

अनुमानित लागत पेश गर्ने सम्बन्धमा सूचना

प्रकाशित मिति : २०७७०९१९

CDS
and
Clearing Ltd.

सिडिएस एण्ड क्लियरिङ लि. (सिडिएससि) ले प्रयोग गर्दै आएको सफ्टवेयरमा Trade Management System संग आवद्ध गर्नका लागि API (Application Programming Interface) को आवश्यक भएकोले देहाय बमोजिमको Requirements को लागत अनुमानित यो सूचना प्रकाशित भएको मितिले ७ (सात) दिनभित्र Real Time Data Fetch सम्बन्धी API विकास गरेको अनुभव भएका कम्पनीहरूबाट यस कार्यालयमा पेश गर्नुहुन अनुरोध गरिन्छ।

GENERAL REQUIREMENTS:

1. API should have N tier architecture in which the functional process logic, data access, data storage and user interface are developed and maintained as independent modules on separate platforms due to which maintenance on separate module can be easily performed.
2. API should be highly scalable and reliable. It should handle growing number of users with increasing resources and also should work smoothly at any time.
3. Web based API is to developed which lowers development costs, easy Installation and maintenance, accessible anywhere and increase efficiency.
4. Failover policy is to be maintained in system level and application level as well so that it ensures no single point of failure at application level.
5. API system should have cross browser compatibility to support various web browsers identically.
6. Authentication and authorization both play important roles in security systems. They confirm the identity of the user and grant access to system. So Suitable authentication and authorization mechanism is to be applied into API system.
7. API should satisfy Top 10 OWASP vulnerabilities. The Top 10 OWASP vulnerabilities in 2020 are:
 - Injection
 - Broken Authentication
 - Sensitive Data Exposure
 - XML External Entities (XXE)
 - Broken Access control
 - Security misconfigurations
 - Cross Site Scripting (XSS)
 - Insecure Deserialization
 - Using Components with known vulnerabilities
 - Insufficient logging and monitoring.
8. API should not be dependent on specific platform. It should be platform independent.
9. API system should trace the detailed transactions occurred into system. So Audit trail is to be maintained for each CRUD (Create, read, update and delete) operations.
10. Role based content management system is to be endorsed into system which enables non technically minded users to create functional pages or upload and modify content themselves, without having to outsource the work to technical manpower.

11. API should be developed using proven standards used for application development.
12. API system should be developed using OOP (Object Oriented Programming) approach and RDBMS(Relational Database Management System) concept.

SPECIFIC REQUIREMENTS:

CDAS RELATED

1. API should provide investor's current and free balance
2. It should allow parameterized value eg. date, company name ,name , boid etc.
3. Restful (**RE**presentational **State Transfer**) API design is to be implemented.
4. Realtime information from API should be fetched on user request.
5. Access control mechanism should be based on IP.IP may be private/public of each users
6. API should provide EOD/BOD data on batch, BOID specific and also should provide data on particular period of time .
7. Data should be populated as per audit date values.
8. Boid validation based on specific unique parameters may be (Nepalese citizenship number,name,father's name,grandfather's name etc.)
9. API for master data (company's detail, ISIN etc.)
10. API for corporate actions approved by companies.
11. API for transaction history if required.
12. It should able to handle push/ pull mechanism.
13. API should maintain BOID registration mechanism

CNS RELATED

1. API should provide Settlement master related data with pending and complete status.
2. It should provide settlement status based on contract number, settlement id, quantity settled for closed out
3. CGT, commission related data also to be provided with API.
4. API should be provide Pay in/Pay out related data.

सम्पर्क गर्ने ठेगाना :

सिडिएस एण्ड क्लियरिङ लि.
चौथो तल्ला, शेयर मार्केट्स कर्मशियल कम्प्लेक्स, पुतलीसडक काठमाडौं ।
फोन नं : ०१-४२४०९५०, ४२६०३८६

