

ISTN3SI
2 October 2021



Codename: Developers Next Door

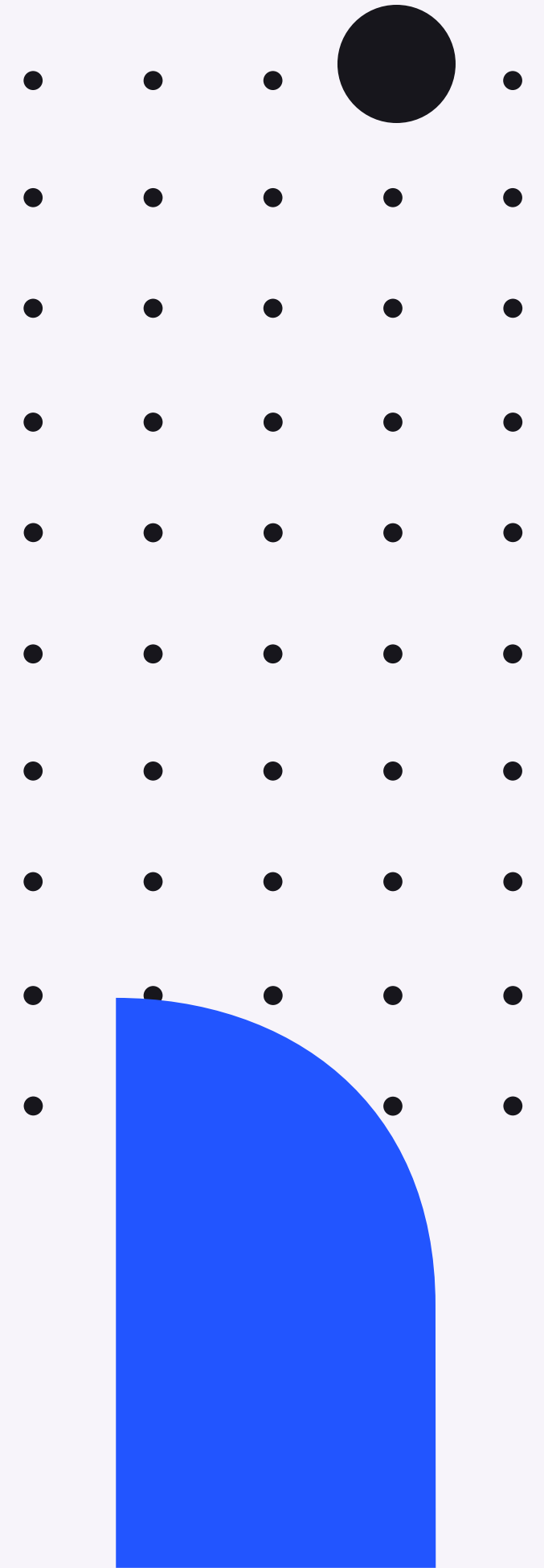
Milestone 3 Presentation

Self-Service Ordering System

Presenters: Sashen Moodley, Denita Pillay, Kalen Naidoo, Sadikha Maharaj & Shridhar Singh

Presentation Outline

1. Client Background [Sashen]
2. Overview of Main Requirements [Sashen]
3. Front End System Demonstration [All]
4. Website Documents
 - a. Website DFDs [Denita]
 - b. Sitemap and Page Description Diagram [Kalen]
 - c. Usability Strategy [Sadikha]
5. Website Demonstration [Shridhar]



CLIENT BACKGROUND



Who are they and what do they do?

