**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **Figure No.** | **Particulars** | **Page No.** |
| 2.1 | Fuzzy Logic System Architecture | 41 |
| 2.2 | Membership function | 42 |
| 2.3 | Membership Functions Constructs | 43 |
| 2.4 | De-fuzzification Membership Function | 46 |
| 3.1 | Codebase Deployments | 118 |
| 3.2 | Backing Services | 119 |
| 3.3 | Build Release Run | 120 |
| 3.4 | Workload Diversity | 121 |
| 4.1 | Learn Speculate Collaborate | 126 |
| 4.2 | Plan Build Implement | 128 |
| 4.3 | Plan Build Revise | 128 |
| 4.4 | Speculate Learn Collaborate | 129 |
| 4.5 | Adaptive Learning Loop | 135 |
| 4.6 | Adaptive Learning | 143 |
| 4.7 | Adaptive Learning Iteration | 143 |
| 4.8 | Proxy Patterns | 148 |
| 5.1 | Evolution of Cloud Computing | 203 |
| 5.2 | Cloud Computing Model | 205 |
| 7.1 | Command to Check Java Version | 233 |
| 7.2 | Choosing the default editor by Git | 234 |
| 7.3 | Adjusting Git Path Environment | 234 |
| 7.4 | Choosing HTTPS transport backend | 235 |
| 7.5 | Configuring the line ending conversions | 235 |
| 7.6 | Adding system variable Git | 236 |
| 7.7 | How to save a remote server ssl certificate | 242 |
| 7.8 | Windows Credential Manager | 243 |
| 7.9 | Unlocking Jenkins | 245 |
| 7.10 | Jenkins Default Password | 246 |
| 7.11 | Starting Jenkins Service | 249 |
| 7.12 | Manage Jenkins/Users | 249 |
| 7.13 | Jenkins Users Database | 250 |
| 7.14 | Create Jenkins Users | 250 |
| 7.15 | Jenkins New Item | 251 |
| 7.16 | Jenkins Project Name | 251 |
| 7.17 | Manage Plugins | 251 |
| 7.18 | Search available plugins | 251 |
| 7.19 | Upload plugin | 253 |
| 7.20 | Manage Jenkins | 254 |
| 7.21 | Global Tool Configuration | 255 |
| 7.22 | Configure JDK | 255 |
| 7.23 | Configure GIT | 256 |
| 7.24 | Configure Gradle | 256 |
| 7.25 | Configure MSBuild | 256 |
| 7.26 | Add SonarQube Scanner for MSBuild | 257 |
| 7.27 | Add SonarQube Scanner | 257 |
| 7.28 | Configure ANT | 258 |
| 7.29 | Configure Maven | 259 |
| 7.30 | Global Tool Configurations | 260 |
| 7.31 | Maven Project Configuration | 260 |
| 7.32 | Default View | 261 |
| 7.33 | Configure SonarQube Servers | 261 |
| 7.34 | Slave Port Status | 261 |
| 7.35 | Slave Machine Status | 262 |
| 7.36 | Jenkins Location | 262 |
| 7.37 | Configure Sonarqube Quality Gates | 262 |
| 7.38 | Configure E-mail notification | 263 |
| 7.39 | Configure Android SDK | 265 |
| 7.40 | Automation Build Setting | 266 |
| 7.41 | Configure Project Name | 267 |
| 7.42 | Configure job notifications | 267 |
| 7.43 | Configure GIT Repository URL | 268 |
| 7.44 | Configure Build Triggers | 269 |
| 7.45 | Build Triggers | 269 |
| 7.46 | Add Build Step | 270 |
| 7.47 | Configure Windows Batch Command | 270 |
| 7.48 | Configure Root POM | 271 |
| 7.49 | Configure Sonar Scanner Properties | 271 |
| 7.50 | Uploading plugins | 274 |
| 7.51 | Creating Sample Projects | 275 |
| 7.52 | Configure Build Monitor | 275 |
| 7.53 | Manage Nodes | 276 |
| 7.54 | Configure New Node | 277 |
| 7.55 | Select Agents | 277 |
| 7.56 | Configure Build Slave Machine | 278 |
| 7.57 | Launch Agent Jenkins Slave | 279 |
| 7.58 | Jenkins agent launch | 279 |