**INSY 5341/Section 001**

**Analysis and Design**

**Fall 2022**

**Assignment 1: UseCase Document**

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**Submitted By: Group#2**

Ankita Phadke

Durvakshi Anil Nare

Neil Tuscano

Rehan Rahim Khan

Tharunaa Sakthi Navulluri

Manideep Bavirishetty

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| **Use Case Name:** Manage employee records | **ID**: 1 | **Priority**: High | |
| **Actor:** Store staff | | | |
| **Description:** Store staff uses the System to create and manage the Employee records | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. Store staff has the knowledge of registration process in the system 2. Store staff has all the required information available to be entered in the system | | | |
| **Normal Course: Information for Steps:**   1. Store staff enters their information like name, marital status, address, date of birth, SSN, and emergency contact in the system 2. System checks if the given staff member is already present in the system or not (see exception) 3. System records the new entry for entered staff member information 4. System takes for the approval from Store Manager 5. System automatically assigns staff member ID number to the new staff member (see exception) 6. Store staff enters their date-wise future availability, two months in advance 7. System updates the staff information and availability records 8. System sends a confirmation of the updates to Staff Manager and Business Owner (see exception) | | |
| **Postconditions:**  System schedules employee calendar schedule and allocates work assignment (done by other use cases) While booking a picnic, unallocated staff members are assigned as per requirement (done by other use cases) | | |
| **Exceptions**:   1. If staff member is already present in the system, system sends an appropriate message 2. If staff member is already present in the system, new staff member ID is not created by the system 3. If staff member’s details like marital status, address change, emergency contact are to be changed, system takes confirmation from the Store Manager | | |

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| **Use Case Name:** Manage PRU Calendar | **ID**: 2 | **Priority**: High | |
| **Actor:** Store Manager | | | |
| **Description:** Store Manager uses the System to Manage the Calendar schedules for employees | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. Store Manager has knowledge on booking calendars for picnics 2. All staff members are be registered in the system 3. System has a pre-populated list of dates and times on which PRU offers their picnic services | | | |
| **Normal Course: Information for Steps:**   1. Store Manager chooses the calendar view showing all the picnics bookings done by PRU 2. Store Manager changes the calendar view as per date, week, or month, to see other schedules 3. System automatically displays a list of timings on which picnics are booked for a particular date 4. Store Manager uses the system to view and select the employee calendar assignment for a particular date and time (see exceptions) 5. Store Manager uses the system for staff assignment changes on existing calendar records for confirmed bookings (see exceptions) 6. System displays details of all the booked calendar appointments to the Store Manager | | |
| **Postconditions:**  While booking a picnic, unallocated staff members are assigned by the system as per requirement (done by the other use cases) | | |
| **Exceptions**:   1. If the picnic booking is not confirmed on given date and time, employee assignment is done temporarily, till the booking is confirmed (done by another use case) 2. If any assigned staff members are not available on given date and time, Store Manager assigns other available staff members 3. Store Manager updates availability of staff members if any staff member is unavailable due to emergency | | |

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| **Use Case Name:** Manage inventory | **ID**: 3 | **Priority**: High | |
| **Actor:** Business Owner | | | |
| **Description:** Business Owner uses the System to Manage the Inventory with the PRU and their supply | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. Business Owner has knowledge on the inventory needs at the PRU 2. Business Owner knows reliable suppliers identified by system (done by other use case) 3. System has a pre-populated list of ingredients and quantities required for menu prepared by the PRU | | | |
| **Normal Course: Information for Steps:**   1. System prompts the list of upcoming picnics for the week, on every Monday 2. Business Owner uses the system to check list of items currently in stock and their quantities/availability 3. Business Owner updates the stock of returned usable items from past picnics in the system (see exception) 4. System displays if any ingredients from the above list are already ordered, along with their quantities 5. Business Owner uses the system to separately record items that are purchased ready-made by the PRU 6. System uses above information to automatically identify ingredients and quantities to be purchased (see exception) 7. Store Manager reviews the list of items and their quantities for which Purchase order is to be created (see exception) 8. System prepares the Purchase order for the required ingredients 9. Business Owner approves the Purchase order (see exceptions) | | |
| **Postconditions:**  System displays a confirmation of created Purchase order and generates an email to the supplier | | |
| **Exceptions**:   1. If none of the returned items from past picnics are usable by PRU, their stocks are not adjusted 2. If Business Owner needs to make any changes to the automatically generated Purchase Order, she can do so in the system 3. If any new menu is introduced, Business Owner uses the system to store the necessary quantities of ingredients for individual dishes 4. If any changes are needed in ingredients list, Business Owner uses the system to make changes | | |

