**API Specifications**

**WSDL** – WSDL will be used to describe the functionality and the operations provided by the web-based service (Buzz system).

**CORBA** – CORBA will mediate the communication between the diverse systems that will be integrated to the Buzz system to provide added functionality and data for the operation of the system.

**IDL** – This will be used for data analysis purposes for the data passed from the data source to the Buzz system and any other form of data required by the system.

**Integration Quality Requirements**

**Integration Approach**

The ideal Integration approach that will cater for the needs of the Buzz system is the Document-based Integration because only essential data that is required by the system will be provided by the data source.

The following requirements need to be fulfilled to ensure optimal operation of the system after integration:

**Performance** – The integration should not impact poorly on the performance of the Buzz system. The data required should be easily accessible at all times when requested by the system without compromising the Buzz systems ability to evaluate user credentials or any functionality that is dependent on the data source.

**Scalability** – The data source will contain a large volume of records pertaining to the students registered for the module making use of the Buzz system and therefore has to have the capability to handle a large data set and multiple concurrent users.

**Reliability** – When the Buzz system requires certain records in an efficient timely manner, reliability is also a major concern. To allow proper accessibility, functionality and productivity of the system, reliable data has to be delivered at all times or else the whole system will not operate as desired.

**Security** – The data provided will come from a reliable data source that has sensitive information regarding students who are registered and the details of the system itself. During the integration process, the Buzz system cannot compromise the data source by feeding malicious data to intentionally or unintentionally extract valuable information. The Buzz system can only access records that the data source deems as essential for the use of the Buzz system.

**Auditability** – Every request that is passed by the Buzz system for sensitive data has to be evaluated and assessed to determine whether or not the Buzz system has the rights to obtain that data. Certain requested have to be logged if they produce certain errors or faults in the system that could compromise any of the quality requirements.

**Integrability**

**Flexibility**

**Reusability**

**Maintainability**

**Testability**

**Affordability**

**Usability**

**Deployability**