Use Cases

for

Cafeteria Ordering System, Release 1.0

Version 1.0 approved

Prepared by Karl Wiegers

Process Impact

November 4, 2002

Revision History

| Name Date | | Reason For Changes | Version |
|--------------|----------|---------------------------------------------|--------------|
| Karl Wiegers | 10/13/02 | initial draft | 1.0 draft 1 |
| Karl Wiegers | 11/4/02 | baseline following changes after inspection | 1.0 approved |

The various user classes identified the following use cases and primary actors for the Cafeteria Ordering System:

| Primary Actor | Use Cases |
|-----------------|-------------------------------------|
| Patron | 1. Order Meal |
| | 2. Change Meal Order |
| | 3. Cancel Meal Order |
| | 4. View Menu |
| | 5. Register for Payroll Deduction |
| | 6. Unregister for Payroll Deduction |
| | 7. Subscribe to Standard Meal |
| | 8. Modify Meal Subscription |
| | 9. Override Meal Subscription |
| Menu Manager | 10. Create Menu |
| | 11. Modify Menu |
| | 12. Define Meal Special |
| Cafeteria Staff | 13. Prepare Meal |
| | 14. Generate Payment Request |
| | 15. Request Delivery |
| | 16. Generate System Usage Reports |
| Meal Deliverer | 17. Deliver Meal |
| | 18. Record Meal Delivery |
| | 19. Print Delivery Instructions |

| Use Case ID: | 1 | | | | |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------|--|--|
| | 1 Only Mysl | | | | |
| Use Case Name: | Order Meal | T TT 1 : 1D | Lat Macillan | | |
| Created By: | Karl Wiegers | Last Updated By: | i i | | |
| Date Created: | October 21, 2002 | Date Last Updated: | November 7, 2002 | | |
| Actors: | Patron | | | | |
| Description: | A Patron accesses the Cafeteria Ordering System from the corporate intranet or | | | | |
| | from home, optionally views the menu for a specific date, selects food items, | | | | |
| | and places an order for a meal to be delivered to a specified location within a | | | | |
| | specified 15-minute time window. | | | | |
| Preconditions: | 1. Patron is logged into COS. | | | | |
| | 2. Patron is registered | 7.7 | | | |
| Postconditions: | | l in COS with a status of | | | |
| | 2. Inventory of available food items is updated to reflect items in this order. | | | | |
| | 3. Remaining delivery capacity for the requested time window is updated to | | | | |
| | reflect this delivery request. | | | | |
| Normal Flow: | 1.0 Order a Single Meal | | | | |
| | | menu for a specified dat | e. | | |
| | | | | | |
| | 2. System displays menu of available food items and the daily special.3. Patron selects one or more food items from menu. | | | | |
| | 4. Patron indicates that meal order is complete. | | | | |
| | 5. System displays ordered menu items, individual prices, and total price, | | | | |
| | including any taxes and delivery charge. | | | | |
| | 6. Patron confirms meal order or requests to modify meal order (back to step | | | | |
| | 3). | | | | |
| | 7. System displays available delivery times for the delivery date. | | | | |
| | 8. Patron selects a delivery time and specifies the delivery location. | | | | |
| | 9. Patron specifies payment method. | | | | |
| | 10. System confirms acceptance of the order. | | | | |
| | 11. System sends Patron an e-mail confirming order details, price, and delivery | | | | |
| | instructions. | | | | |
| | | | | | |
| | 12. System stores order in database, sends e-mail to notify Cafeteria Staff, | | | | |
| | sends food item information to Cafeteria Inventory System, and updates available delivery times. | | | | |
| Alternative Flows: | , , , , , , , , , , , , , , , , , , , | eals (branch after step 4) | | | |
| Anteniative Flows. | 1. Patron asks to order | | | | |
| | | anomei meal. | | | |
| | 2. Return to step 2. | | | | |
| | 1.2 Order multiple ide | entical meals (after step 3 | 8) | | |
| | | pecified number of identic | | | |
| | Patron requests a sp Return to step 4. | occinca namber of facility | cai meais. | | |
| | 2. Ketuili to Step 4. | | | | |
| | 13 Order the deily on | point (after step 2) | | | |
| | 1.3. Order the daily special (after step 2) | | | | |
| | 1. Patron orders the daily special from the menu. | | | | |
| Emantis | 2. Return to step 5. | a aften ander and after | (at atom 1) | | |
| Exceptions: | | s after order cutoff time | • • | | |
| | 1. System informs Patron that it's too late to place an order for today. | | | | |
| | 2a. Patron cancels the meal order. | | | | |
| | 2b. System terminates use case. | | | | |
| | 3a. Patron requests to se | elect another date. | | | |