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| **Use Case Name:** Manage menu listing | **ID**: 4 | **Priority**: High | |
| **Actor:** Business Owner | | | |
| **Description:** Business Owner uses the System to Manage Menu listings for picnics | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. Business Owner has a business knowledge in designing list of menu options including correct prices 2. Business Owner has fixed standard menu options available to feed into the system 3. Business owner has a list of menu item options pre-determined with prices to feed into the system 4. System has information on the previous sales done by PRU | | | |
| **Normal Course: Information for Steps:**   1. Business Owner creates set of 10 standard menus like Italian, French, Mexican and Barbeque 2. Business Owner creates options for two main dishes, three side dishes, two desserts, and standard beverages to choose from, for every standard menu 3. Business Owner uses the system to add, delete or view the menu items or the standard menu (see exception) 4. System allows to edit the prices of standard menu items 5. Business Owner designs the system to list the standard menu as well as individual menu items for choice 6. System identifies and shows frequently ordered special items, ordered more than 3 times, so that the Owner considers adding in the standard menu (see exception) 7. System allows the Business Owner to change criteria to identify frequently ordered items, more or less than ordered 3 times | | |
| **Postconditions:**  Picnic menu can be customized by placing special order for items not available in the menu (done by another use case)  System allows to customize menu booking by selecting items from other standard menus or by excluding few items from selected menu (done by another use case)  Customers can select combination of one or more standard menu as per their choice (done by other use case) | | |
| **Exceptions**:   1. If frequently ordered special items are not profitable for business, Business Owner discards the suggestions by system 2. If there are any special item requests, then the invoice generated will not be final as the owner needs to approve price and availability in system 3. If any standard menu items are not available, Business Owner removes those from list and system removes the pricing 4. If there are no items that suffice the condition of frequently ordered special items in 2 months span, system will prompt the user if they want to change the conditions for the same | | |

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| **Use Case Name:** Manage picnic booking | **ID**: 5 | **Priority**: High | |
| **Actor:** Customer | | | |
| **Description:** Customer uses the System to Manage new Picnic booking | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. System already has a pre-populated list of registered customers with PRU 2. System identifies the loyal customers with the PRU 3. System has a list of standard set of questions to be asked to customers to help them choose right picnic | | | |
| **Normal Course: Information for Steps:**   1. Customer enters the system to choose picnic booking (see exception) 2. System helps customers to choose the right picnic, by taking responses to standard set of questions and automatically generates best suitable options for picnic 3. System shows details about picnic arrangements and new items options, for selected picnic type 4. Customer selects the date and time, to check the availability for picnic 5. System checks availability of staff members on the selected date and time (see exception) 6. System allocates available staff members and creates staff assignment 7. System automatically creates a Picnic Booking ID number and customer moves to next steps | | |
| **Postconditions:**  System tentatively schedules the picnic if staff members are available on given date and time  System redirects the customer to next steps for menu selection, ordering and payment (done by other use case) | | |
| **Exceptions**:   1. If customer details are not present in system, the system registers the customers first (another use case) 2. If the selected date and time of picnic aren’t available, system asks customer to try another date and time combination 3. If the customer trying to book picnic is loyal customer, system shows option to reserve a booking without deposit | | |

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| **Use Case Name:** Manage picnic ordering | **ID**: 6 | **Priority**: High | |
| **Actor:** Customer | | | |
| **Description:**  Customer uses the System to Manage picnic Ordering module | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. System already has a Picnic Booking ID number (created in previous use case) 2. Customer has all the information on food menu options and non-food items | | | |
| **Normal Course: Information for Steps:**   1. Customer selects the menu options, including standard menu as well as individual menu dishes and their quantities 2. System calculates the food menu price per participant for standard menu as well as menu items 3. Customer uses system to record special item request not available in the standard menu (see exception) 4. Customer chooses standard or fancy non-food items along with quantities 5. System makes a note of customization requirements by customer (see exception) 6. Customer selects loaned or purchased options for the non-food items (see exception) 7. System automatically calculates the total bill amount based on the purchase done by customer 8. Customer adds a note on number of and details of picnic participants (see exception) | | |
| **Postconditions:**  System redirects the customer to next steps for picnic payment/billing module (done by other use case)  For loaned items, add security deposit to the invoice generated (done by other use case) | | |
| **Exceptions**:   1. If the special items requested could not be arranged, alternative is suggested, else the item is removed from the order and charges are reverted as per decision by Business Owner 2. If there are any special item requests, then the invoice generated will not be final as the system needs to check with owner regarding the price and availability of the item 3. If customization requirements can’t be completed, the same is removed from order 4. If picnic customer is not a participant, system makes a note on details of actual participants | | |

