

| User   |         |
|--|---------|
| UserID<br>Username<br>Password<br>Email Address<br>First Name<br>Last Name<br>SessionID History<br>isAdmin | Session |

| Webcrawler                                |               |
|---|---------------|
| JobID<br>List of Spiders<br>StartCrawling | Spider<br>Job |

| JobScheduler   |                   |
|--|-------------------|
| List of JobIDs<br>StartWebCrawler<br>TerminateWebCrawler<br>NotifyUser | Webcrawler<br>Job |

| Job  |                      |
|--|----------------------|
| JobID<br>List of monitor sites<br>List of source sites<br>Schedule start time<br>Completed Notification method<br>CrawledData<br>Add/Remove source site<br>Add/Remove monitor site<br>AddCrawledData | Sites<br>CrawledData |

| Spider  |             |
|---|-------------|
| Source Site<br>List of keywords to catch<br>returnCrawledData | CrawledData |

| Site           |  |
|----------------|--|
| URL<br>Aliases |  |

| Article                                     |  |
|---|--|
| Publish time<br>Title<br>HTML source<br>URL |  |

| Reference                         |         |
|-----------------------------------|---------|
| Monitor Article<br>Source Article | Article |

| Data-Converter   |             |
|--|-------------|
| CrawledData<br>ExportToWebARC<br>ExportToCSV<br>ExportToJSON | CrawledData |

| Session                               |     |
|---------------------------------------|-----|
| SessionID<br>List of JobIDs<br>AddJob | Job |

| CrawledData   |                   |
|---|-------------------|
| ListOfReferences<br>Start crawl time<br>End crawl time<br>Number of References from (Site)<br>Number of References to (Site)<br>Number of References between Date | Reference<br>Site |

| Visualizer  |             |
|---|-------------|
| CrawledData<br>View data as table<br>View data as graph<br>View data as chart | CrawledData |

| Main  |   |
|---|---|
| Current User<br>Current Session<br>User Database<br>Session Database<br>Visualizer<br>Data-Converter<br>Create New User<br>Reset Password<br>Forgot Username<br>Login<br>Logout<br>Compare Sessions<br>Display User's Past Sessions<br>Display Session's Results<br>Create New Session<br>Create New Job<br>Send Job to WebScheduler<br>Export Results to File via Data-Converter | User<br>User Database<br>Session<br>Session Database<br>Job<br>Job Database<br>Visualizer<br>WebScheduler<br>Data-Converter |

| UserDatabase  |      |
|---|------|
| List of Users<br>AddUser<br>RemoveUser<br>ModifyUser<br>FindUserByEmail<br>FindUserByName | User |

| Session Database                                     |         |
|--|---------|
| List of Sessions<br>AddNewSession<br>FindSessionByID | Session |

| JobDatabase                              |     |
|--|-----|
| List of Jobs<br>AddNewJob<br>FindJobByID | Job |