| 3b. System restarts use case. | | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 1.0.E.2 No delivery times left (at step 1) | | |
| System informs Patron that no delivery times are available for the meal date. | | |
| 2a. Patron cancels the meal order. | | |
| 2b. System terminates use case. | | |
| 3. Patron requests to pick the order up at the cafeteria (skip steps 7-8). | | |
| 1.2.E.1 Can't fulfill specified number of identical meals (at step 1) | | |
| 1. System informs Patron of the maximum number of identical meals it can supply. | | |
| 2. Patron changes number of identical meals ordered or cancels meal order. | | |
| None | | |
| High | | |
| Approximately 400 users, average of one usage per day | | |
| BR-1, BR-2, BR-3, BR-4, BR-8, BR-11, BR-12, BR-33 | | |
| 1. Patron shall be able to cancel the meal order at any time prior to confirming the order. | | |
| 2. Patron shall be able to view all meals he ordered within the previous six | | |
| months and repeat one of those meals as the new order, provided that all | | |
| food items are available on the menu for the requested delivery date. (Priority = medium) | | |
| 1. Assume that 30 percent of Patrons will order the daily special (source: previous six months of cafeteria data). | | |
| 1. The default date is the current date if the Patron is using the system before today's order cutoff time. Otherwise, the default date is the next day that the cafeteria is open. | | |
| 2. If Patron doesn't want to have the meal delivered, the precondition requiring registration for payroll deduction is not applicable. | | |
| 3. Peak usage load for this use case is between 8:00am and 10:00am local | | |
| time. | | |
| | | |

| Use Case ID: | 5 | | | | |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|
| Use Case Name: | Register for Payroll Deduction | | | | |
| Created By: | Karl Wiegers Last Updated By: Chris Zambito | | | | |
| Date Created: | October 21, 2002 Date Last Updated: October 31, 2002 | | | | |
| Actors: | Patron, Payroll System | | | | |
| Description: | Cafeteria patrons who use the Cafeteria Ordering System and have meals | | | | |
| | delivered must be registered for payroll deduction. For noncash purchases made | | | | |
| | through the COS, the cafeteria will issue a payment request to the Payroll | | | | |
| | System, which will deduct the meal costs from the next scheduled employee | | | | |
| | paycheck or payday direct deposit. | | | | |
| Preconditions: | Patron is logged into COS. | | | | |
| Postconditions: | Patron is registered for payroll deduction. | | | | |
| Normal Flow: | 5.0 Register for Payroll Deduction | | | | |
| | Patron requests to register for payroll deduction. | | | | |
| | 2. System invokes Authenticate User's Identity use case. | | | | |
| | 3. System asks Payroll System if Patron is eligible to register for payroll | | | | |
| | deduction. | | | | |
| | 4. Payroll System confirms that Patron is eligible. | | | | |
| | 5. System informs Patron that he is eligible for payroll deduction. 6. System asks Patron to confirm his desire to register for payroll deduction. 7. Patron confirms desire to register for payroll deduction. | | | | |
| | | | | | |
| | 8. System asks Payroll System to establish payroll deduction for Patron. 9. Payroll System confirms that payroll deduction is established. 10. System informs Patron that payroll deduction is established and provides | | | | |
| | | | | | |
| | | | | | |
| | confirmation number of the registration transaction. | | | | |
| Alternative Flows: | None | | | | |
| Exceptions: | 5.0.E.1 Patron identity authentication fails (at step 2) | | | | |
| | 1. System gives user two more opportunities for correct identity | | | | |
| | authentication. | | | | |
| | 2a. If authentication is successful, Patron proceeds with use case. | | | | |
| | 2b. If authentication fails after three tries, System notifies Patron, logs invalid | | | | |
| | authentication attempt, and terminates use case. | | | | |
| | 5.0 E.2 Datum is not aligible for narrall deduction (et etcn.4) | | | | |
| | 5.0.E.2 Patron is not eligible for payroll deduction (at step 4) 1. System informs Patron that he is not eligible for payroll deduction and gives | | | | |
| | the reason why. | | | | |
| | 2. System terminates use case. | | | | |
| | 2. System terminates use case. | | | | |
| | 5.0.E.3 Patron is already enrolled for payroll deduction (at step 4) | | | | |
| | 1. System informs Patron that he is already registered for payroll deduction. | | | | |
| | 2. System terminates use case. | | | | |
| Includes: | Authenticate User's Identity | | | | |
| Priority: | High | | | | |
| Frequency of Use: | Once per employee on average | | | | |
| Business Rules: | BR-86 and BR-88 govern an employee's eligibility to enroll for payroll | | | | |
| | deduction. | | | | |
| Special Requirements: | * * * | | | | |
| | security applications. | | | | |
| Assumptions: | None | | | | |

