**Requirements Engineering**

**Submitted To**

Mohammad Abdullah Al Mumin, PhD

Professor

CSE, SUST

**Submitted by**

Oishik Biswas

2018331069

**Requirement Engineering Process**

**Stakeholder Identification:**

* **Users**

→ **Players:** accessing training schedules, monitoring fitness, reviewing performance data, receiving communication from coaches and team management.

→ **Coaches and Support Staff:** planning training sessions, analysing player performance and developing team strategies.

→ **Team Managers:** scheduling, player condition and communication.

→ **Cricket Teams like Franchise based teams:** Selection and trial purposes.

* **Admins**

→ **IT administrators:** managing the technical aspects of the software, ensuring its proper functioning, handling any technical issues

→ **Developers:** creating, updating, maintaining the software, have the access to implement new features.

→ **Analysts & Statisticians:** statistical analysis of individual players and video analysis of different players strengths and weaknesses.

→ **Administrative Staff:** overall team management, logistics and coordination.

**Requirement Elicitation**

* Identify Stakeholders
* Conducting Interviews
* Surveys
* Observation
* Review Documentation and Validation
* Prototyping
* Feedback
* Usability Testing
* Security
* Performance
* Communication
* Testing and Maintenance

**Functional requirements**

* User Authentication and Authorization
* Player Profiles
* Training Management
* Match and Tournament Management
* Performance Analysis
* Communication Tools
* Injury Tracking
* Player Availability and Selection
* Scouting and Recruitment
* Document Management
* Travel and Logistics Management
* Reports and Dashboard
* Security and Data Protection
* Feedback Mechanism

**Non-Functional Requirements**

* **Usability Requirement**

→ UI Design

→ Accessibility

* **Efficiency Requirement**

→ Fault Tolerance

* **Dependability Requirement**

→ Availability

* **Performance**

→ Response Time

→ Scalability

* **Security**

→ Data Encryption

→ Access Control

* **Compatibility**

→ Browser

→ Device

* **Maintainability**
* **Backup and Recovery**

→ Regular Backups

→ Emergency Recovery Plan

**External Requirements**

* **Legal and Regulatory Compliance**

→ Data Protection Laws

→ Sports Governing Body Regulations

* **Integration with External Systems**

→ Cricket Associations

→ Tournament Management Platform

* **Security Standards**

→ Industry Security Standards

→ Secure Communications

* **Scalability**

→ Team Growth

→ Tournament Participation

* **Technological**

→ Device and Platform Compatibility

→ Network Infrastructure

* **Budget**

→ Financial Considerations

* **Operational**

→ Team Travel Logistics

* **Support and Maintenance**