UNIVERSITY OF
KWAZULU-NATAL ™
INYUVESI
YAKWAZULU-NATALI

# Codename: Developers Next Door

## Milestone 4 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**

   a. **Front-end System [Sashen]**

   b. **Website [Shridhar]**

3. **System Demonstration with Reporting[All]**

4. **Review of Requirements and Objectives**

5. **Reflections and Closing [All]**

# CLIENT BACKGROUND


Picture: Dimension Data Westville Branch
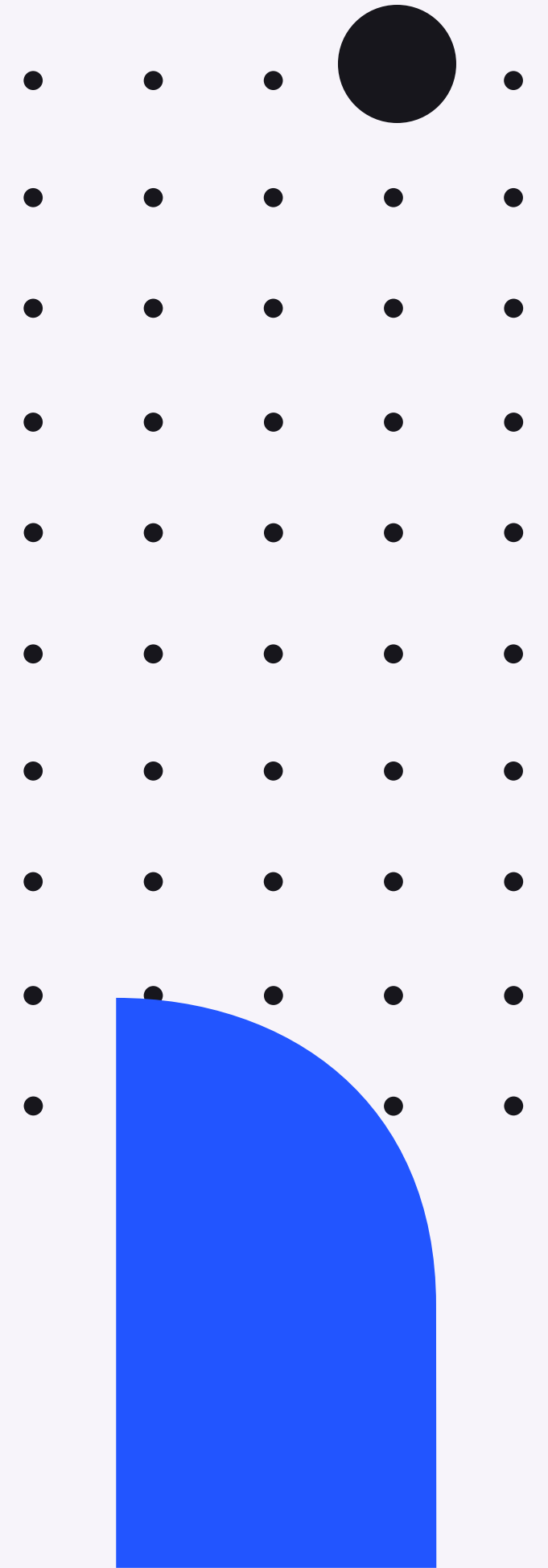
## Who are they and what do they do?

- 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
- Lack of business intelligence for canteen
- COVID-19 safety measures -> social distancing & minimizing interaction
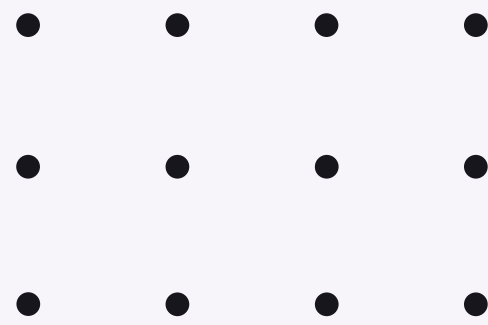

Picture: Westway Office Park

# Front-End System Objectives

**1** **Login - Access Control**
- 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)
- Generates receipt

**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
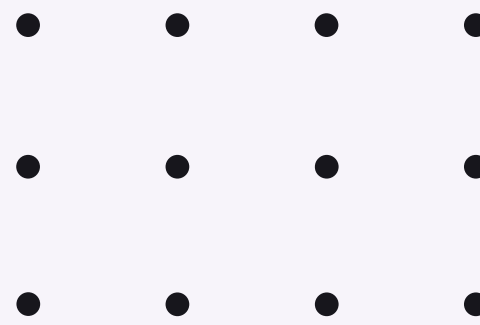- Set Credit Limit
- Manage Canteen Staff Details

