L0 – Problem Solving final Assessment

Q11) Water Supply Management System

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PROJECT NAME: WATER SUPPLY MANAGEMENT SYSTEM	
What? 1	How? 2
1. What are the modules are required? **Ans: a) Admin Module** **b) Customer Module** **2. What are the functionalities required for Admin Module?** **Ans: Admin Module** 1. Login to the system using their email and password. 2. Admin can perform all the CRUD operations on water can. 3. Admin can perform all the CRUD operations on payment 4. Admin can perform all the CRUD operations on Customer. **3. What are the functionalities required for Customer Module?** **Ans: Customer Module** 1. Customer can register and Login to the system using their email and password. 2. Customer can Search and order water can. 3. Customer can also view the previous order. 4. Customer can make the payment for purchased water can **4. What are the fields required to add the Water can?** **Ans:** waterCanID, waterCanPrice, watercanLit. **5. What are the fields required for customers?** **Ans:** customerId, customerName, customerAddress. **6.what are the fields required for placing the order by customers?** **Ans:** orderId, watercanId, waterCanPrice, paymentId.	**1) Admin:** **a) Login** Method1: Admin can login using username and password. Method2: Admin can login using email and password. Mehtod3: Admin can login through social media. **b) CRUD Operation on Water Cans** Method1: Implement the CRUD operation on water cans by using waterCanId. Method2: Implement the CRUD operation by using waterCanPrice. **c) CRUD Operation on payment** Method1: Implement the CRUD operation on payment by using paymentId. Method2: implement the CRUD operation on payment by using waterCanId. **d) CRUD Operation on Customer** Method1: Implement the CRUD operation on Customer by using customerId. Method2: implement the CRUD operation on Customer by using CustomerName. **2)Customer:** **a) Register & Login** Method1: Customer can Register and login using username and password. Method2: Customer can Register and login using email and password. Mehtod3: Customer can Register and login through social media. **b) Search Water Cans** Method1: Customer can search for the water can by using waterCanId. Method2: Customer can search for the water cans by using waterCanId or waterCanPrice. **c) Placing order** Method1: Customer can place the order by using orderId. Method2: Customer can place the order by using orderId & waterCanId. **d) Make Payment** Method1: Customer can pay the amount by using waterCanId Id & orderId. Method2: Customer can pay the amount using waterCanId. **e) Previous order Details** Method1: Customer can view the previous order information by using orderId. Method2: Customer can view the previous order information by using CustomerId.
1) Admin: **a) Login** Method2: Admin can login using email and password. **(if admin can login by using email and password, it can be able to find out originality of the user).** **b) CRUD Operation on Water Cans** Method1: Implement the CRUD operation on water cans by using waterCanId. (If admin can do the CRUD [add, delete, update, view] operation on the water Cans by using waterCanId. Because we can identify uniquely. It resolves ambiguity). **c) CRUD Operation on payment** Method1: Implement the CRUD operation on payment by using paymentId. (If admin can do the CRUD [add, delete, update, view] operation on the payment by using paymentId. It's uniquely Identified by admin). **d) CRUD Operation on Customer** Method1: Implement the CRUD operation on Customer by using customer Id. (If admin can do the CRUD [add, delete, update, view] operation on the Customer by using customerId. It's uniquely Identified by admin because customerId is a primary key). **2)Customer:** **a) Register & Login** Method2: customer can register and login using email and password. **(if a customer can Register, while Registering it will get all information about the customer like address etc., and after they have the account to login by using email and password, it can be able to find out originality of the user).** **b) Search Water Cans** Method2: Implement the CRUD operation on water cans by using waterCanId or WaterCanPrice. (if customer can search water Cans by using waterCanId or waterCanPrice. It's for efficient search of watering Can information. It's user friendly based on price also we can Search Watering Cans in this System). **c) Placing order** Method2: Customer can place the order by using orderId & waterCanId. (if Customer can place the order by using orderId and waterCanId. It's very efficient to view the entire information about the placing order [Water Cans]). **d) Make Payment** Method1: Customer can pay the amount by using waterCanId & orderId. (if customer can make the payment by using their unique id that is waterCanId and orderId. Using this customer can pay the amount efficiently). **e) Previous order Details** Method2: Customer can view the previous order information by using CustomerId. (if customer can view the previous history of order means they can use their Id itself we can know it their previous order information).	**1) Admin:** **a) Login** Method1: Admin can login using username and password. **(Admin can be used to login by using username and password. It can't verify the originality of the user. The authentication will fail).** Mehtod3: Admin can login through social media. **(Admin can be used to login by using social media, it also captures the entire information in that social media. Doesn't maintain privacy).** **b) CRUD Operation on Water Cans** Method2: Implement the CRUD operation by using waterCanPrice. **(It's not an efficient one to do the CRUD on product, because duplicate may arise).** **c) CRUD Operation on Payment** Method2: implement the CRUD operation on payment by using waterCanId. **(Admin can't do the CRUD operation on payment by only using waterCanId, also need to verify by using payment Id. So, it's somewhat tedious process).** **d) CRUD Operation on Customer** Method2: implement the CRUD operation on Customer by using Customer Name. **(It's not an efficient one to do the CRUD on Customer, because duplicate may arise).** **2)Customer:** **a) Register & Login** Method1: Customer can register and login using username and password. **(Customer can be used to login by using username and password. It can't verify the originality of the user. The authentication will fail. While registering phase it's not sufficient one to get customer information).** Method3: Customer can register and login through social media. **(Customer can be used to login by using social media, it also captures the entire information in that social media. Doesn't maintain privacy. There is no options for registration).** **b) Search Water Cans** Method1: Customer can search for the water can by using waterCanId. **(Customer can search the water cans by using waterCanId means, he/she finds it individually. It took a lot of time to see the water can informations).** **c) Placing order** Method1: Customer can place the order by using orderId. (While using orderId alone means, customer doesn't know about watering cans information). **d) Make Payment** Method2: Customer can pay the amount using waterCanId. **(It's a difficult task to do the payment by using waterCanId So, it's somewhat tedious process).** **e) Previous order Details** Method1: Customer can view the previous order information by using orderId. (orderId is not necessary to view the previous History. Customer can view by using their customerId itself they can see it).
Why? 3	Why not? 4

