data entries for quality control
- Met with buyers regularly to discuss available inventory and future pickups

Remote Technical Support Agent

*Verizon Wireless*

- Provided troubleshooting for telecommunication and network devices
- Followed up on escalated issues to confirm resolution and customer satisfaction
- Assisted with activation and explanation of services to improve customer relations and build rapport

**EDUCATION**

*Pursuing BS Software Engineering Kennesaw State University | H.S Diploma*

## **Kevin Nolan**

Atlanta, GA 30339 | (678) 338-5088 | k.nolan@gmail.com

### **SUMMARY OF QUALIFICATIONS**

- Grasps main concepts of Java, C++ and C# programming languages
- Experience with graphic editing programs such as Adobe Photoshop, Flash, and various similar products.
- Proficient in design and document formats through experiences in Technical Writing courses.
- Knows basic concepts of Database design and implementation.
- Very proficient in matters involving computer technology, both in physical hardware and software interface matters.
- Proficient in Software design using various models including Agile and UML charts.
- Experience in customer relations and managing customer needs to keep a well maintained and organized workplace.
- Experience in sales and dealing with different kind of clientele and suiting to their various needs.
- Proficient in Microsoft Office suite programs Word, Excel, PowerPoint, Access and Publisher.

### **OBJECTIVE**

To pursue a career in software development with a company that can help fully utilize my skills in proper software planning, architecture design, and implementation.

### **WORK EXPERIENCE**

Birch Communications – *Tech Support* [ 05/18 – Current ]

Responsible for executing and assisting with various software support issues as requested.

Snap Fitness - *Sales Manager* 01/12 – Current ]

Helped manage sales and keep an organized system of member fulfillments, account queries, and gym marketing [ prospects.

### **AWARDS**

-Dean's List – Kennesaw State: Fall 2018

-Eagle Scout Award – Troop 209 – August 2005

-Superintendent Top 10 Academic Award – RCHS: May 2005

-4-H Honors Award – Rockdale County: May 2005

### **EDUCATION**

Kennesaw State University – Marietta, GA

*Business Management Major – Computer Science/Minor* (8/18 - Current)

Rockdale County High School – Conyers, GA (8/01-5/05)



## **Abebe Thewodros**

414 Rams Court | Tucker, GA 30084 | 678-791-8847 |  
kingthewodros@yahoo.com

### **SUMMARY OF QUALIFICATIONS**

- Adept at Providing Computer Support
- Skilled in Systems Troubleshooting, Installations, and Maintenance
- Possess In-Depth Knowledge of Numerous Software Packages and Operating Systems
- Top Customer-Service and Help Desk Skills
- Experienced in object-oriented programming; developing, testing and debugging code;
- Quickly learn and master new technologies; successful working in both team and self-directed settings

### **OBJECTIVE**

To obtain a position where I can practice both my technical and managerial skills in the computer science field while completing my degree.

### **WORK EXPERIENCE**

- Drafting Support| preparing blueprint | Hayat Real Estate Company | Feb. 1993–May 1997
- Drafting Technical | Preparing blueprint | Hayat Real Estate Company | Jun 1997-July 2003
- Cashier | Customer Representative | BP Oil Company | October 2003 – November 2008
- Limo Driver | Service Provider | Self-Employed | December 2009 – March 2015
- Uber Driver | Service Provider | Self-Employed. | April 2015 – Present

### **EDUCATION**

*DIPLOMA* | Addis Ababa Technical School, Addis Ababa, Ethiopia May 1992

*A.S* | Georgia State University, Atlanta Ga, May 2018 (Computer Science)

*B.S* Kennesaw State University, Marietta Ga, Candidate (Computer Science)



## **YEONKUK WOO**

Kennesaw, GA 30144 | 678-882-9923 | ywoo940912@gmail.com

### **OBJECTIVE:**

To obtain a part-time or internship position in which I can contribute to education, as well as my collaboration and communication skills. Operating Systems: Windows, macOS

### **TECHNICAL SUMMARY**

#### Proficient in the Following Programming Languages:

- C++
- C#
- Cobol
- Java
- HTML

#### Skilled in the Following Software:

- Word
- Excel
- PowerPoint

### **RELATED EXPERIENCE:**

#### IT Assistant

- Provided daily technical support to soldiers in the army.
- Performed troubleshooting and problem-solving of hardware issues.

### **ADDITIONAL EXPERIENCE:**

Korean Tutor, Kennesaw State University | August 2019 - Present

Republic of Korea Army | August 2016 – May 2018

3<sup>rd</sup> Company Leader Trainee at 20<sup>th</sup> infantry division

Gate guard/Honor guard at 66<sup>th</sup> infantry division

Discharged as a sergeant

### **LEADERSHIP ACTIVITIES:**

Korean Students Association (President) | January 2014 – Present

### **EDUCATION:**

B.S Computer Science, Kennesaw State University, Kennesaw, GA | Expected May 2021

# **SCOPE**

## **OBJECTIVE**

Design a new menu ordering system for local pizzeria that allows employees to easily input orders for customers, calculate and process payments and view the menu contents. It must also contain a manageable database containing customer information that the user can easily navigate to access relevant customer information.