**6** **View Reports**
- Various reports made available to Manager in the reporting dashboard
- Employee order receipt

# Website Objectives

**1** **Login - Access Control**

- Public and private pages
- Only employees can login
- User specific pages

**2** **Place Order**

- Add snacks or drinks to cart
- Login to proceed with purchase
- Confirmation

**3** **Employee Profile**

- View personal details
- View order history
- Password facility

**4** **Manage Menu Items**
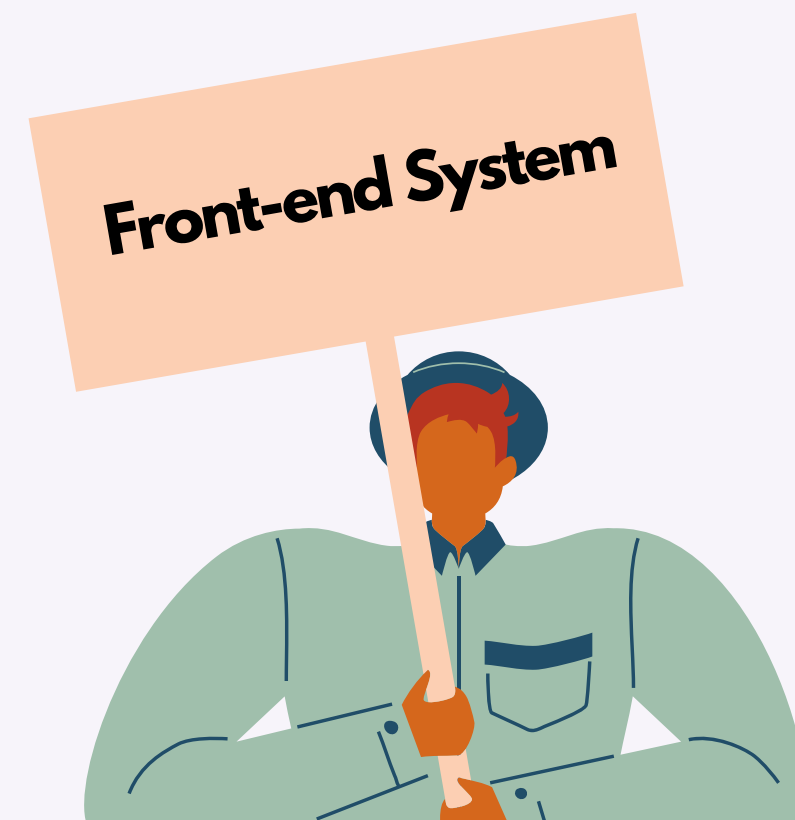
- Viewing, adding, archiving, and updating

**5** **View Reports**

- Externally accessed PowerBI reports

# Unified Usability Strategy
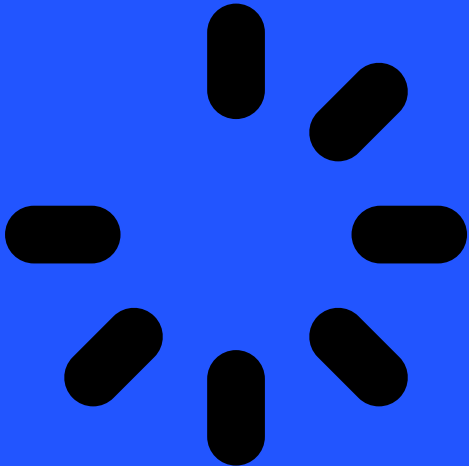
| | |
|---|---|
| 1. SEARCH | The website will contain a search feature as well as HELP & FAQ |
| 2. LARGE FONTS | Easier to read |
| 3. COLOR SCHEMES | Appropriate colour schemes |
| 4. IMAGES & TEXT | Images of menu items as well as text |
| 5. SELECTED OPTIONS | Only selected options highlighted |
| 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. |

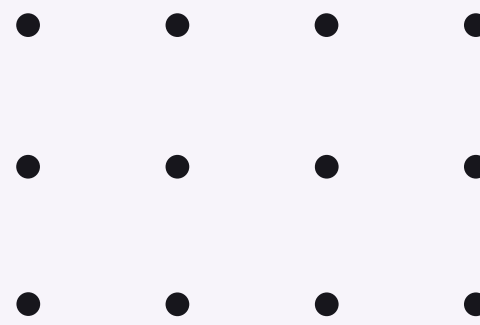| | |
|---|---|
| 15. NAVIGATION | All pages in the website have visible links to all public pages including the home page and login page making it easier for users to navigate the website. Navigation options are concealed in a burger menu when the website is viewed on mobile devices or when resized 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. |

# FULL SYSTEM DEMONSTRATION

Front-end System

Website

Reporting

# INTERMISSION

# Front-End System Objectives

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✓

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- Add snacks or drinks to cart
- Login to proceed with purchase
- Confirmation