- Dimension Data Westville Branch
- South African-based IT company
- Willing to play the role of our client
- Offer global solutions

Area for improvement

- Internal canteen in need of upgrade
- Provides quick snacks to employees before meetings

Main problems they face

- Lengthy waiting times
- Long queues
- COVID-19 safety measures -> social distancing & minimizing interaction

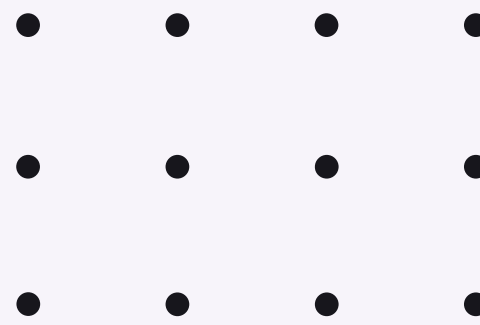


Picture: Dimension Data
Westville Branch



Picture: Westway Office Park

Overview of Main Requirements



1

Login

- Enter user credentials
- Get authorization status
- Features unlocked according to role

2

Place Order

- Employee finds available kiosk
- Enters login credentials
- Selects Items
- Review and pay (credit deduction)

3

Fulfil Order

- Canteen worker views active orders
- Change order status

4

View Credit Balance

- Employee presented their credit information (Credit limit and balance)
- Employee presented with their credit history

5

Management Facility

- Manage Menu Items
- Set Credit Limit
- Manage Canteen Worker Details

6

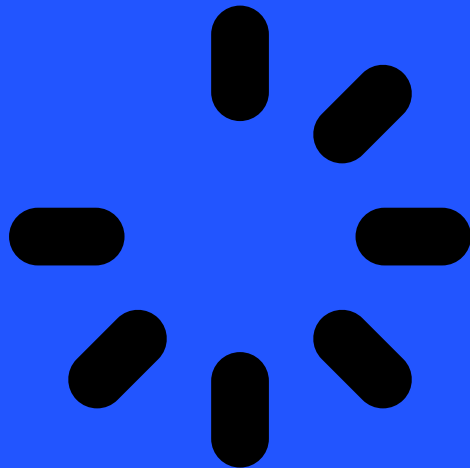
View Reports

- Various reports made available to Manager in the reporting dashboard
- Employee order receipt

FRONT END SYSTEM DEMONSTRATION



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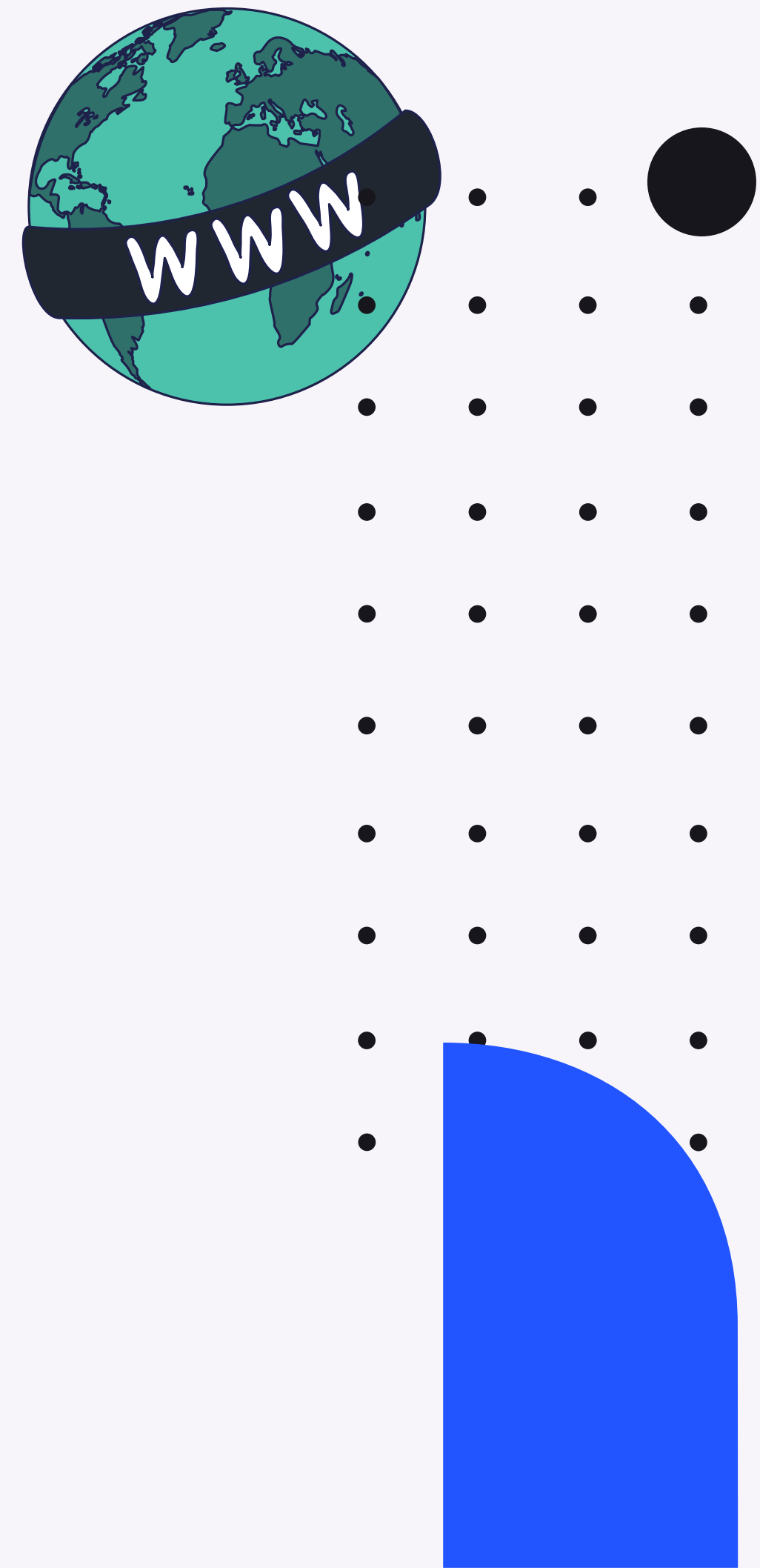


