JAVA PROGRAMMING

Gadget Insurance Policy Prototype

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Introduction

For my assessment I created an insurance premium calculator prototype. By doing this I demonstrated a vast amount of skills by implementing key features such as using several calculations. Firstly the prototype works by asking the client for a few details such there first and last name, it also requires the user to make up a valid reference number to make each insert more unique, the prototype then collects the number of items that the user has and stores that value as an integer, it then asks the user to input their gadget price which also gets stored as an integer, the gadget price is then cross-referenced in my prices method which goes through and uses the number or items and most expensive gadget price to calculate a single price. The user also has an option to choose an excess amount between £40, £50, £60 and £70, the excess amount increments by 10 and has a discount allocated to it. The excess of 40 gives the user a 5% discount on their final premium, excess of 50 gives the user a 10% discount on their final premium, excess of 50 gives the user a 15% discount on their final premium and finally the excess of 40 gives the user a 20% discount on their final premium. The client can also choose to have no excess by choosing 30. The prototype then asks the user to either pay for an annual premium (which has a 10% discount on the final premium) or to pay monthly.

Security Measures

While undergoing this assessment I briefly researched security measures that I could implement to my prototype to ensure that the data in the system was safeguarded, this is important because the system holds the clients personal information. Whilst researching I came across The DPA (The Data Protection Act 1998). All companies who store personal information such name, credit card details must use the DPA legislation. This protects customers/clients from other people accessing there information without permission thus I it I would comply with the DPA because my prototype stores personal information.

Current State

Due to poor time management and a lack of understanding earlier on in the development of my prototype I was only able to complete option 1, 2, 3, and 0. I used my experience from learning Python last year and completing the practical session examples to implement option 1 with very little difficulty. I then had to research further to complete options 2 and 3 because files where new to me and I hadn't learnt any object oriented programming (working with classes). Overall I think that the prototype is very well structure and it works very well with rigorous testing

The pros of this assessment:

- Greater understanding of java programing language as a whole
- Greater understanding of object oriented programing

Cons

- More research needed on file handling

I could have managed my time better during the development process because I would have then been able to thoroughly test options 2 and 3 like I have done with option 1, this is also reflected in my test plan purely because of time constraints but to the best of my knowledge everything I have implemented so far is functional and has a nice neat structure. I aim to carry on working on this prototype and fully complete it as it has widen my java skills.

The test plan has helped me with my development process because it has helped me to identify and correct any errors the in my code. Finally I regret not adding in more comments in my java which would help other programmers better understand my code this Is purely because I added in more code later on and ran out of time in the end though to compensate I spent a bit of time structuring my code to look neat and follow the PEP 8 standard for coding.