## APPENDIX A

## GLOSSARY OF TERMS

<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>Autonomic Computing</td>
<td>Autonomic computing is a phrase IBM uses to describe the set of technologies and tools that enable applications, systems and entire networks to become more self-managing.</td>
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<tr>
<td>Bandwidth</td>
<td>The amount of data that can be transmitted in a fixed amount of time. For digital devices, the bandwidth is usually expressed in bits per second (bps) or bytes per second.</td>
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<tr>
<td>Client</td>
<td>A program that establishes connections for the purpose of sending requests.</td>
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<tr>
<td>Dead link</td>
<td>A Web link that turns up a &quot;404 error&quot; if the target page is deleted from the site or moved to another directory.</td>
</tr>
<tr>
<td>Delta Encoding</td>
<td>HTTP transfer of minimal description of the changes rather than the entire new instance of the resource is called delta encoding.</td>
</tr>
<tr>
<td>Degree of change</td>
<td>Degree of change refers to the amount of change that has occurred in the document.</td>
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<tr>
<td>Deliberation process</td>
<td>Deliberation process extracts the updated portion, the delta and sends the sending delta behavior to the web server negotiator component.</td>
</tr>
<tr>
<td>Entity</td>
<td>The information transferred as the payload of a request or response. An entity consists of meta information in the form of entity-header fields and content in the form of an entity-body.</td>
</tr>
<tr>
<td>Entity header</td>
<td>Entity-header fields define metainformation about the entity-body or, if no body is present, about the resource identified by the request.</td>
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</tbody>
</table>
Entity Tag

Entity tags are used for comparing two or more entities from the same requested resource.

Exponential distribution

Exponential distribution is a class of continuous probability distribution which are often used to model the time between the events that happen at a constant average rate.

Freshness

A database is considered fresher when the database has more up-to-date elements.

HTTP

The Hypertext Transfer Protocol (HTTP) is an application-level protocol for distributed, collaborative, hypermedia information systems.

HTTP header

HTTP header fields include general-header, request-header, response-header, and entity-header fields which follow the generic format given in RFC 822. Each header field consists of a name followed by a colon ("":"" and the field value.

HTTP request

A request message from a client to a server includes, within the first line of that message, the method to be applied to the resource, the identifier of the resource, and the protocol version in use.

HTTP response

After receiving and interpreting a request message, a server responds with an HTTP response message.

HTTP method

The Method token indicates the method to be performed on the resource identified by the Request-URI.

Latency

The time that elapses between a network request and the moment that request is met. Latency refers to the time it takes for a data packet to move across a network connection.
Negotiation component

The web server negotiator component allows issue of PATCH request depending on the bandwidth available or invokes predefined policies, which suits the current resource status.

Pareto distribution

Pareto distribution is a power law probability distribution which says that 20% of the population owns 80% of the wealth.

Poisson distribution

A probability distribution that counts the number of events occurring in an interval of time, assuming that the occurrence of events is independent.

Proxy server

A proxy server is a server that acts as an intermediary between a workstation user and the Internet so that the enterprise can ensure security, administrative control, and caching service. A proxy server is associated with or part of a gateway server that separates the enterprise network from the outside network and a firewall server that protects the enterprise network from outside intrusion.

Resource

A network data object or service that can be identified by a URI. Resources may be available in multiple representations (e.g. multiple languages, data formats, size, and resolutions) or vary in other ways.

Search engine ranking

search engine ranking logics (algorithms) favour webpages dedicated to a specific topic (ie webpages that contain a large number of topic-specific terms) above webpages containing information on a range of topics

Spamming

The term used to describe techniques that might be used to 'trick' search engines into ranking a website high up in their search results - such as the repetitive use of keywords, hidden text or keywords unrelated to the site's content. Search engines will penalise websites that use such methods and will either
### Search engine
A program that searches documents for specified keywords and returns a list of the documents where the keywords were found.

### Session
When a client and server exchange multiple messages in a short period of time, then the set of messages exchanges can be called as session.

### Task knowledge
Task knowledge of AC node contains representation of actual system behavior, the system itself and the environment as perceived by the system.

### URL
An acronym/term that describes the location and access method of a resource on the Internet.

### Variant
A resource may have one or more than one representation(s) associated with it at any given instant. Each of these representations is termed as variant.

### Web server
A computer that delivers (serves up) Web pages. Every Web server has an IP address and possibly a domain name.

### Web crawler
It is used to locate HTML pages by content or by following hypertext links from page to page. Search engines use crawlers to find new Web pages that are summarized and added to their indexes.

### Zipf distribution
Zipf law meant that the frequency of the use of nth most frequently used word in any natural language is approximately inversely proportional to n.