| Notes and Issues: | 1. | Expect high frequency of executing this use case within first 2 weeks after |
|-------------------|----|-----------------------------------------------------------------------------|
| | | system is released. |

| Use Case ID: | 11 | | | |
|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------------------------------------------|--|
| Use Case Name: | Modify Menu | | | |
| Created By: | Karl Wiegers | Last Updated By: | | |
| Date Created: | October 21, 2002 | Date Last Updated: | | |
| Actors: | Menu Manager | | | |
| Description: | The cafeteria Menu Manager may modify the menu of available food items and | | | |
| F | prices for a specified date to reflect changes in availability or prices or to define | | | |
| | daily meal specials. | | | |
| Preconditions: | Menus already exist in the system. | | | |
| Postconditions: | Modified menu has been saved. | | | |
| Normal Flow: | 11.0 Edit Existing Menu | | | |
| | Menu Manager requests to view the menu for a specific date. | | | |
| | 2. System displays the menu. | | | |
| | 3. Menu Manager modifies the menu to add new food items, remove or | | | |
| | change food items, create or change a meal special, or change prices. | | | |
| | 4. Menu Manager requests to save the modified menu. | | | |
| | 5. System saves modified menu. | | | |
| Alternative Flows: | None | | | |
| Exceptions: | 11.0.E.1 No menu exists for specified date (at step 1) | | | |
| | 1. System informs Menu Manager that no menu exists for the specified date. | | | |
| | 2. System asks Menu Manager if he would like to create a menu for the | | | |
| | specified date. | | | |
| | 3a. Menu Manager says yes. | | | |
| | 3b. System invokes Create Menu use case. | | | |
| | 4a. Menu Manager says no. | | | |
| | 4b. System terminates use case. | | | |
| | | | | |
| | 11.0.E.2 Date specified is in the past (at step 1) | | | |
| | 1. System informs Menu Manager that the menu for the requested date cannot | | | |
| | be modified. | 100 0000 | | |
| Tu ala da sa | 2. System terminates u | ise case. | | |
| Includes: | Create Menu | | | |
| Priority: | High | - man | | |
| Frequency of Use: | Approximately 20 times per week by one user | | | |
| Business Rules: | BR-24 | . mar. aanaaltt | any modification for attacks | |
| Special Requirements: | 1. The Menu Manager may cancel out of the menu modification function at any time. If the menu has been changed, the system shall request | | | |
| | _ | _ | system snaii request | |
| A | confirmation of the | | and Transact business day | |
| Assumptions: | | | pcess Impact business day, mployees are scheduled to be | |
| | on site. | s and nondays in which en | improyees are scheduled to be | |
| Notes and Issues: | | will not be deliverable as | the menu presented to the | |
| roles and issues. | 1. Certain food items will not be deliverable, so the menu presented to the Patrons of the Cafeteria Ordering System for delivery will not always | | | |
| | exactly match the menu available for pickup in the cafeteria. The menu | | | |
| | shall indicate which items may not be delivered. The system shall not | | | |
| | | order those items for deliv | - | |
| <u> </u> | r a r amon to c | | · | |