Algorithm:

Step1: Start

Step2: Open the Online Water Supply Management System by using browser.

Step3: Enter the Credentials for Login.

Step4: wait for Validations.

4a) if successful goto Step5.

4b) else goto Step3.

Step5: It’s Re-directed into Home page of Water Supply Management System.

Step6: Search for watering can you want to purchase.

Step7: Click the Placing order button.

Step8: Select your comfort UPIs for payment

Step9: Re-directed into Payment Page.

Step10: Enter the amount for Purchased Watering cans.

Step11: Enter the pin.

Step12: Wait for Validations.

12a) if Successful goto Step13.

12b) else goto Step11.

Step13: Payment Receipt generation process.

Step14: Payment was received successfully.

Step15: Enter customer Id to view previous History.

Step16: wait for Validations.

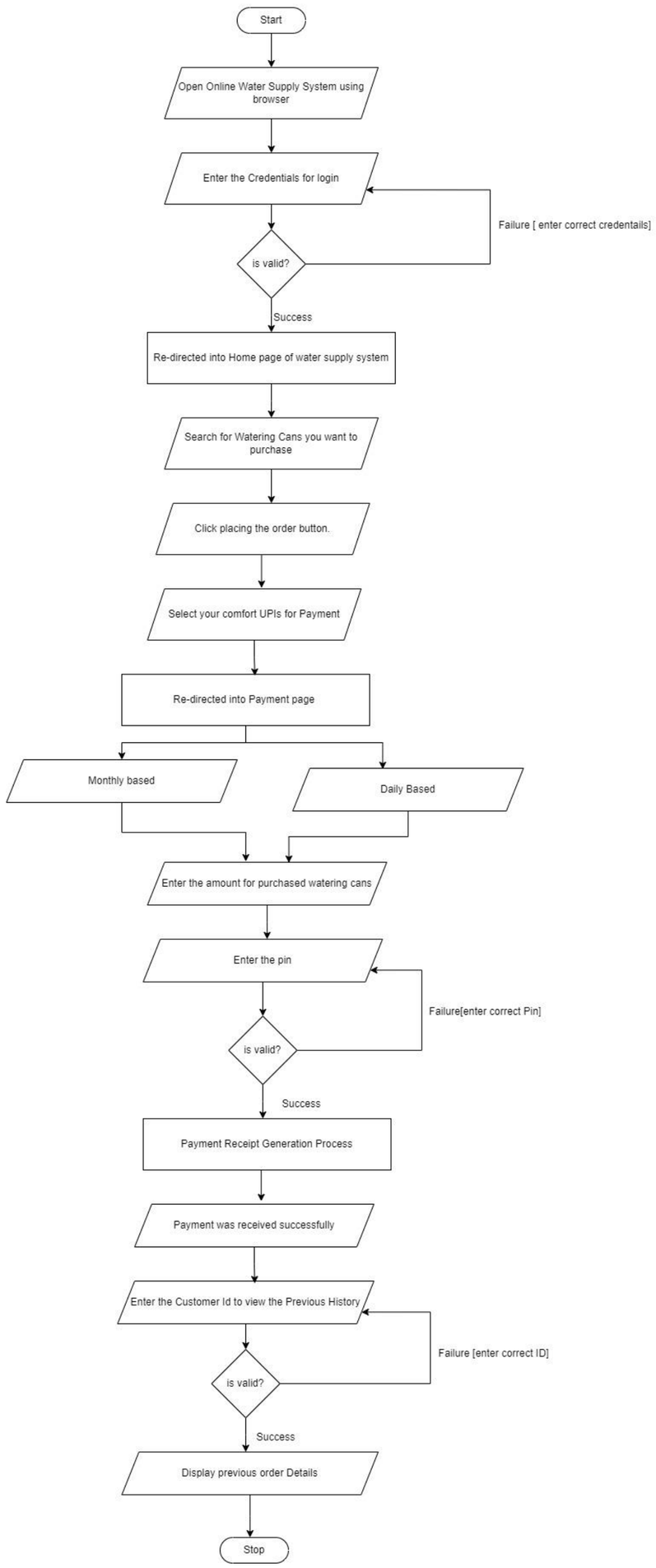
16a) if Successful goto Step17.

