

Business Requirements Document (BRD)

1. Executive Summary

This BRD outlines the requirements for a **Company Café System** that allows:

1. **Companies** to create a workspace (similar to Slack) in order to manage their café(s).
2. **Staff** (invited by the company) to manage menus, send reminders, and oversee orders.
3. **Employees** (end-users) to browse the café menu, place orders, and receive notifications when their meals are ready.

The system's ultimate goal is to streamline meal ordering, reduce queues, and allow both staff and employees to engage in a user-friendly, secure environment. The **company registration** and **staff invitation** processes will mimic the Slack model, where a company signs up for a "workspace," configures its café, and sends out email or link invitations to staff.

2. Project Overview

Purpose

- Provide an easy-to-use **platform** for employees to order meals from the company café(s).
- **Allow companies** to set up their own café system quickly (workspace creation).
- **Enable staff** to manage menus, send reminders to all employees, and monitor orders.
- **Reduce wait times** by letting employees pre-order and pay in advance.
- **Send notifications** when orders are ready, ensuring employees pick up their meals promptly.

Objectives

1. **Company Registration :**
 - A company can sign up for the café system, creating a unique workspace URL or identifier.
2. **Staff Invitation & Roles:**
 - Company admins can invite staff using email invitations or shareable links
 - Staff accounts are assigned specific roles (e.g., admin, menu manager) with appropriate permissions.

3. **Menu Management:**

- Staff can add, edit, or remove menu items (name, description, price, availability).
- The menu data updates in real-time for all ordering employees.

4. **Employee Meal Ordering & Payment:**

- Employees can browse menus, add items to a cart, and pay via supported payment methods (credit card, payroll deduction, etc.).

5. **Notifications for Order Ready:**

- When staff marks an order “ready,” employees immediately receive a push/email/SMS notification.

6. **(New) Out-of-Stock Handling:**

If an employee orders an item that later becomes unavailable, staff can either:

- **Accept & In-Prep** (if the item is still fulfillable or restocked),
- **Deny & Notify** (and refund if truly unavailable), or
- **Propose Alternative** (e.g., a similar item) for the employee’s approval.

7. **Company-Wide Reminders:**

- Staff can broadcast announcements (e.g., daily specials, holiday hours) to all registered users in the workspace.
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3. **Scope**

In-Scope

1. **Company Registration:**

- Companies sign up, provide basic information, and configure their workspace URL.

2. **Staff Invitations & Roles:**

- Admin invites staff via email or link.
- Staff registration and secure authentication (passwords, user management).
- Role-based access control (admin, menu manager, etc.).

3. **Menu Management & Ordering:**

- Staff configures the café menu and updates it in real-time.
- Employees select menu items, place orders, specify quantity, and add special instructions.

4. Order Processing & Payment:

- Payment integration with credit cards, or if applicable, a company account.
- Immediate digital receipt generation.
- Order lifecycle (Placed → In Progress → Ready for Pickup).

5. (New) Out-of-Stock (OOS) Handling:

- Staff can mark items as OOS **before** or **after** an order is placed.
- System must manage refunds, partial approvals, or alternative suggestions.

6. Notifications & Reminders:

- Real-time order-ready notifications (push, email, SMS).
- Staff-initiated announcements to all workspace members.

Out-of-Scope

1. Complex Inventory Management:

- The system will not track detailed stock levels; staff manually updates menu item availability.

2. Advanced Meal Plans:

- No complex meal credit or subscription model (beyond standard payment).

3. Enterprise SSO Integration (unless specified as an enhancement):

- Basic sign-on is in scope, but advanced SSO (Okta, AzureAD) may be future enhancements.

4. Stakeholders

Stakeholder	Role / Interest	Impact
Company (Workspace Owner)	Creates the workspace, invites staff, configures overall settings	High
Café Staff	Manage menus, handle orders, send reminders to employees	High
Employees	Place orders, receive notifications, interact with café	High
IT Department	Deploys and supports system (for the vendor/developer)	Medium

5. User Requirements Specification

1. **As a company admin, I want to create a workspace, so my company can manage our café.**
 - **Reasoning:** Provides a unique environment for each company.
 - **Acceptance Criteria:** The system prompts for company name, URL (e.g., `companyname.cafesystem.com`), and admin details upon signup.
2. **As a company admin, I want to invite staff via email or a shareable link, so my team can join easily.**
 - **Reasoning:** Reduces friction in getting staff on-board.
 - **Acceptance Criteria:**
 - Admin can enter staff emails for direct invites.
 - A “Generate Invite Link” option that staff can use to self-register.
3. **As a café staff member, I want to accept the invitation and create my account, so I can manage menus and orders.**
 - **Reasoning:** Ensures a secure, role-based login.
 - **Acceptance Criteria:** Clicking the invite link guides the user to set up credentials and then grants them the correct staff permissions.
4. **As a café staff member, I want to add, update, or remove menu items, so the menu remains accurate.**
 - **Reasoning:** Ensures employees see current offerings.
 - **Acceptance Criteria:**
 - Menu management interface for staff only.
 - Changes reflect immediately for employee ordering.
5. **As an employee, I want to browse the menu and place an order, so I can get my meal without waiting in line.**
 - **Reasoning:** Core feature of the café system.
 - **Acceptance Criteria:** Employee sees up-to-date menu, selects items, pays, receives an order confirmation.
6. **As an employee, I want to receive a notification when my order is ready, so I know exactly when to pick it up.**
 - **Reasoning:** Minimizes waiting.
 - **Acceptance Criteria:**
 - System sends real-time alert (push, email, SMS).