## **MAJOR FUNCTIONALITIES**

### **1.) Customer Record**

- a.) Input customer phone number as key identifier.
- b.) Input relevant customer contact information:
  - i.) Name
  - ii.) Phone #
  - iii.) Address
- c.) Input customer payment information
- d.) Input address or customer notes

### **2.) Menu Design**

- a.) User Home Screen - Layout
- b.) Pizza Section
  - i.) Options for each Pizza Type
  - ii.) Options for each Pizza Size
  - iii.) Options for each Pizza Topping
- c.) Appetizers Section
  - i.) Options for each Appetizer Type
- d.) Desserts Section
  - i.) Options for each Dessert Type
- e.) Beverage Section
  - i.) Options for each beverage type



- ii.) Options for each beverage size

### 3.) Customer Search

- a.) Customer Search Screen - User Interface
- b.) Search database using Customer Phone # input
  - i.) Return customer information (if previous customer)
  - ii.) Start new database entry (if new customer)
- c.) Display customer information on screen for order input

### 4.) Order Input

- a.) Connect to Menu Screen
  - i.) Choose from 4 sections and find correct menu item
  - ii.) Add/Remove Menu items continuously until order complete
- b.) Modify order contents as necessary from menu summary
- c.) Mark order as pickup or delivery option
  - i.) Confirm address for delivery option.
- d.) Receive order total for processing payment

### 5.) Order Payment Processing

- a.) Confirm payment type
- b.) Process Payment:
  - i.) Cash payment: User input of cash received and change given
  - ii.) Check payment: Check number input by user
  - iii.) Credit card payment: full credit card number and expiration input by user
- c.) Verify customer payment type and amount is correct.
- d.) Finalize payment with order summary screen.

### 6.) Order Print Output

- a.) "Print Order Receipt" function automatically processed on order summary screen
- b.) Paper receipt printed by function to provide:
  - i.) Customer information
  - ii.) List of items ordered
  - iii.) Delivery or Pickup
  - iv.) Amount due

- v.) Signature line (if paid by credit card)
- c.) "Print Order Receipt" option available for user for duplicate receipt

## **LIMITS AND EXCLUSIONS**

1. The system will only be accessible to employees via in store network and will not have web access capabilities.
2. The system will only be able to process credit card, cash or check payments. Any other form of payment will not be accepted.
3. The customer database will only contain a customer's contact and payment information
4. The system will not have a location system to verify delivery addresses.
5. The menu system will only have what is provided on the printed menu and/or information given.
6. Employees will be responsible for inputting all customer information into customer database when a new customer is added.
7. Any non-menu pricing modifications will need to be provided by Pizza Land ownership.

# **TECHNICAL DESCRIPTION**

## **Functional requirements**

- Fully operational interface displaying menu items for users to input orders
- Database maintaining records for each customer with relevant customer information
- Easy to navigate interface to help user search and utilize customer database.
- Access to saved previous orders to check any mistakes.
- System to keep track and process payments made by the customer.
- Printing system to output receipt to user that will include all pertinent order information

## **Technical requirements**

- Programmers are required to be able to establish Java GUI interface what will provide a front screen.
- Ability to build a fully functional menu which can be displayed and stored as data with buttons is required.
- In order to give clear instructions to user, programmers are required to the process of ordering.
- Programmers are required to establish an easy-accessible data storing environment which also allows user to open the data.

## **Tools**

- Programming language : JAVA
- Programming tool : Eclipse IDE
- Database : SQLite

## **User Interface Concept**

### **Title Screen**

- Main Title Screen will contain log-in control box and pizza company logo image displayed
- User will interact with title screen by inputting login credentials and clicking log-in to gain access into the main Menu Screen where an order can be input into the system.

