Group 9 Review

3. For each of the 12 assignment reports you have at hand, analyze the proposed architectural solution with respect to:

a. Risks - There is no data handler between business logic/ application logic and the database, so there is risk for security and modularity. There is no backup, so recoverability and availability are also in risk.

b. Non-risks - Security using client-server architectural style.

c. Sensitivity points - Credibility is achieved by using an external payment provider

d. Tradeoff points - Lower cost vs availability, there is no backup database which means lower cost, but availability is in risk then.

4. Review each of the 12 proposed solutions with respect to the following abstract design principles:

a. Information hiding

Good, but maybe too far. The external service (bank) is not identified in the component diagram.

b. Minimise coupling

The answer to question seven- component diagram doesn’t provide any link or dependency between layers, so there is no enough material for me to review this aspect.

c. Coherence

Good

d. Divide and conquer

This can be improved in terms of Advertisement component, it can be broken down into analyse patterns and send advertisement. Data analysis before sending advertisement is lacking in the system.

e. Separation of concerns

Good

f. Keep it simple:

Good

g. No circular dependencies

Good (no dependency is shown in the component diagram, but the class diagram in the answer of 10 shows no circular dependencies.)

h. Layering

Good

i. Modularity

This can be improved. There is no interface between database and other layers, it will have stronger modularity if there is an database handler.

5. Give an overall grade for each architectural solution at the scale of 1 (poor) to 10 (excellent).

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Justify your score in terms of your answers to the previous questions.

In general the architectural design is well layered, components are distributed correctly as well. But the connection between layers and the dependencies between components are lacking. Also there is no data handler for database, which lead to lower security and modularity.