Software Engineering Case Based Learning Exercise : Group 11

1. **Stakeholders**:
   Customers, Employees, Investors, Manager, Retinodes Software Company, Government of India, Reserve Bank of India, Various nationalized banks, Bombay Stock Exchange(future IPO possibilities)

   Users:
   LIC Insurance Agents/Insurer, Customer

   User stories:

   As an LIC insurance agent,
   I want to login
   so that i can view my profile. (Must have)

   As an user,
   I want to login
   so that i can view my profile. (Must have)

   As a customer,
   I want to create my own custom consolidated insurance packages,
   so that I can get an insurance deal as per my own necessities and requirements. (Should have)

   As an LIC insurance agent,
   I want the system to generate a new consolidated insurance package while looking at the other insurance packages provided by the other companies,
   so that the insurance deal is more attractive to the customer and the chances of signing the insurance contract increases. (Should have)

   As an LIC insurer,
   I want the system to review the custom insurance package created by the customer,
   So that I can approve whether the package deal is feasible or not. (Could have)

   As an LIC insurer,
   I want the system to generate a new competitive price for the custom package request of the customer if the deal was not feasible,

So that the new deal is proposed. (Could have)

As a customer,
I want to accept the contract of the insurance package,
So that I can be insured for the particular stuff. (Must have)

As a customer,
I want to reject the contract of the insurance package,
So that I don't sign a deal I don't want to. (Must have)

As a customer,
I want to claim my insurance,
So that I can cover my expenses as per required contract. (Will not have)

2. **Facilitating Technology**:
   A web app and a mobile app for this software would be required, on Windows and Mac on desktop and Android and iOS for mobile.

   Data for the various insurance packages offered by various companies can be fetched through a scraper or an API.
   Market-facing technologies/websites that might are helpful for the development of this project are:
   1. https://www.insurancedekho.com/
   2. https://www.policybazaar.com/

   Some Machine Learning Techniques can be used to predict the price at which it increases the probability of the user purchasing the deal by tracking the user behaviour in the website and constantly training on it.

3. **Framework**:
   For requirement elicitation, interviewing the LIC Agents and the customers would be helpful. Also recording the conversation between both would help get better insight into the process. Also a customer centered questionnaire would help generate the customer's custom insurance package idea and other features the software might want to add. By using the feedbacks, we can use the agile process model more specifically SCRUM. As we can deliver the system step by step and as we are creating the system from scratch it will be very helpful as we discuss the problems with the previous sprint and improve ino the next one. Benefit of the SCRUM will be that we can create a basic product in a very short time so that the LIC will have the basic system in a very short period of time.

4. **Not feasible features:**
   A negotiation window between the customer and system/company after the system provides the suggestion,analysis and competing price for the customized plan.
   We have the features which can show every data of every user, but under privacy and policies one user cannot view other users data.

5. Firstly,if the pre-defined package is attractive enough and any more customizations won't lure customers to go through the effort to make changes and go through the system posing the competing prize for their package, this would make customizations less attractive and useful.
   Solution: We can provide different benefits with the customizations which will attract the customers to customize their package and satisfy them by giving them flexibility.

   Secondly, the system suggesting and posing the competing prize is not trained enough to different types of behaviour of customers which can result in losing the interest of a customer in signing off the deal.
   Solution: We have to train our system to a variety of schemes that are related to the customizations which will ensure relevant prizes.

6. **Too many requirements can lead to conflict on the basis of selection. In order to prevent this,less and highly significant requirements should only be considered**.
   - As the customer has the right to choose his own package, the custom package might not be beneficial to the company as the user may compare company’s predefined package prices with his customised package which is less and so the system should be able to solve this conflict and suggest a solution.
   - Many customers may bombard the system with a lot of custom package requests just to check the various schemes suggested and not sign a deal and unnecessarily increase the load on the system which might affect the performance.
   - There might be a case where the customer paid the premium for the policy he purchased but the system has not been updated and this can lead the user to go for a repayment.

7. **Non - Functional Requirements:**
   Performance - The performance of the system should be optimal.

Scalability - System should be scalable as we don’t know the customer's strength may increase.
Reliability - Our system’s failure rate should be very low.
Availability - System should be available during working.
maintainability - Our system’s database should be maintainable and efficient.
Security - Our system should be secure and protracted as it contains private data of users.
Usability - Our system should be user - friendly so that all the users can use it smoothly.

8. **Open issues** -
    - A chat feature between the insurer and the customer while the customer is proposing the custom insurance package would be a good feature but has been kept open for now.
      Right now alternatively, the insurer can only approve the custom deal remotely or can ask the system to provide the other competitive price.
    - The system can also add the feature to claim the insurance when necessary.
      The only alternate solution right now is to claim it in a traditional way through other means.