The Website

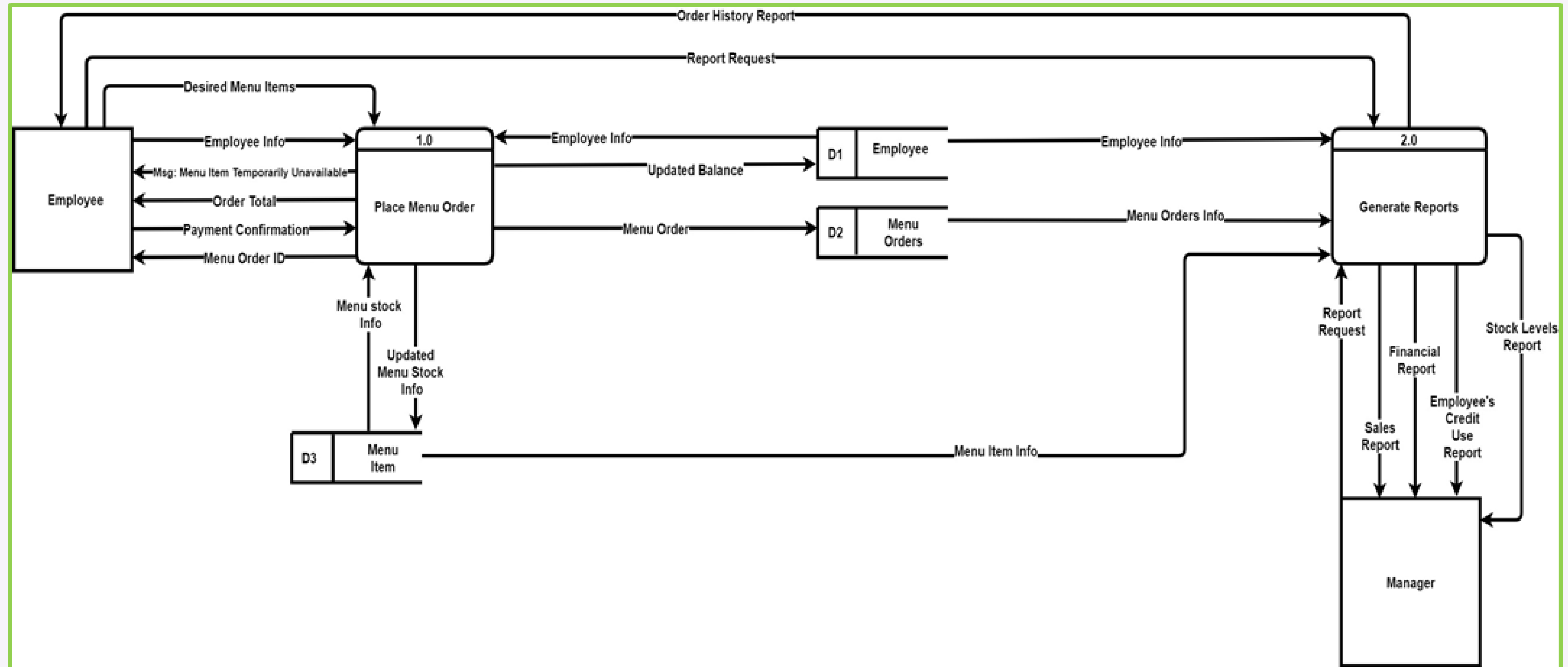
Part 1: Documents Overview

- Website DFDs [Denita]
- Sitemap Diagram [Kalen]
- Usability Strategy [Sadikha]

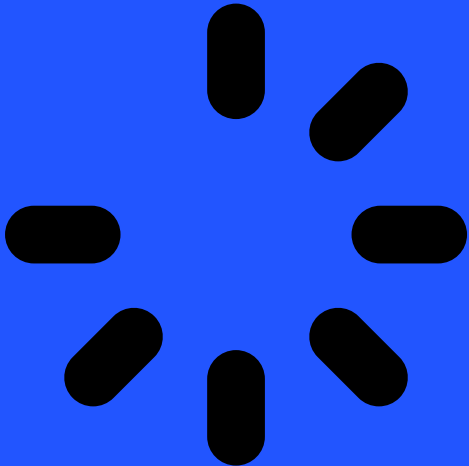
Part 2: Website Demonstration



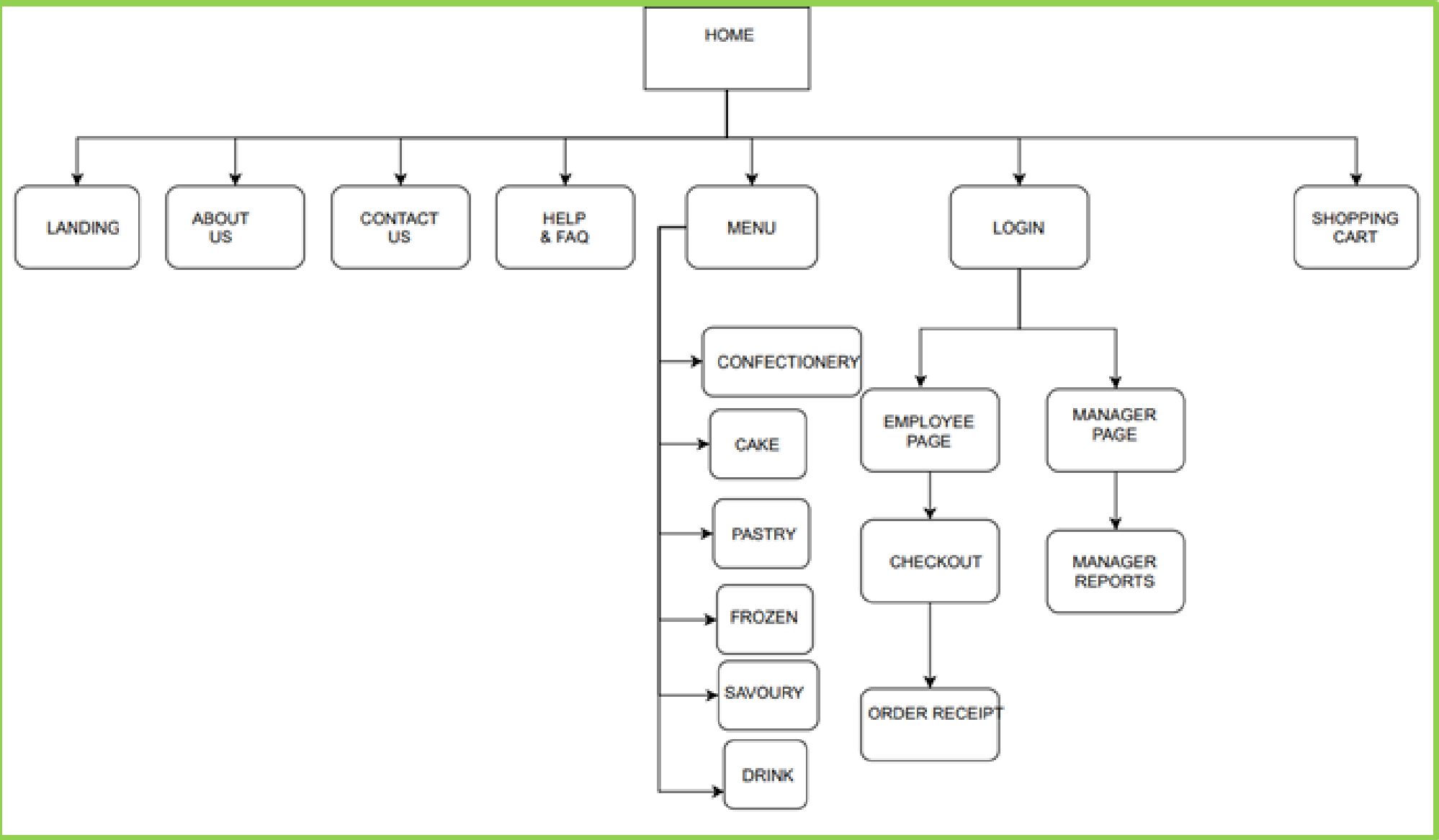
WEBSITE LEVEL-0 DFD



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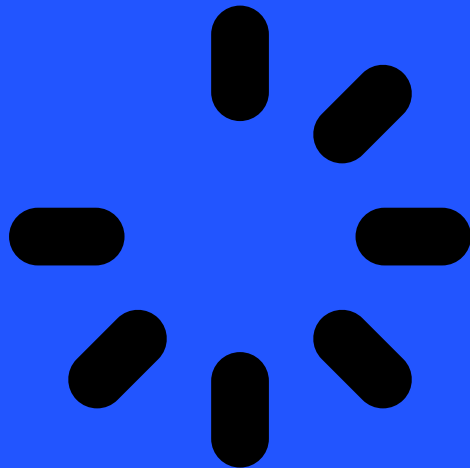


SITE MAP AND PAGE DESCRIPTION DIAGRAM



Page Name	MAIN FUNCTIONALITY	SUB FUNCTIONS
Public Page 1	Landing	View portion of menu items A brief introduction
Public Page 2	About Us	Description of the kiosk system
Public Page 3	Contact us	View contact details of the kiosk
Public Page 4	Help and FAQ	View frequently asked questions
		Help feature
		Complaints
Public Page 5	Menu	Browse menu items
Public Page 6	Login	Access employee pages
		Access manager pages
Public Page 7	Shopping Cart	Add menu items
		Delete menu items
Manager Page 1	Report Request	Request stock level report
		Request sales report
		Request employee credit use report
Employee Page 1	Checkout	Review order
		Confirm order
Employee Page 2	Order Receipt	View receipt of order

