GAS Java Prototype Report

Over the past few weeks, I have been developing your games access subscription-based prototype.

The following report will cover many of your worries and will help support you in implementing the full system. I'll cover the following:

* The security measures and features that would be needed to implement to ensure all data in the system is safeguarded.
* Legal considerations that need to be respected before the full system becomes operational.
* How development and implementation risks be minimized.
* The current state of the prototype. Including: which parts have been successfully implemented and those parts which have not been fully implemented.
* Lastly, a description of known errors.

Many things may affect the security of the implementation of this code. To reduce this cost of security we can do many things. Firstly, we need to write clean and strong code. The more complex our code is, the more vulnerable it is to security breaches. We can use principles as such to not repeat ourselves and to expose as little information in the code as possible while retaining its functionality. The encryption of passwords and other sensitive information even though it is not relevant in the code I have written. It will be needed to implement this code to functionality since it will hold the details of customers for your games access service. Customer details is sensitive data and needs to be encrypted.

One thing to consider is what country this games access service will be implemented in. There are many laws, and they all change around the world. Some countries do not allow for certain subscription services in their country. So, I would advise looking at which countries you want this service to be implemented in.

Some risks you may want to look at and think through with considerable detail include the following. Firstly, developing a service like these costs lots of money, and a budget must be laid out beforehand. More importantly, and again, going over the encryption of the user data is of utmost importance. If certain information is released, there can be lawsuits and as a result, business failure or loss of trust in future customers. We want to hold and retain our customers, so their service comes first always. The data for these customers may be held in a database much like a sql database. These databases may be attacked by the likes of a sql injection attack. This may result in the leak of sensitive data, breaches of privacy and data loss or corruption. We can avoid attacks like this by implementing validation of the server side and keeping backups of data stored if they get corrupted.

The current state of the prototype is as follows:

The prototype firstly gves the user the different options of interaction. Firstly, they may enter a new subscription. It will print all the steps needed and will continue to ask the name of the customer, what package they want, the duration they want to subscribe for, any discount code they may have, and the terms of their payment. All while validating input. For example, they will not be able to enter a string character if they are asked for the duration they want. It will then print a summary of their subscription. Secondly, the user may want to see a summary of subscriptions and if they enter 2, they can view this. The 3rd option will allow the user to see a summary of subscriptions based on the selected month. The fourth option does not work correctly in that it displayed everyones name in the text file and needs further work.

The user may exit the program after their selected option by pressing 0

Known bugs at the current time, include the boarder of the subscription summary may be indented wrong based on the user's name. There is a bug in relation to task 4, in that this task does not run as expected and instead prints everyone's summary and crashes. This task needs further work. also, if the user enters a discount code without a number at the end, the discount will be inaccurate.