### **Main Menu Interface**

- User will have several click action buttons to choose from.
  - Order Input: Goes to order interface for submitting order
  - Find Customer: Search to see if customer is already in system
  - Add Customer: Allows user to add new customer to system

- Order List: Goes to interface showing the various orders placed that day
- Manage System: Goes to interface showing various options for manager

### **Order Input Interface**

- User will first have 2 options of “New Order” or “Continue order”
- Main Display title screen will show all menu categories for user to choose from.
- Pizza Category Option
  - User will click option for “Build your own” or “Specialty”
  - Build Your Own Pizza option:
    - \* Drop down box for user to select pizza size
    - \* Checkboxes for user to check toppings they want added
    - \* Empty Text field for user to input special instructions

- Specialty Pizza option:

- \* Drop down box for user to select pizza size

- \* Checkboxes for user to de-select toppings customer may not want

- \* Empty Text field for user to input special instructions

- Appetizer Category Option

- Each appetizer listed with picture icon for user to click on

- \* User will use quantity box to fill in how many of item to add

- Dessert Category Option

- Each dessert listed with picture icon for user to click on

- \* User will use quantity box to fill in how many to add

- Drink Category Option
  - Each drink type will be listed for user to click on
    - \* User will choose size of drink using drop down box
- View Order Option: Shows full customer order and submission process
  - Display shows each item in order in list for user to review and running total on the bottom of display
  - “Submit Order” button to complete the order for payment processing
  - Order Processing Display: gives user payment options in drop down box and then user chooses correct payment option.
    - \* Credit card: User inputs card information in text field boxes provided
    - \* Cash: User inputs how much cash received and change to be given is displayed
    - \* Check: User inputs check number into text field box provided



- Payment Complete Display: Provides message to user saying order has been processed or an error message if credit card was declined.

### **Customer Search**

- Main screen will show text field with “Search by phone #” label
- User will input phone # in text field and click submit button to connect to database and do a record search using input given.
- Interface will display window of “No customer found” if phone # is not in system. Option will be presented for user to click and enter “Add Customer Interface” to add them to database.
- Interface will display window showing all pertinent customer information if they are found in database. Options available for user to choose will be:
  - Modify Customer Information
  - Start new order on customer’s account
  - Remove customer from system

### **Add Customer Interface**

-Main screen will include text field and prompt for phone # first from user. System will verify the phone # does not exist in database and return error message to user if it does.

-User will be transferred to window with several text fields for user to input information

- First Name
- Last Name
- Phone # (pre-filled from previous entry)
- Address
- Type of Charge Account
- Delivery Instructions

-User will get an error message prompt if any of the inputs do not correspond with the correct data types needed for each text box.

-User will get “Customer added successfully!” when new customer record is processed into the database and will be then given option to “Start new order” and be transferred to the “order input screen” or exit to “Main Menu Interface”.

### **Order List Interface**

-Main screen will show table with list of orders processed that day.

-User can click on individual order in list to expand on order in new window.

- Print option: User can re-print the order receipt
- Modify order: User can modify the order and re-process payment

### **Manage System**

-Main screen will give user option buttons to manage different features:

- Add new User: option to add new user to system
- User Summary: display a user's orders for that day
- Refund/Void Order Option
- Print Total Day Sales
- Print Payments Processed

# SCHEDULE

	Progress	Status	Phase/ Task		Planned Start	Planned End	Actual Start	Actual End	Targeted Phase Duration	Actual Duration	Assigned To	Notes
1			Project Plan									
				Scope	9/7	9/14	9/7	9/23	6d	3w	Kevin	
				Data Management	9/7	9/20	9/7	9/23		3w	Team	
				Technical Description	9/7	9/20	9/7	9/23	6d	3w	Yeon	
				Schedule	9/7	9/14	9/7	9/23	6d		Keilah	
				Test plan	9/7	9/14	9/7	9/13	6d		Ted	
2	DONE	Milestone	Project Plan Complete			9/22		9/23		3w		
91			Requirements Documents									Test-case development
				Requirements Definition								
				Case flow & Diagram								
				Class Diagram& Documentation								
				Entity Relationship & State Transition								
		Milestone	Requirements Documents			11/4						
			System Design Documents									
				Conceptual system design								
				Technical design - High level								
				Testing								Test Execution
				Detailed Class diagrams -Classes Defined								
				Supporting text specification								
				Database table descriptions								
		Milestone	System Design Documents			11/18						QAE Testing/Fixed/Final
			Additional Requirements	Meeting Minutes								
				Appendix								
				Video Presentation								

## WORK BREAKDOWN STRUCTURE

<b>PROJECT TITLE</b>	Pizza Order/Delivery System
<b>PROJECT MANAGER</b>	TBA
<b>COMPANY NAME</b>	KSU SWE3313
<b>DATE</b>	9/23/2019

[illegible]

# **Data Management Plan**

## **OBJECTIVE**

The purpose of this Data management plan is to outline the data requirements, discuss the plans for storing and retrieving customer data as well as the program and software tools that will be used to manage it.

## **PLAN**

Our Pizza Order/Delivery application will collect the users name, phone number, address, and card type. This data will only be accepted in numbers or characters. Additional customer delivery information will be stored as well. All returning customers will have a retrievable record detailing this information in the database repository for long-term access.

Customer data will be collected via the software application. A Database-centric methodology will be used so that our separate program application can only access it. Essentially the customers will communicate directly with the database in some aspect whether it's placing an order for the first time or if the user is a returning customer. Using the Database-centric methodology we will construct a robust Database management system. The database design will be split into four phases: Data modeling, logical database design, physical database design, and deployment and maintenance. The Goal is to take the users input from our software application and store it in a safe and efficient manner.