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WEBSITE USABILITY STRATEGY

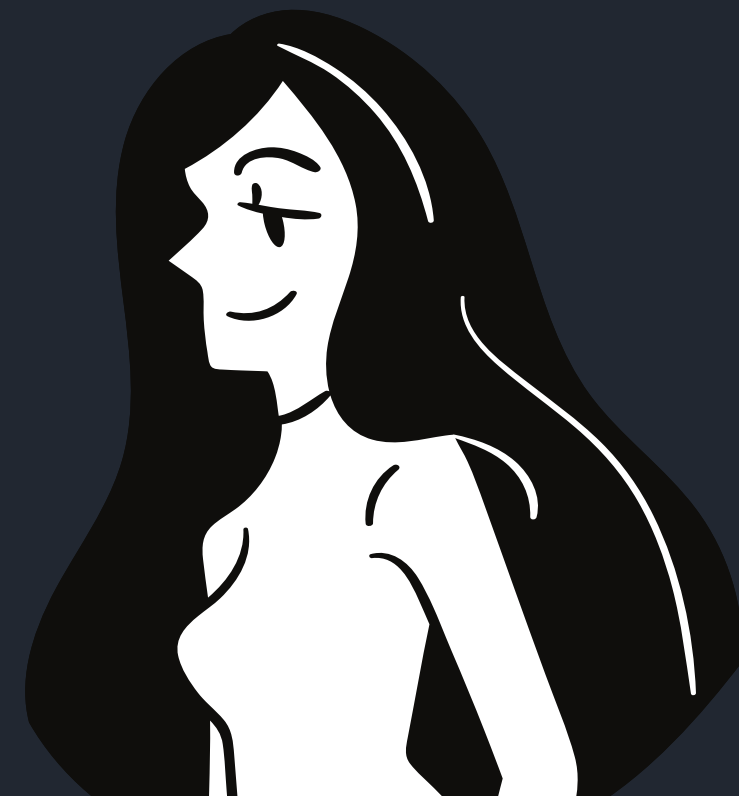
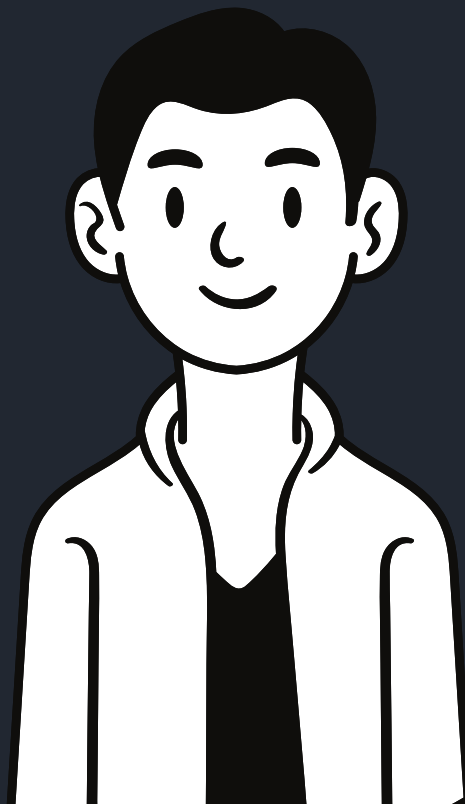
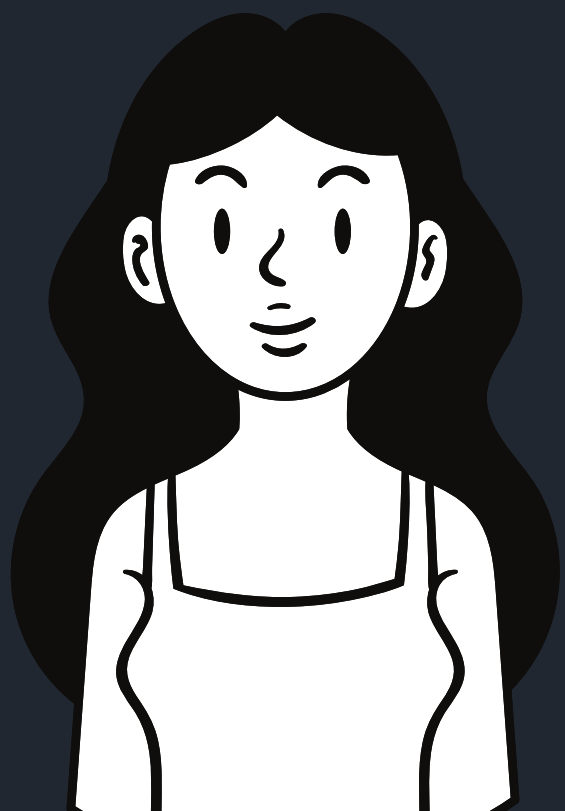
1.SEARCH	The website will contain a search feature as well as HELP & FAQ
2. LARGE FONTS	Easier to read
3. COLOR SCHEMES	Appropriate colour schemes
4.IMAGES & TEXT	Images of menu items as well as text
5.SELECTED OPTIONS	Only selected options highlighted
6. DESIGN PROCESS AND EVALUATION	Only absolutely necessary information is included in website
7. AVAILABILITY	Website should be accessible at all times
8. USER FRIENDLY	The user interface is pleasant and easy to navigate. Not many button clicks required to place order/request reports.
9. SCROLLING	Website mainly incorporates vertical scrolling. with minimal horizontal scrolling making the website more easily readable by users and fully visible.
10.CLARITY	Website is attractive, yet simple and easy to read and understand
11. PRIVACY	Personal details of users are not visible or accessible to others
12. RELEVANCE	The website is quite engaging and includes all relevant information needed as well as images of menu items.
13. RECOGNITION	The Home Page includes all necessary steps required to place an order/request reports
14. USER EXPERIENCE	Website is easy to use, does not include pop ups or bright lighting/colours that can be harmful to the eyes. Plenty of images to grab the user's attention. Fonts are easily legible.