16b) else goto Step15.

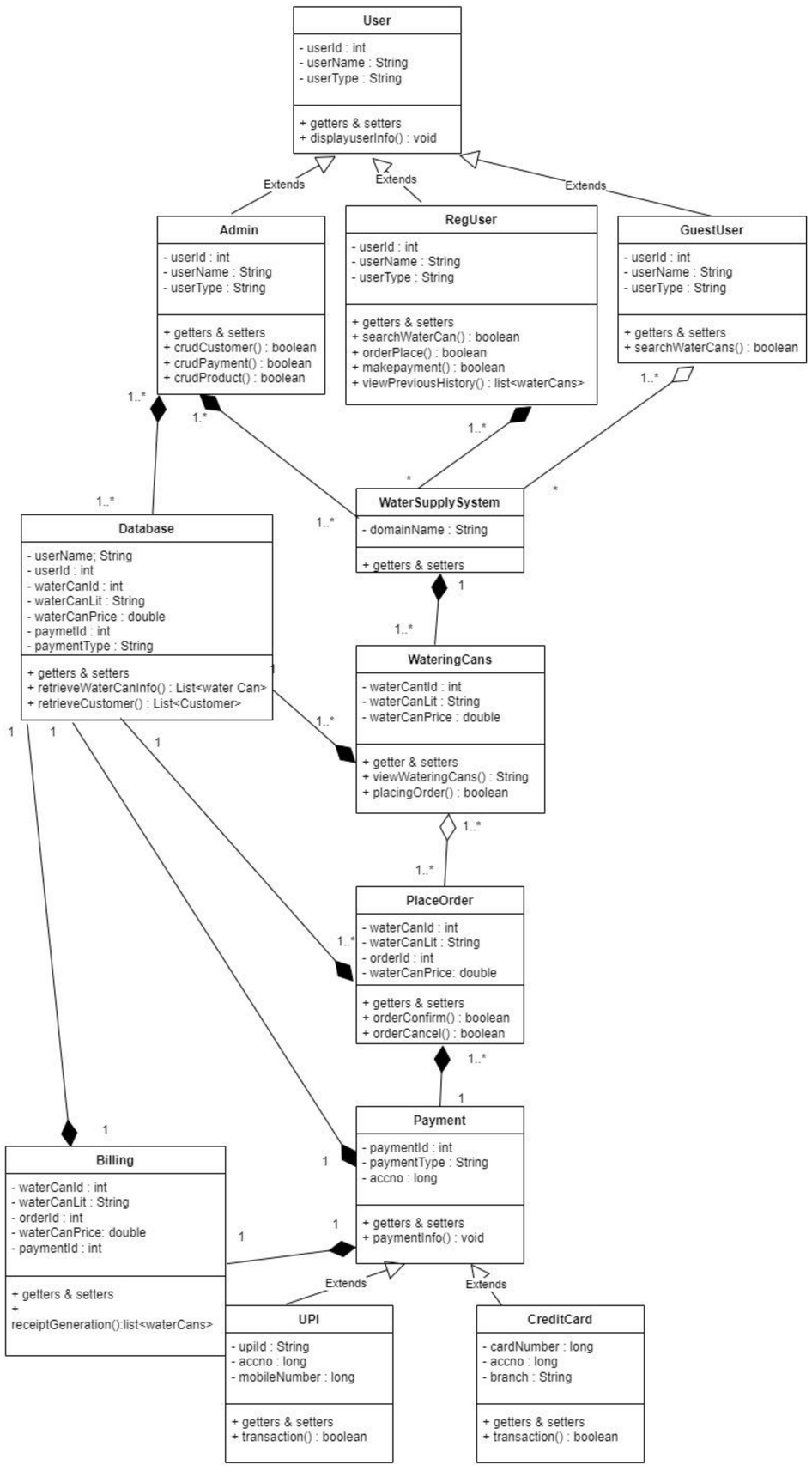
Step17: Display Previous order.

