Hamza Subsystem: 3 = USU operation system | Section 4.4

Chosen functional requirement:

* FR-USU-2(a): Initiation of New Event

Summary of functional requirement:

* The system should provide a facility to the USU staff to create new events. The creation of a new event should be provided the following data such as name, theme, related events, organisers, date and time, venue, participation constraints, promotion materials, etc. Once created, the event will be promoted on the USU portal, and notifications will be sent to union officers and student members.

Quality requirements:

1. Security and Privacy protection:
   1. Access Control – Only authenticated and authorised USU staff should be allowed to access the event initiation feature
   2. Data Privacy – Personal data of organisers (like names and roles) and information about the event (like venue and time of event) should be stored and transmitted using encryption
   3. Audit Logging – All actions such as event creation, modification and deletion should be logged with the user’s ID and a timestamp to ensure accountability
2. Performance:
   1. Response time – Event initiation requests should be processed and confirmed within 3 seconds under normal circumstances
   2. Upload speed – Promotional materials (such as photos and videos) up to 10 MB should be processed and stored within 5 seconds
   3. Notification Delivery – Notifications should be sent to union officers and students within 10 seconds after event initiation
3. Reliability:
   1. Availability – Event initiation feature should not be out of service for more than 100 hours per year in any consecutive operation period of one calendar year
   2. Backup and recovery – Event data should be included in system backups and recoverable within 2 hours in case of failure
4. Scalability:
   1. Concurrent usage – The feature should support at least 200 concurrent users creating or editing events while still meeting performance targets
   2. Load Handling – The feature should be able to handle up to 1000 events being initiated per day and still meet performance targets
   3. Notification Scalability – The system should be able to send notifications to 10,000+ recipients without delays exceeding 10 seconds.