# **CHAPTER THREE**

## **3.0 System Requirements**

**3.1** **Functionality:**

**Introduction-**This part of the document contains the requirement for the Sports Events Management System which gives a detailed description of the product(deliverable) and all its features.

* + 1. **Multiple User authentication and Platform**
    2. The system shall provide User sign-in configurations to new Users of the system.
    3. The system shall perform User authentication and validation at the Login stage.
    4. The system shall allow the user to reset a password once forgotten by the user.
    5. The system would not redirect the user to its specific platform unless all configuration data is filled correctly and no portion is left null.
    6. The system shall notify the User when a configuration step is skipped or not filled properly so as the filter and accept only accurate details.
    7. The system shall direct the user to the specific platform based on the user type from the configuration details of the user
    8. **Provides awareness on Trending events**
    9. The system shall provide an interactive and responsive interface on this platform to make participation interesting.
    10. The system shall provide detailed information of trending and ongoing events.
    11. The system shall give the user the option to either view comprehensive details of the event of his choice.
    12. The system shall give the user the option to enroll for a particular event.
    13. The system shall give the user whom will not enroll for any event the chance to view results of events.
    14. **Accurate Events Sorting**
    15. The system shall categorize the events in terms of indoor and outdoor.
    16. The system shall provide corresponding events to the category of event chosen.
    17. **Provides Effective Events Supervision**
    18. The system shall appoint an events supervisor to each and every event.
    19. The system shall have all records on participants enrolled in all events.
    20. The system shall have all scores of events keyed in the by event supervisor.
    21. **Provide error correction Platform**
    22. The system shall allow the administrator to check and correct all inaccurate information once uploaded unto the system.
  1. **Usability**

**Graphical User Interface**

The system shall be easy to navigate through the all the web pages.

The system shall provide a Highly User friendly interface, responsive and attractive web forms.

The system shall provide high definition images as part of the description for each event.

The system shall have a sporting nature and an entertaining and intriguing environment to depict its nature.

* 1. **Accessibility**

The system shall be available for at least more than 10 hours a day.

The system should be made accessible anywhere regardless of the geographical location of an authorized user.

* 1. **Reliability & Availability**

The system shall provide a reliable database for quick and fast querying.

* 1. **Performance**

The system shall be Wed Based and has to be run from a web browser.

The performance also depends on the hardware component of the User.

The system should be available for user in real time and always up to date.

The performance of the system shall be fast and efficient in searching, editing, deleting and updating, and generation of reports.

* 1. **Security (Data Transfer)**

The system shall use validations in all User configurations and details.

The system shall automatically log out all customers after a period of inactivity.

The system shall confirm all information and details with the Users web browser.

The system shall not leave any trace of the Users details on the device containing the user’s password.

The system shall not leave any loop hole on the Users device containing any of the user’s confidential information.

* 1. **Data Storage**

The system’s back-end server shall never display a User’s password**.**

The system shall filter all data properly before entering into the database.

The system should be able to store only the useful data, and data that will used later on.

* 1. **Error Handling**

The system should be able to handle unexpected errors quickly and easily by alerting users for easy and early detection and rectification.

* 1. **Design Constraints**
     1. **Web Based Product**

There are memory requirements

The Users device must be equipped with web browsers such as Internet explorer, Google chrome or Mozilla Firefox.

The deliverable must be stored in such a way that allows the Users easy access to it.

Response time for loading the system should take no longer than 10 minutes.

TheUser should have a general knowledge of basic computer skills required to use the system.

* 1. **Software Requirements**

Microsoft SQL Server 2012

Visual Studio 2015

* 1. **Interfaces**

There are many interfaces supporting the running of the system such as the User interface, Software Interface and Hardware Interface.

* + 1. **User Interfaces**

The user interface for the software shall be compatible to any browser such as Internet Explorer, Mozilla or Google Chrome by which user can access to the system.

The user interface shall be implemented using tools such as Java script, Bootstrap Css, HTML5.

* + 1. **Hardware Interfaces**

Since it is a web based application it must run over the internet, all the hardware shall require to be able to connect to the internet as the hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

* + 1. **Software Interface**

The system shall communicate with the database for easy querying.

The system shall communicate with the database for identification if authorized and registered users.

The system shall communicate with the events supervisors for Event results.

* + 1. **Communications Interface**

The system shall use the HTTP protocol for communication over the internet and intranet communication will be through TCP/IP protocol suite.

* 1. **Licensing Requirements**

Not Applicable

* 1. **Legal, Copyright and other notices**

The Sports Events Management System should display the copyright, word mark, trademark of the Institution and other Sporting organizations.

* 1. **Applicable Standards**

The system shall be per Users definition and standard.

* 1. **Supporting Information**

**Please Refer to the following documents.**

1. SRSExample-webapp.doc
2. SRS4.0.doc
3. srs\_example\_2010\_group2.pdf
4. SWEBOKv3.pdf
5. Somerville - Software Engineering 9ed.pdf