**LIST OF FIGURES**

|  |  |  |
| --- | --- | --- |
| **Figure No.** | **Descriptions** | **Page** |
| Figure 3.1 | Logistic Regression Model | 10 |
| Figure 4.1 | Breast Cancer Wisconsin Dataset | 17 |
| Figure 5.1 | Kernel Execution | 20 |
| Figure 5.2 | User to Notebook Interface | 21 |
| Figure 5.3 | Notebook Dashboard | 22 |
| Figure 6.1 | Dependency between two Dataset | 29 |
| Figure 6.2 | Supervised Learning Workflow | 29 |
| Figure 6.3 | Code for Reading the CSV Data File and Cleaning the Data | 31 |
| Figure 6.4 | Code for Finding the Correlation between the Data | 31 |
| Figure 6.5 | Code to Remove the least dependent attribute from Dataset | 32 |
| Figure 6.6 | Code to Train and Test the Model | 33 |
| Figure 7.1 | Dataset Loaded | 34 |
| Figure 7.2 | Splitting the dataset into the ratio 4:1 | 35 |
| Figure 7.3 | Accuracy using Logistic Regression | 36 |
| Figure 7.4 | Accuracy using Random Forest Algorithm | 37 |
| Figure 8.1 | Diagnosis Count | 38 |
| Figure 8.2 | Relation between average area and perimeter of the Tumor | 38 |
| Figure 8.3 | Correlation Square showing relation between each columns | 39 |
| Figure 8.4 | Correlation between useful columns and diagnosis | 40 |
| Figure 8.5 | Choosing X and Y for Training the model | 40 |
| Figure 8.6 | Splitting data into training and testing set in ratio 4:1 | 40 |
| Figure 8.7 | Training Accuracy using Logistic Regression | 41 |
| Figure 8.8 | Testing Accuracy using Logistic Regression | 41 |
| Figure 8.9 | Training Accuracy using Random Forest | 41 |
| Figure 8.10 | Testing Accuracy using Random Forest | 41 |

vi

**LIST OF TABLES**

|  |  |  |
| --- | --- | --- |
| **Table. No**. | **Descriptions** | **Page** |
| Table 7.1 | Unit test case for Dataset Loading | 34 |
| Table 7.2 | Unit test to check for null/NA value | 35 |
| Table 7.3 | Integration test to check for train-test-split | 35 |
| Table 7.4 | System test to check the accuracy using Logistic Regression | 36 |
| Table 7.5 | System test to check the accuracy using Random Forest | 37 |

vii