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| **Use Case Name:** Manage picnic billing | **ID**: 7 | **Priority**: High | |
| **Actor:** System | | | |
| **Description:** System manages picnic Billing module | | | |
| **Trigger**: Temporal | | | |
| **Preconditions:**   1. System already has a Picnic Booking ID number (created in previous use case) 2. System has a bill amount calculated based on the purchases made by customers 3. System has knowledge on loaned items, for which security deposit is to be added to bill amount | | | |
| **Normal Course: Information for Steps:**   1. System makes a note of the special requests by customer (see exception) 2. System calculates and displays the 20% of total price as base deposit (see exception) 3. System takes approval on final pricing information by the customer 4. System checks for preferred mode of payment by customer 5. System records the credit card information if chosen as option by customer (see exception) 6. System prepares invoice with details of terms, arrangements, amount details to be emailed to customer 7. System prepares unconfirmed booking list for payments not completed | | |
| **Postconditions:**  Employee calendars are updated to reflect confirmed bookings (done by other use case)  System displays a message showing ‘successful booking’ and sends a confirmation | | |
| **Exceptions**:   1. If any special requests are made by customer, 10% of contingency and taxes are added to the bill 2. If any additional rental deposit is agreed by customer, that is added to bill amount 3. If price is agreed by customer, but not paid, picnic is added to provisional schedule 4. If complete payment is made, picnic status is changed to ‘booked’ | | |

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| **Use Case Name:** Manage Vendor records | **ID**: 8 | **Priority**: High | |
| **Actor:** Store Manager | | | |
| **Description:** Store Manager uses the System to Manage Vendor records with PRU | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. Store Manager has necessary information about vendors and prices they offer 2. System has a pre-populated list of vendors and previous order history | | | |
| **Normal Course: Information for Steps:**   1. Store Manager views the list of all the vendors, including items they supply and prices 2. Store Manager enters details of a new vendors like name, items, category, prices and contact in the system (see exception) 3. System assigns vendor ID number once vendor record is created (see exception) 4. System automatically displays a list of reliable vendors whose prices don’t change frequently with every order 5. Store Manager uses system to differentiate between the suppliers on basis of operation mode as online or offline 6. System updates the list to display suppliers offering best price on the products 7. Store Manager views list of all suppliers and the past orders 8. Store Manager uses system to shortlist suppliers offering best bargains and place order from them | | |
| **Postconditions:**  Store Manager uses the reliable suppliers identified by system to place order for supplies (done by other use cases)  System displays and sends a confirmation | | |
| **Exceptions**:   1. If any vendor details are missing, system will prompt the Store Manager to enter the details and then add those to the record 2. If any vendor details are already present in system, Store Manager only updates records. New vendor ID is not generated | | |

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| **Use Case Name:** Manage list of customers | **ID**: 9 | **Priority**: High | |
| **Actor:** Customer | | | |
| **Description:** Customer uses the System to Manage the records with the PRU | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. System has information about the products and the prices they offer to customers 2. System has a pre-populated list of previous order history of customers | | | |
| **Normal Course: Information for Steps:**   1. Customer enters all the information like name, address, contact number, company name for corporate customers, how they learnt about PRU in the system (see exception) 2. System assigns customer ID number once customer record is created in system (see exception) 3. System flags the type of customer – as personal or corporate based on past orders, cost records and how they learnt about PRU 4. System automatically identifies if the customer is a ‘loyal’ customer who has placed bookings more than three time 5. System automatically enables an option for reserving a booking without deposit for repeat customers | | |
| **Postconditions:**  System identifies the repeat customers to provide booking without deposit (done by other use cases)  System uses the customers list who didn’t complete past orders to contact them and get feedback from them for improvement (done by other use case)  System uses loyal customers list to create and send special offers (done by other use case) | | |
| **Exceptions**:   1. If any customer details are missing, system will prompt the Customer to enter the details 2. If any customer details are already present in system, new customer ID is not generated 3. If a customer is loyal customer, system marks them so that invoice can be scheduled to be sent on a particular date and time in future (two weeks after picnic) | | |

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| **Use Case Name:** Manage PRU Marketing | **ID**: 10 | **Priority**: High | |
| **Actor:** Business Owner | | | |
| **Description:** Business Owner uses the System to Manage the PRU marketing needs | | | |
| **Trigger**: External | | | |
| **Preconditions:**   1. Business Owner has a list of customers who placed and dropped out of their past orders 2. The system has records of testimonials collected from customers to be displayed on website 3. The marketing system has informing flowing from PRU inventory and sales records | | | |
| **Normal Course: Information for Steps:**   1. Business Owner uses system to create and maintain different email templates to be used for new and existing customers 2. Business Owner sends offers via emails to loyal customers using system (see exception) 3. Business Owner sends survey links to customers periodically who chose to not finish their past orders using system 4. Business Owner enters the survey responses data into system 5. System automatically suggests promotional schemes using existing customer records, high selling items and survey responses 6. Business Owner collects testimonial data from loyal customers and enters in the system 7. System displays loyal customer testimonials on the PRU website | | |
| **Postconditions:**  Business Owner sends email to customers using system  Different email templates created are editable and viewable in the system  Survey links are triggered for selected group of customers | | |
| **Exceptions**:   1. If incorrect email IDs are entered, system will prompt the Business Owner to enter correct details | | |