Architectural Patterns/Styles

Audacity

Purpose: Record, edit, add, delete, modify, mix, etc. the audio

Architectural style: Plugin

Quality attributes:

Integrability

- Source of Stimulus: User
- Stimulus: Addition of new component/plugin
- Environment: Integration, runtime
- Artifact: New component/plugin, new system
- Response: New integrated change/configuration
- Response Measure: New plugin, new configuration, new functionality

Usability

- Source of Stimulus: User
- Stimulus: Need of tools provided
- Environment: Runtime
- Artifact: GUI, audio tools
- Response: Provide the anticipated feature
- Response Measure: User satisfaction, task accomplished

Security

- Source of Stimulus: Malefactor
- Stimulus: Use of personal data, links to other websites
- Environment: System

- Artifact: System services
- Response: Personal data being protected if requested, confirmation of safe hyperlinks
- Response Measure: How compromised of the supposed compromised component, quick test on websites being linked

Desktop Privacy Notice | Audacity ® (audacityteam.org)

GPSd

Purpose: Provides the gathered GPS data via an Internet Protocol network to multiple client applications as a background task of the server

Architectural style: Client-Server

Quality attributes:

Availability

- Source of Stimulus: User
- Stimulus: Incorrect response, crash
- Environment: Normal operation
- Artifact: Process
- Response: Report/troubleshoot to developer
- Response Measure: time taken to fix, problem being solved

Integrability

- Source of Stimulus: User
- Stimulus: Data contribution
- Environment: Integration, runtime
- Artifact: System
- Response: Successful integration
- Response Measure: Use of newly added functionality

Performance

- Source of Stimulus: User/System request
- Stimulus: Application of the software
- Environment: Normal operation runtime
- Artifact: System

- Response: Response/error being returned, anticipated data obtained
- Response Measure: Accuracy of the data, time taken between the request and the response

JOOMLA

Purpose: Content Management System (CMS) [create and manage a fully customizable website without any knowledge of coding and website creation]

Architectural style: Model-view-controller (MVC)

Joomla - Architecture (tutorialspoint.com)

Quality attributes:

Usability

- Source of Stimulus: User
- Stimulus: Creation of website
- Environment: Runtime
- Artifact: Website
- Response: Anticipated-detailed website
- Response Measure: User satisfaction

Performance

- Source of Stimulus: User request
- Stimulus: Creation/Modification of the website
- Environment: Runtime
- Artifact: Website, component of the website
- Response: Change in component as needed (with slow very speed if not modified properly)
- Response Measure: Accuracy of change, speed (time taken)

Why Is Joomla So Slow? | itoctopus

Security

- Source of Stimulus: Malefactor

- Stimulus: Request of information
- Environment: System
- Artifact: System services, information
- Response: Requested information and reports being protected
- Response Measure: How vulnerable of a request and a respond is

Joomla! Security