**Apache Axis2**

Adarsh Choudhary, Mohit Jain, Surabhi Lone

**What is Apache Axis2?**

Apache Axis2 is a powerful framework for creating and managing web services. It helps developers easily build services that can work with various protocols, like SOAP and REST. The framework is designed to be both flexible and efficient, making it suitable for different types of applications. Axis2 provides essential features like handling messages and managing errors, allowing seamless interaction between clients and services. Overall, it streamlines the process of developing web services across multiple platforms

**Functional Requirements**

1. Web Service Creation : Users should be able to create web services easily using Java code.
2. Support for Protocols: The framework must support various protocols like SOAP and REST.
3. Message Handling: Users need a way to send and receive messages between services.
4. Error Management: The system should have mechanisms to manage errors and exceptions gracefully.
5. Configuration Management: Users should be able to configure services through XML files.
6. Extensibility: The framework should allow for the addition of custom modules and features.
7. Client Generation: Users must be able to generate client stubs for accessing services.

**Quality Attributes**

1. Speed: The system should work quickly without making users wait too long.
2. Growth: It needs to handle more users or requests without slowing down.
3. Dependability: Users should be able to count on it to work all the time.
4. Compatibility: It must easily connect with other web services and systems.
5. Easy to fix: If something goes wrong, it should be simple to update or fix.
6. Safety: It should protect user data and keep it secure from bad actors.