Step18: Stop

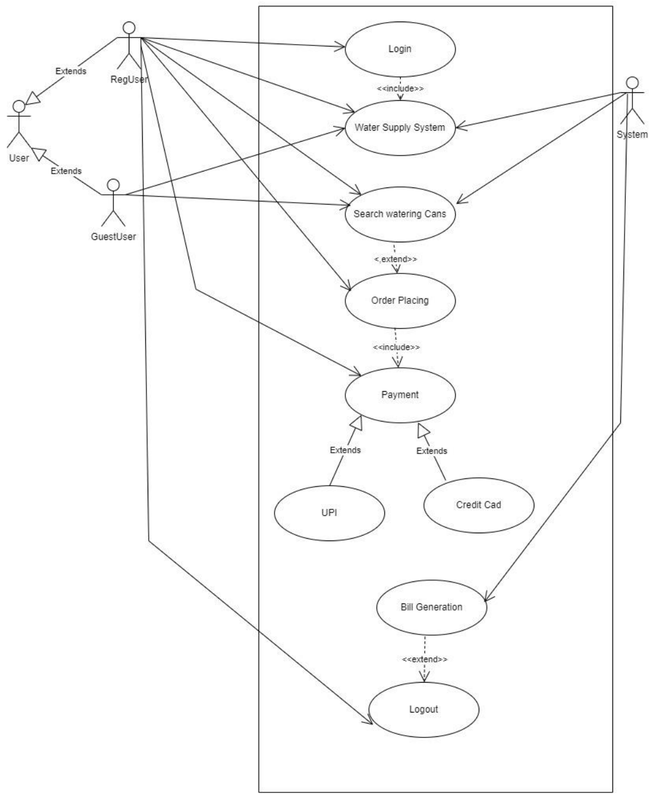
Flowchart Diagram For Water Supply Management System

