**App Features**

The insurance pricing tool had three major sections. The Plot of expected Reserve over time, the expected premium and the controls. The expected reserve was plotted over time in an interactive line plot. The plot clearly indicates the reserved in a specified time period. The premium section contains an info box that was used to computed the expected premium of the insurance. It was expresses in $. The control section contained all the components affecting expected insurance reserve and premiums. These controls included the product type, age, interest rates, assured sum, annuity product type, expenses, premium payments, premium payment frequency etc. Two side bar menus were provided for computing single policy and couple policy. The interaction between these components results to different reserves and premiums. Adjusting every parameter on the application alters the reserve value and the premium. This connecting was established by the relationship that exists between these variables and the reserve as well as the premium. Conditional panel function was used in the app development to ensure some variables only show when a certain position is meet. This enables to hid irreverent variables under the context and display the important and the required panels and variables. The joint products (Assurance and Annuity were provided in the couple policy).

**Analysis and Recommendations**

Different approaches and functions exist for computing insurance reserves and premiums. This is due to the fact that insurance also exists if different from and formats as well as types. The complexity of the insurance type has resulted to different methods and techniques applied in the context. The workability of the developed system depends on a life insurance policy and all it pertains. This implies that applying the application to another type of insurance policy would require appropriate changes to the app. Further any life insurance policy with another defined feature different from the one design in the app would also require to incorporate the feature to the app to attain its usefulness. There were different functions defined in the app that aided the analysis process. These functions included among others, the whole life annuity function, the life assurance functions. These functions compute the expected present value of the insurance under the assurance and annuity products. These functions take the inputs of age and interest to return the expected present value. Since the computed reserves and the premium depends on these functionalities, care should be maintained to define these functions properly to have the correct values generated for the reserves and the premiums. A standard formular, function, functions should be established by insurance regulatory bodies. This would enhance consistency and accuracy in insurance reserve and premium computations. Other than developing the app through the functions, applying machine learning and actuarial models in the app would result to more insightful results in the computation of insurance reserves and premiums. Visualizing the relationship between insurance reserves, premiums, expenses, products, assured sum would also generate insightful visualizations on the underlying relationship between the variables. This relationship would therefore form the foundation of the suggested actuarial models.