

Group 7

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Assignment 1

Question 1: Discuss your initial thoughts in details on how you will design this application? (2 points)

In our initial start, we listed the details of what the clients need and include specifics on how to handle each of the functionality of our application (listed below). We determine that this application can be implemented using an IOS app or a website that can navigate the clients through the application. With the pros and cons of both formats, we decide to use the website as our main format. We reference how facebook's "login page" designs/buttons as our model to how our login/register page would look like. For the pricing module that can predict the rate of fuel, we refer to a google forum format that contains "fields" where users can enter their required information to generate the total cost of fuel.

(drafting in process)

Goal: predict rate of fuel		
Descriptions of what we need to do	Client access (what they can see)	Programmer access (what we do...specifics)
Login	-username -password -register	-username/password management to check if valid or invalid login <<automatic action choices: IF NEW CLIENT, take to client profile management after login IF OLD CLIENT, take >>
Register	-username -password -confirm password	-validity: check if password is strong and valid -validity: check if username is taken or valid <<automatic action: take to login page after register>>
Client profile management Complete their profile	<u>PROFILE INFO ENTER</u>	-validity: check if each strings

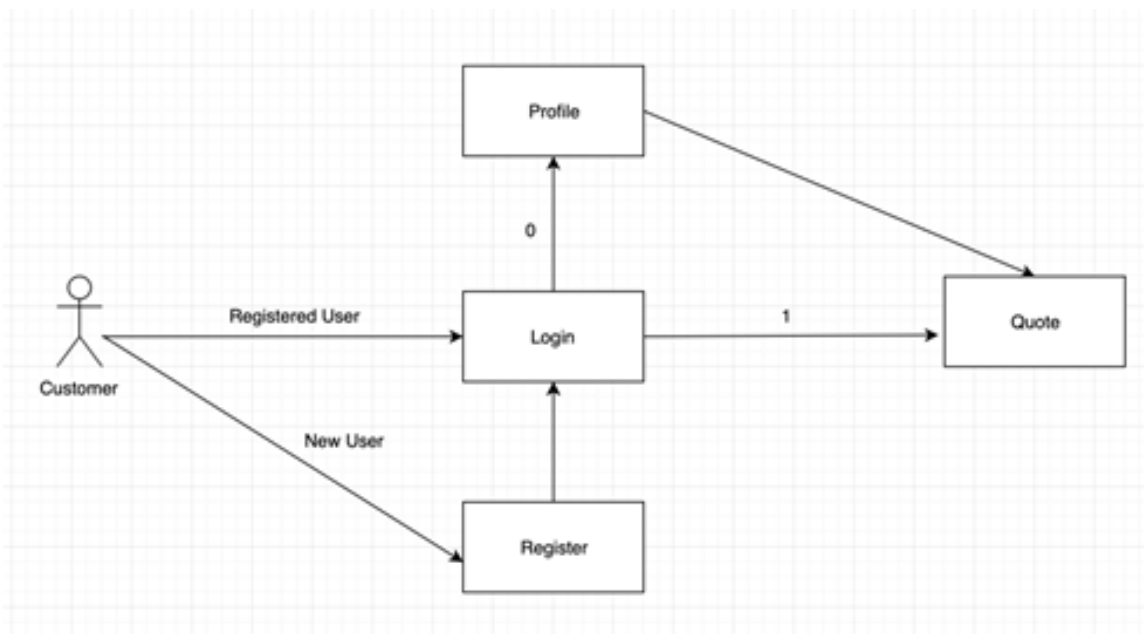
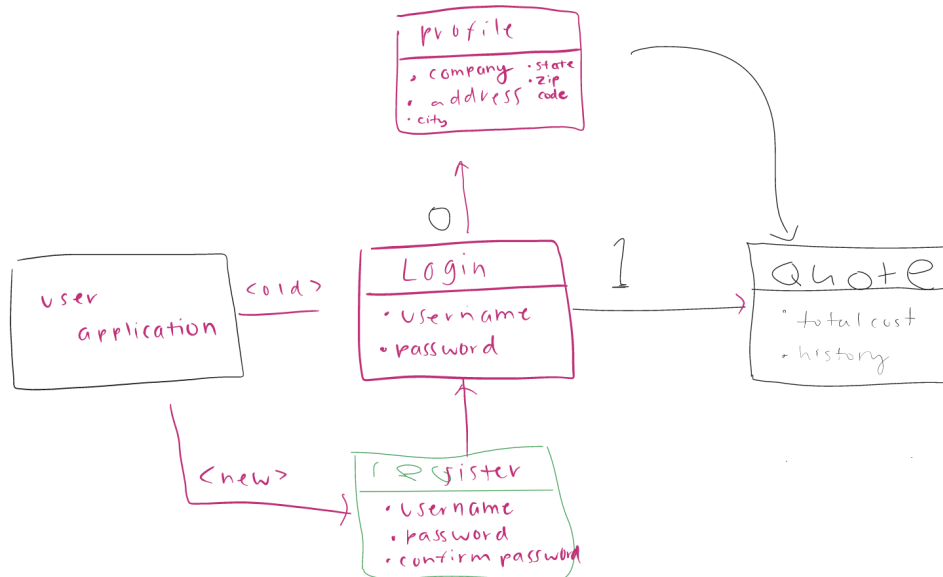
-restriction: have to be register/login	-first/last name -company -company address -state -zipcode	are valid (no blanks, no weird characters...)
Fuel Quote Form with Pricing module client enters all required info and calculates the rate provides total cost	<u>REUQUIRED INFO ENTER</u> -gallon request -location (more info needed)	-valdity: check if info is valid/invalid string/int << <u>automatic action</u> : put total cost to history>>
Fuel quote history stores all total cost	-displays history to client	Use queue/stack to store adn show data?

Question 2:Discuss what development methodology you will use and why ? (2 points)

We had a look at both Agile and Waterfall methodologies. Waterfall is better for projects completed in a linear fashion and does not allow going back to a prior phase. Agile methods break projects into smaller, iterative periods. We select the Agile methodology for this project.

Question 3: Provide high level design / architecture of your solution that you are proposing? (6 points)

We think of a Website to have this application, as an high level design and architecture of a web application as below:



We have used UML diagrams to model the system architecture:

CLASS DIAGRAM UML:

