**Table 2.1**: Decision Possibilities

**Table 2.2**: Possibilities Construct

**Table 2.3**: Target Room Temperature Decision Table

**Table 2.4: Condition and Action Table**

**Table 4.1:** Automation Procedure Design Process

**Table 4.2:** Development/Test Relationship

**Table 4.3**: Admin Process Priority and Description

**Figure 2.1**: Fuzzy Logic System Architecture

**Figure 2.2**: Membership function

**Figure 2.3:** Membership Functions Constructs

**Figure 2.4**: Defuzzification Membership Function

**Figure 4.1: Codebase Deployments**

**Figure 4.2**: Backing Services

**Figure 4.3**: Build Release Run

**Figure 4.4**: Workload Diversity

**Figure 5.1**: Learn Speculate Collaborate

**Figure 5.2**: Plan Build Implement

**Figure 5.3**: Plan Build Revise

**Figure 5.4**: Speculate Learn Collaborate

**Figure 5.5**: Adaptive Learning Loop

**Figure 5.6**: Adaptive Learning

**Figure 5.7**: Adaptive Learning Iteration

**Figure 5.8**: Proxy Patterns

Figure 6. 1: Evolution of Cloud Computing (Y-axis - Maturity)

Figure 6.2 - Cloud Computing Model

**Figure 7.1**: Command to Check Java Version

**Figure 7.2**: Choosing the default editor by Git

**Figure 7.3**: Adjusting Git Path Environment

**Figure 7.4**: Choosing HTTPS transport backend

**Figure 7.5**: Configuring the line ending conversions

**Figure 7.6**: Adding system variable Git

**Figure 7.7**: How to save a remote server ssl certificate

**Figure 7.8**: Windows Credential Manager

**Figure 7.9**: Unlocking Jenkins

**Figure 7.10**: Jenkins Default Password

**Figure 7.11**: Starting Jenkins Service

**Figure 7.12**: Manage Jenkins/Users

**Figure 7.13**: Jenkins Users Database

**Figure 7.14:** Create Jenkins Users

**Figure 7.15**: Jenkins New Item

**Figure 7.16**: Jenkins Project Name

**Figure 7.17**: Manage Plugins

**Figure 7.18**: Search available plugins

**Figure 7.19**: Upload plugin

**Figure 7.20:** Manage Jenkins

**Figure 7.21**: Global Tool Configuration

**Figure 7.22**: Configure JDK

**Figure 7.23**: Configure GIT

**Figure 7.24**: Configure Gradle

**Figure 7.25**: Configure MSBuild

**Figure 7.26**: Add SonarQube Scanner for MSBuild

**Figure 7.27**: Add SonarQube Scanner

**Figure 7.28**: Configure ANT

**Figure 7.29**: Configure Maven

**Figure 7.30**: Global Tool Configurations

**Figure 7.31**: Maven Project Configuration

**Figure 7.32**: Default View

**Figure 7.33**: Configure SonarQube Servers

**Figure 7.34**: Slave Port Status

**Figure 7.35**: Slave Machine Status

**Figure 7.36**: Jenkins Location

**Figure 7.37**: Configure Sonarqube Quality Gates

**Figure 7.38**: Configure E-mail notification

**Figure 7.39**: Configure Android SDK

**Figure 7.40**: Automation Build Setting

**Figure 7.41**: Configure Project Name

**Figure 7.42**: Configure job notifications

**Figure 7.43**: Configure GIT Repository URL

**Figure 7.44**: Configure Build Triggers

**Figure 7.45**: Build Triggers

**Figure 7.46**: Add Build Step

**Figure 7.47**: Configure Windows Batch Command

**Figure 7.48:** Configure Root POM

**Figure 7.49**: Configure Sonar Scanner Properties

**Figure 7.50:** Uploading plugins

**Figure 7.51**: Creating Sample Projects

**Figure 7.52**: Configure Build Monitor

**Figure 7.53**: Manage Nodes

**Figure 7.54**: Configure New Node

**Figure 7.55**: Select Agents

**Figure 7.56**: Configure Build Slave Machine

**Figure 7.57**: Launch Agent Jenkins Slave

**Figure 7.58**: Jenkins agent launch