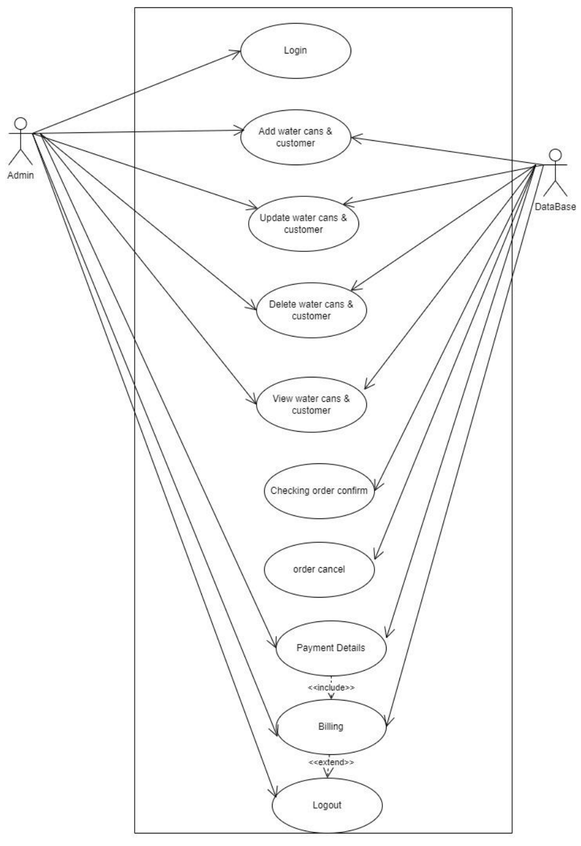


Class Diagram For Water Supply Management System



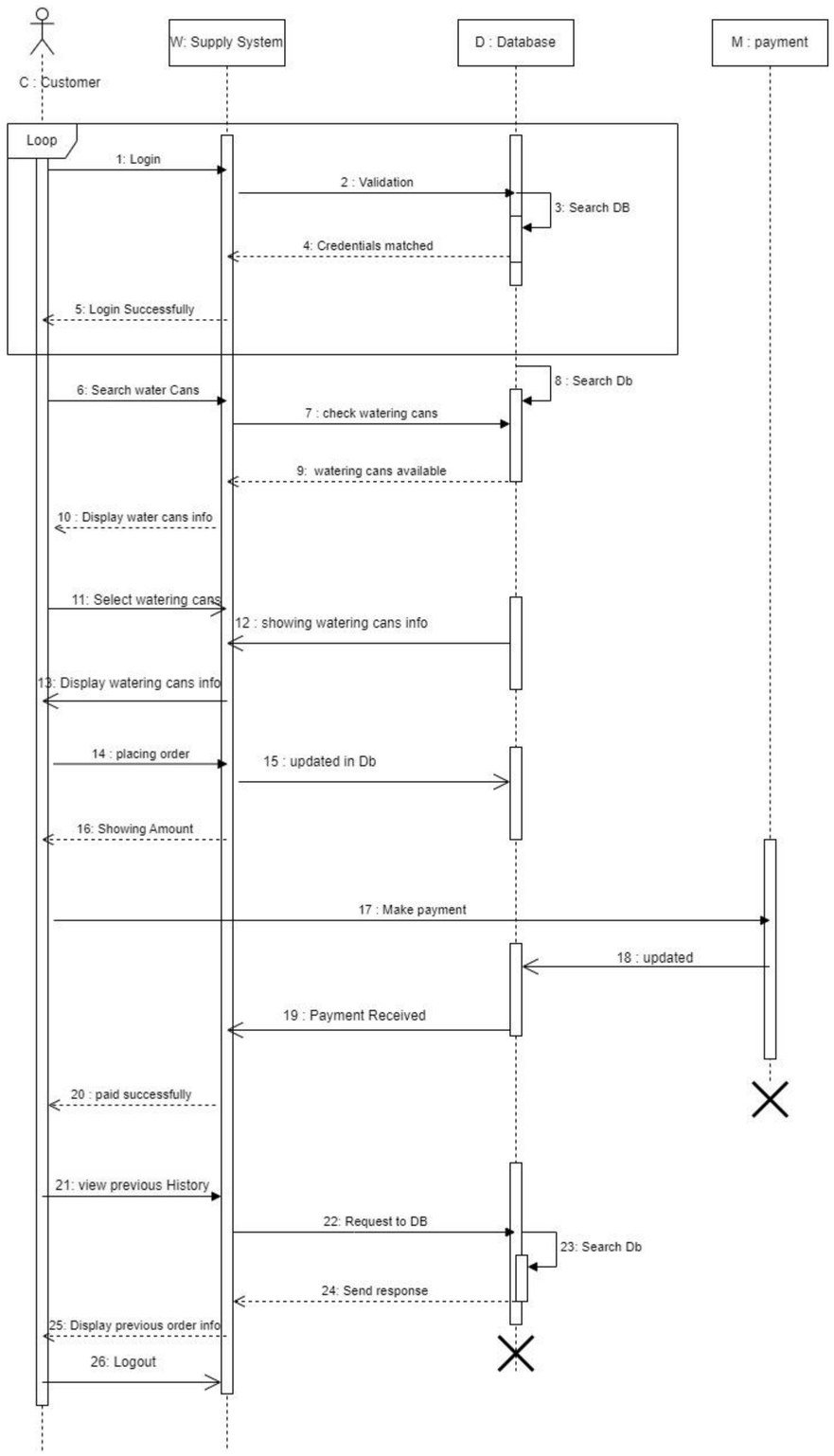
UseCase Diagram for Water Supply Management System





Primary Actor : User(regUser, GuestUser)
Secondary Actor : Admin , System
OffStage Actor : Database

Sequence Diagram for Water Supply Management System



Sequence Diagram for Water Supply Managment System