SYS466 Summer 2020
Assignment 3: ProTKD Tae Kwon Do
Worth: Graded out of 60, worth 10%.
Professor: Tevin Apenteng
Due: See Blackboard for due date (No Extensions. Deadline is firm)

Your professor will provide you with a UML model to use as a starting point for this assignment. Failure to use this model will result in a grade of zero.

As per Assignment 1, this is a group assignment.

- Please put the names of all team members participating in the assignment in a note in each class diagram.
- Name the uml file with your team number and assignment name e.g. Team1_Assignment3.uml

This assignment uses class diagrams that were created as part of your previous assignments.

In this assignment you will use the provided class diagrams and controllers to create sequence diagrams using the scenarios below. You do not have to create any classes.

Scenario 1: Register for classes

Precondition: Parent has logged into the system and has selected to register children for classes

Actor (Parent)	System
Requests to register for a semester and location	Retrieves list of children for the parent. Prompts for selections
Selects a child	Display a list of scheduled classes that meet the child's age range and skill level in that semester and location. Prompts for selection
Selects class	Creates registration entries for each class, for the child, recording the date and time of the registration Displays the registration. Prompts to add another registration.
Repeats the above 2 steps until all classes are selected	Returns to menu

Scenario 2: Add T-shirt to list of items sold

Precondition: Store Manager has logged into the system and has selected to add this year's workout T-shirt to the list of items that the stores sell (aka the catalogue)

Actor (Store Manager)	System
Requests to add an item to the catalogue	Displays a list of item types and prompts for selection. Prompts for item name, description, and whether or not the item is bought in sizes (e.g. clothing).
Selects the item type of clothing, enters item name, description, price and chooses bought in sizes.	Displays a list of sizes that clothing is stocked in and prompts for selection of all applicable sizes.

Selects sizes	generates a unique item identifier for each item/size combination. Displays the items. Prompts for confirmation
Confirms the items	Saves the items. Returns to the main menu

Scenario 3: Adds new flavour of bottled water

Precondition: Store Manager has logged into the system and has selected to add a new flavour of bottled water to the list of items that the stores sell (aka the catalogue)

Actor (Store Manager)	System
Requests to add an item to the catalogue	Displays a list of item types and prompts for selection. Prompts for item name, description, and whether or not the item is bought in sizes.
Selects the item type of beverage, enters item name, price, description and chooses one size only.	generates a unique identifier. Displays the item with selected sizes and prompts for confirmation.
Confirms the item	Saves the item. Returns to the main menu

Scenario 4: record store sale of t-shirts

Precondition: Store Manager has logged into the system and has selected to add a sale for a parent. Semester and location were selected as part of the Store Manager's login process.

Actor (StoreManager)	System
Requests to record a sale	Retrieves list of parents and prompts for selection.
Selects a parent	Display of item types. Prompts for selection. Creates Sale assigning a unique identifier and sale date. Assigns current semester the sale
Selects T-Shirts	Displays a list of t-shirts including price. Prompts for selection
Selects required t-shirt	Displays T-Shirt. Prompts for quantity sold
Enters quantity sold	Creates sale detail. Calculates taxes and total amount of the sale. Displays the t-shirts sold.
Repeats the above 2 steps until all t-shirts selected	Calculates taxes and total amount of the sale. Displays the t-shirts sold. Displays the sale. Prompts for confirmation
Confirms sale	Adds the sale transaction.

Scenario 5: Query Parent Account balance and details for a semester

Precondition: Parent has logged into the system

Actor (Parent)	System
Requests to view account	Displays a list of semesters and prompts for selection
Selects semester	Displays a list of classes that the parent's children are registered including the name of the class, the location and the cost of the class. Updates amount owed including HST. Displays a list of store purchases for the parent's account including date of purchase, items purchased including quantity and price of

	item. Calculates extend price and updates amount owed including HST.
	Retrieves a list of payments applied to the account including date and payment amount. Updates amount paid.
	Calculates amount owing for the semester.

Scenario 6: Pay fees in full

Precondition: Parent has logged into the system. Has executed the Query Parent Account balance and details for semester scenario. Account information is displayed.

Actor (Parent)	System
Requests to pay fees in full	Displays the total cost and total HST for all of the classes that the parent's children are registered in for the semester.
	Calculates and displays the 10% discount from the cost (not including HST). Prompts to confirm if the parent would like to proceed with the payment.
Confirms payment	Sends a payment transaction to the payment system for processing *(hint – the payment system needs a controller)*
	Creates a payment for the parent's account with the details of the amount charged and the amount discounted. Payment includes payment date and a unique identifier. Payment description includes the semester and 'fees paid in full'