## **MODELING PHASE**

An entity relationship diagram will be created. This will show the relationship between each component in our system.  
Entities:

- Customer
- Application.

Attributes:

Customer -

- Name
- Address
- Phone number
- Charge account

Application

- Menu
- Metadata
- Customers Previous order

Relationships

Customer>Application

Customer> Data Management System.

### **LOGICAL DATABASE DESIGN PHASE**

All entities will be transformed into a table for single valued attributes. This would be the customers phone number ect. Multivalued attributes will have a seperate table created. These relationships will be transformed into a one-one or a one to many.

### **PHYSICAL DATABASE DESIGN PHASE**

During this phase we will determine what data types to assign to each attribute. Our database will support only fixed sized characters, and fixed precision numbers. The customers phone number and name will be an index for easy data retrieval for returning customers.

Duplicate entries cannot be saved. Customers are unable to edit or delete.

### **DEPLOYMENT AND MAINTENANCE**



Finalizations will be made on indexes and keys. Since this is an object oriented database use cases will apply. The relationships between the customer and the database may vary.

# TEST PLAN

## **GOALS:**

- The main purpose of this test plan is to find defects in Mom and Pop, pizza order and delivery system and fix it accordingly. This test plan also helps us to get a general assessment about the quality of the website

## **OBJECTIVES OF THE TESTS:**

- The main purposes of these tests are to identify the bugs, program efficiency, and reliability.

## **COMPLETION OR EXIT CRITERIA:**

- We will focus on unit and functional testing of the website including robustness goals of the website, user interface testing, acceptance testing, and performance and efficiency testing. If the report from the group members is accurate, then we will consider that the test for the system is complete.

## **FUNCTION TO BE TESTED:**

### Customer Record

- Check user's phone number is a valid integer
- Ensure user's phone number is not a duplicate entry in database
- Verify Name, Address, and charge account are *String* > toString values

### Menu Design

- Check all items on menu displayed on the home screen
- Make sure pizza type, size, and topping options are available

- Check options for appetizers, dessert, and beverage sections are available and working

#### Customer Search

- Check the application has customer login
- Test the existing customer information is keyed with customer phone number
- Make sure there is a new database entry for a new customer.
- Make sure there is a new database entry for name, phone number, and address
- Test menu display is active after login

#### Order Input

- Check all menu selections are working
- Test after each selection, the selected item is added to the cart.
- Check add/remove/edit options are working at any time
- Make sure there is an option to confirm address for delivery
- If the address for delivery is not the same as the one in the system, make sure that there is a new data entry for a new address.
- After order is completed, make sure the order total with all selected items displayed.
- Check tax is included
- Check there is “PAY” options to transfer to the payment process.

#### Order Payment Processing

- Check all three payment options (Check, cash, and credit card) are displayed
- Test all three payment options are working
- After selection of payment option, make sure that it directs you to payment process
- For cash transactions, make sure cash received and change given are correct
- Make sure short balance is detected
- Make sure there is check number input entry for check payment (integers)
- Test full credit card and expiration date inputs are working and only accept integers
- Make sure that there is “DONE” option to finalize payment process.

## Order Print Output

- Test the application print order receipt
- Make sure the receipt has Mom and Pop Pizza full address and contact information
- Make sure the receipt has customer name on it
- Make sure that the list of items ordered, weather it is delivery or pickup, amount paid, and signature line (if paid by credit card) are included.

## TEST METHODOLOGIE

### Functional testing

- Test all application functionalities shared information and data and work together
- Test all inputs and outputs
- Test user and agent units are connected

### Performance Testing

- Test the application under different internet speed
- Check how the behaves under normal and peak loads

### Usability Testing

- Test all application functionalities are working smoothly (Including navigation and content)
- Test design, concept, and prototype of the application.

### Interface Testing

- Test the interaction between the web server and application.
- Test communication between all functionalities.
- Test error messages are displayed correctly.

## Compatibility Testing

- Test browser compatibility
- Operating system compatibility (Windows, MacOS, Linux, and Unix)
- Mobile compatibility (Android, iOS)

## **RESOURCES**

- All four team members and other 8 students (outside this class) will participate on this test. All are college students and capable to follow the test procedure.
- All the testers use their own laptop to perform the tests.
- All team members are responsible for the control of the testing procedures. Since the testing is home based, all members of the team can easily check and control the system.

## **SCHEDULE**

- |                                |               |
|--------------------------------|---------------|
| • Test-case development        | 9/20 – 10/25  |
| • Text execution               | 10/26 - 11/14 |
| • Problem reporting and fixing | 11/15 – 12/02 |