15. NAVIGATION	All pages in the website have visible links to all public pages including the home page and login page making it easier for users to navigate the website. Navigation options are concealed in a burger menu when the website is viewed on mobile devices or when resized on larger displays.
16. LOGIN	The website will have 1 login page. When a user logs in, the website will analyse the type of user and redirect the user to the respective page accordingly; namely employee page or manager page. This is an access control mechanism which provides "context-dependent" access to pages that are access controlled, thus increasing website security.
17. CONVENIENCE	Important fields will be displayed on top left-hand side/ no need to scroll down page for important info
18.HEADINGS	All pages have a heading
19. LINKS	Links to social media pages included in the 'contact us' page of the website
20. ERRORS	Website does not allow users to order a quantity of menu items that does not exist. Try catch blocks are implemented for all database connectivity, this ensures that error handling is taking place and displays the error message on screen, should an error occur.
21. CRUD	The website will allow managers to add new menu items and delete menu items, as well as request reports. The website will also allow employees to update their details on the website.

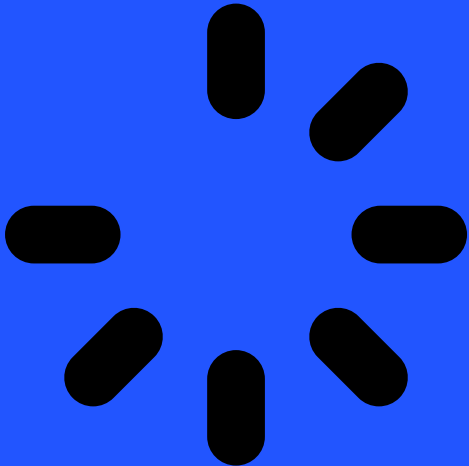
WEBSITE DEMONSTRATION