✓

**3** **Employee Profile**

- View personal details
- View order history
- Password management

✓

**4** **Manage Menu Items**

- Viewing, adding, archiving, and updating

✓

**5** **View Reports**
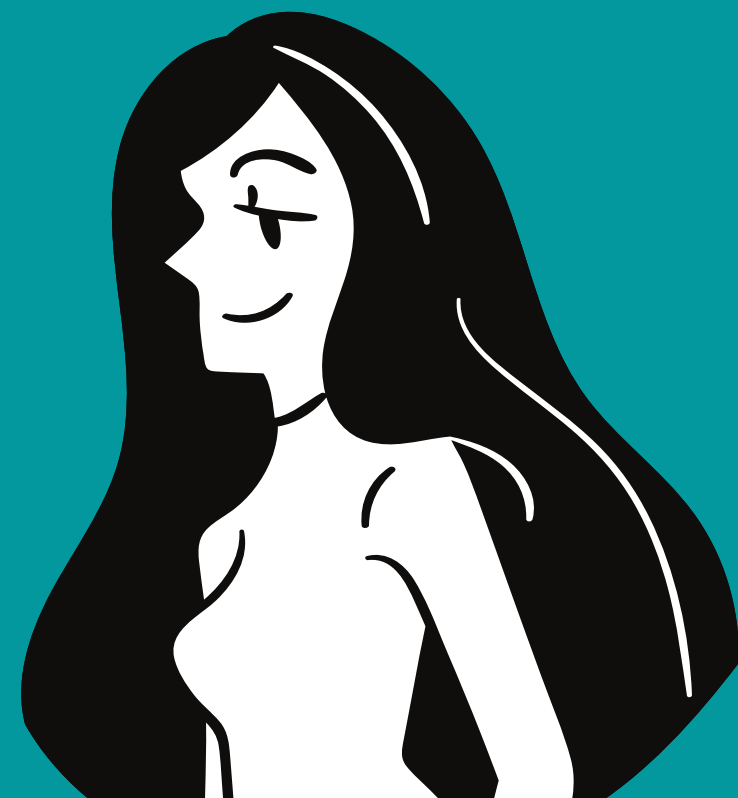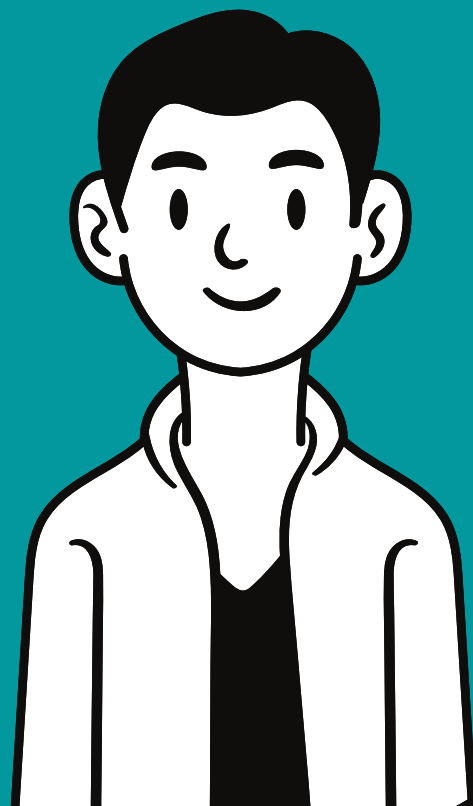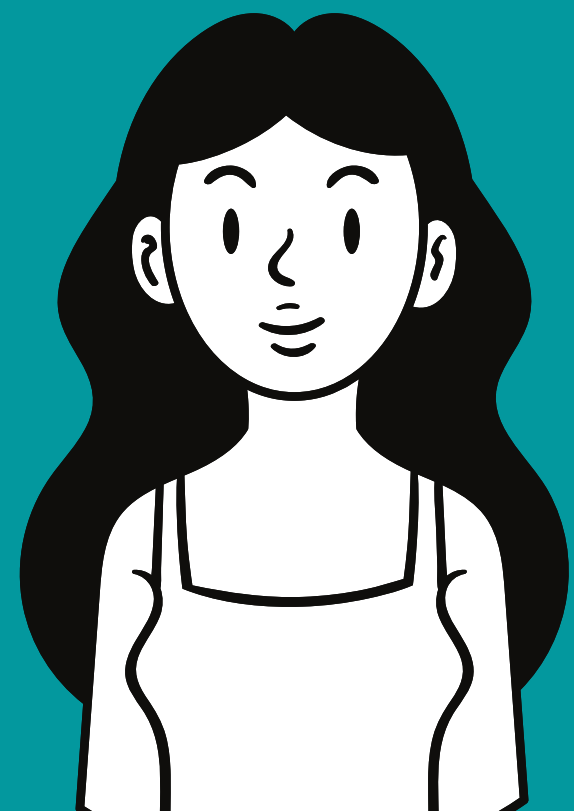
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✓

# Issue - Report Separation

- Lack of foresight
- Change in database schema

- Various tests and research conducted
- Not worth the risk

# REFLECTIONS

# THANK YOU