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FUNCTIONAL REQUIREMENTS

# Project: Figbook

CLIENT: FIGTORY ANIMATION

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Here's a link to GitHub.

<https://github.com/SpheMalo/COS-301-Main-Project.git>

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# 1 Architecture Requirements

## 1.1 Architecture Scope

## 1.2 Quality Requirements

## 1.3 Integration and Access channel requirements

### 1.3.1 Channels

- REST: Representational State Transfer
  - The REST architecture design is a good option to use as it is simpler than SOAP and is a dynamic design.
  - A RESTful system can integrate well with HTTP as RESTful systems are optimized for the web.
  - Restful systems need to follow a client-server model, so this means that there needs to be communication between the client and server which is vital in the Figbook system.
  - There is support for a lot of components to interact with each other and to be interchangeable.

### 1.3.2 Protocols

- Http(Hypertext Transfer Protocol) is the main protocol for all websites in the modern internet usage. It allows linking of nodes which allows the users to easily navigate through web pages.
- HTTPS is a more secure version of Http. HTTPS is a combination of HTTP and TLS and SSH. This protocol will ensure that data is safely transported.
- TCP/IP(Transfer Communication Protocol/Internet Protocol) Used to as communication over the internet. TCP is reliable and is able to check for errors in the transfer of the page over the IP.
- SMTP(Simple Mail Transfer Protocol) is used to send emails. This will be easier than mailing manually and is prominently used in the web space.
- IPv6(Internet Protocol version 6) This will be redirected and to allow them to be redirected users or routed to the correct space on the internet. This provides access to buzz through the use of http and the TCP/IP protocols.
- IPsec(Internet Protocol Security) will allow for a secure IP and to ensure no harmful data is ever transmitted to the servers of buzz.

### 1.3.3 API Specifications

- Web Service Definition Language(WSDL) - WSDL will be used to describe the functionality and the operations provided by the web-based service (Buzz system).
- Common Object Request Broker Architecture(CORBA) - CORBA will mediate the communication between the diverse systems that will be integrated to the Buzz system to provide added functionality and data for the operation of the system.
- Interactive Data Language(IDL) - This will be used for data analysis purposes for the data passed from the data source to the Buzz system and any other form of data required by the system.

## 1.4 Architecture Constraints

## 2 Architectural patterns or styles

### 2.1



### **3 Architectural tactics or strategies**

## 4 Use of reference architectures and frameworks

## 5 Technologies

## 6 Bibliography