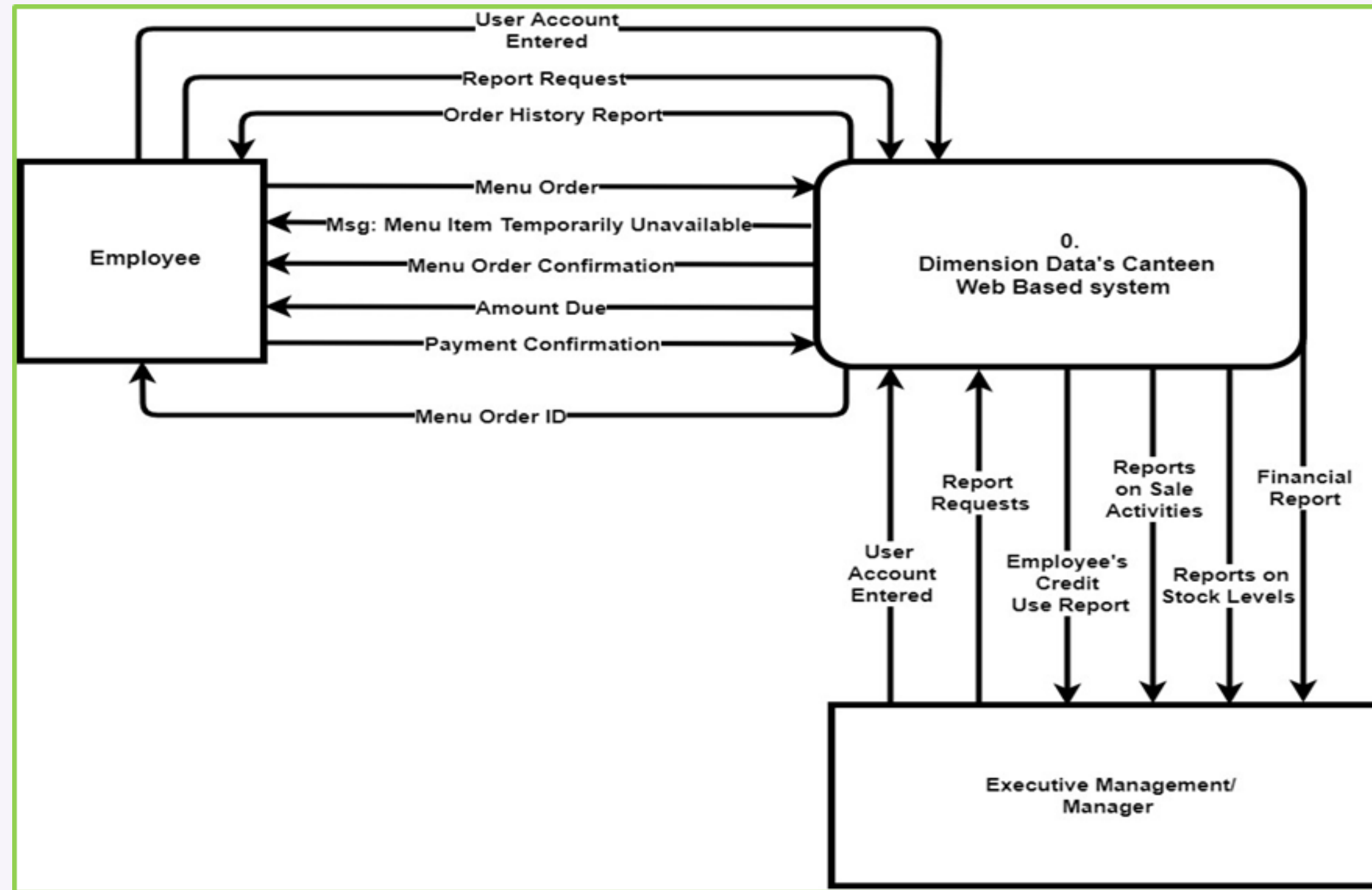
THANK YOU



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WEBSITE CONTEXT LEVEL DFD



FES ENHANCEMENTS

Aspect of Improvement for the FES	What was done to enhance this aspect of the FES	Level of Success (High, Moderate, Low)
Visual Improvements	<ul style="list-style-type: none">• Improved spacing between UI elements• Better colour selection for panels (reduced likeliness of dark text on dark backgrounds)• Text and formatting improvements• Layout changes• Page and column heading changes• Field and window sizing fixes	High
Usability	<ul style="list-style-type: none">• Filtered searching• Moved cart to the menu• Seeing credit info on menu• Tooltips and improved error information• Mandatory field checks• More confirmation dialogues• Included FAQ/Help section• Different landing pages for each user group• Emailing confirmations (when necessary)	High
Security	<ul style="list-style-type: none">• Masking passwords• Emailing new passwords	High
Processing	<ul style="list-style-type: none">• Refinement of business rules• Adding new items• Improved input validation• Archive status rather than deletion• Improved Grid View filling parameters• Monthly credit limit and balance interaction	High
Reporting	<ul style="list-style-type: none">• Added receipt after order using Crystal Reports• Created Various PowerBI reports from data generated in the FES	High