- Employee sees “Order Ready” status.
 - 7. **As a café staff member, I want to broadcast company-wide announcements (e.g., daily specials, closure notices), so everyone stays informed.**
 - **Reasoning:** Allows staff to communicate effectively with all employees.
 - **Acceptance Criteria:** Staff can push notifications or emails to all users in the workspace.
 - 8. **As a company admin, I want to manage workspace settings (e.g., default notifications, staff permissions), so the café system is aligned with company policies.**
 - **Reasoning:** Centralized control over system configuration.
 - **Acceptance Criteria:** Admin dashboard with role management and default setting configuration.
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6. System Requirements Specification

6.a. Functional Requirements

1. Company Registration & Workspace Creation

- **Description:** A new company signs up by providing an email, company details, and an initial admin user.
- **System Actions:**
 - Prompt for **Company Name, Admin Email, Preferred Workspace URL.**
 - Store workspace settings in the database.
 - Create an admin account with the specified email.

2. Staff Invitations

- **Description:** Admin can invite staff via **email** or a **shareable link**.
- **System Actions:**
 - Generate secure invitation links or send email invites with a unique token.
 - Track the status of each invite (accepted, pending, expired).
 - Once a staff member accepts, they set up login credentials (hashed/salted passwords).

3. Role & Permission Management

- **Description:** The system supports different roles (Admin, Staff, Employee) with distinct permissions.
- **System Actions:**
 - Admins can assign or revoke staff roles.
 - The system enforces role-based access (e.g., only staff can edit menus).

4. Menu Management

- **Description:** Staff can add, edit, or remove menu items.
- **System Actions:**
 - Provide a form to enter **item name, description, price, availability**.
 - Immediately update the menu database; changes are visible to employees.

5. Ordering Process

- **Description:** Employees browse items, add them to cart, pay, receive an order confirmation.
- **System Actions:**
 - Display menu items, handle cart operations (add/remove items, update quantity).
 - Process payment (credit card, or alternate methods if configured).
 - Generate digital receipt with an itemized list and timestamp.

6. Order Status & Notifications

- **Description:** Staff updates order progress, triggers real-time notifications to employees.
- **System Actions:**
 - Staff can mark orders as **“In Progress”** → **“Ready”**.
 - On **“Ready,”** the system sends out push/email/SMS notifications containing pickup details.

7. Reminders/Announcements

- **Description:** Staff can broadcast messages to all users within the workspace.
- **System Actions:**
 - Provide a text field or template for announcements.
 - Send via push/email to all registered users.
 - Log announcements for auditing or review later.

8. Company Workspace Settings (Admin Dashboard)

- **Description:** Admin configures settings like default notification methods, staff permissions, branding, etc.
- **System Actions:**
 - Offer toggles/fields for notification preferences (email, SMS, push).
 - Manage staff roles and workspace branding (company logo, color scheme).
 - Manage billing (if the system is subscription-based).

6.b. Non-Functional Requirements

1. Usability

- The interface must be **intuitive** with an easy on-boarding process for new company signups and staff invitations.
- Clear user flows: **Create Workspace → Invite Staff → Staff Joins → Menu Setup → Employees Order.**

2. Performance

- **Menu loading** and **order processing** should happen within **2 seconds** on average.
- **Notifications** are sent in near real-time once an order is ready (under 1 minute).

3. Security

- **SSL/HTTPS** for all communication.
- Passwords stored using **secure hashing** (bcrypt or similar).
- Role-based access control to prevent unauthorized menu edits or announcements.

4. Availability

- Target **99% uptime** during operational hours.
- Failover mechanisms or manual operations in case of downtime.

5. Scalability

- Must handle **multiple companies** and **peak meal times** without performance degradation.
- Adding new cafés or expanding the menu should not require major system overhauls.

6. Notifications & Alerts

- Support **push notifications, SMS, email** for staff invites, order statuses, and announcements.
- Must ensure timely and reliable delivery.

7. Next Steps & Approvals

1. Design Phase:

- Create wireframes showing the Slack-like flow for **workspace creation** and **staff invitation**.
- Outline user flows for **menu management, order placement, and notifications**.

2. Development Phase:

- Build the **company registration** and **invitation** module.
- Implement **menu management** and **payment** workflows.
- Integrate **notification service** for orders and announcements.

3. **Testing & QA:**

- Perform user acceptance tests (UAT) with a pilot company.
- Ensure staff invitation, role assignments, and menu updates function correctly.

4. **Deployment & Maintenance:**

- Roll out to multiple companies.
 - Provide **customer support**, monitor system performance, and release updates as needed.
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