###### **Product functions**

**Modules:**

1. Doctor
2. Data Operator

**Doctor**

1. Sign up
2. Sign in
3. Sign out
4. Doctor Information
5. Visualization
6. View Results

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_01** |  |  |  |
| **Name:** | **Sign up** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Doctor will register his account in the data base | Name  Email  User Name  Password | Account is Registered message is shown on the screen. | Must fill all sections which are required for registration. | Enter All details and click on register button, System save the record in database |

Table 2.1: Functional Requirement Doctor Signup

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_02** |  |  |  |
| **Name:** | **Sign in** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Doctor can Sign in in his account that is registered in the data base | User Name  Password | Doctor view will be opened. | Doctor should enter his registered user name and correct password. | Enter Username and password, system will verify and successfully login’s Doctor Account. |

Table 2.2: Functional Requirement Doctor Sign i

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_03** |  |  |  |
| **Name:** | **Sign out** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Doctor can Sign out his account. | Click on the sign out button. | Account will be successfully sign out and sign in page will be shown on the screen. | Account must be sign in when doctor click on sign out button. | Doctor Click on the sign out button and system will successfully sign out doctor’s Account. |

Table 2.3: Functional Requirement Doctor Sign out

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_04** |  |  |  |
| **Name:** | **Doctor Information** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Doctor can add his information in the system | Age  Blood Group  Add Profile Picture  Delete Picture  Hospital Name  Specialization | Doctor Information saved. | Doctor must click on save button | Doctor touch the doctor information section then fill all the details and then click on save button, system will save doctor information in the data base. |

Table 2.4: Functional Requirement Doctor Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_05** |  |  |  |
| **Name:** | **Visualization** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Visualization | Data Set | Visualization | Data Set | Preprocessing and classification is applied in dataset, given result is represented in visualization |

Table 2.5: Functional Requirement Visualization

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_06** |  |  |  |
| **Name:** | **View Results** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Doctor can View prediction results. | Click on  View Results | Prediction results shown. | Doctor must click on the view results button. | Doctor click on the view results, system will show the prediction results from the database. |

Table 2.6: Functional Requirement View Results

**Data Operator**

1. Sign up
2. Sign in
3. Sign out

10. Enter Values

11. Delete Values

12. Prediction

13. Patient Information

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_07** |  |  |  |
| **Name:** | **Sign up** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Data Operator will register his account in the data base | Name  Email  User Name  Password | Account is Registered message is shown on the screen. | Must fill all sections which are required for registration. | Enter All details and click on register button, System save the record in database |

Table 2.7: Functional Requirement Signu

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_08** |  |  |  |
| **Name:** | **Sign in** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Data Operator can Sign in in his account that is registered in the data base | User Name  Password | Data Operator View will be opened. | Data Operator should enter his registered user name and correct password. | Enter Username and password, system will verify and successfully login’s Data operator’s Account. |

Table 2.8: Functional Requirement Sign in

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_09** |  |  |  |
| **Name:** | **Sign out** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Data Operator can Sign out his account. | Click on the sign out button. | Account will be successfully sign out and sign in page will be shown on the screen. | Account must be sign in when data operator click on sign out button. | Data operator Click on the sign out button and system will successfully sign out data operator’s Account. |

Table 2.9: Functional Requirement Sign out

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_10** |  |  |  |
| **Name:** | **Enter Values** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Data Operator can Enter Values to get prediction results. | Click on  Add Data  Prediction Button | Prediction results shown on the screen. | Doctor must click on add data button and prediction button for results. | Doctor click on the add data and enter values, and then click on predict Button, system will show prediction results and record will be save in the data base. |

Table 2.10: Functional Requirement Enter Values

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_11** |  |  |  |
| **Name:** | **Delete Values** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Data Operator can Delete Values. | Click on  Delete Data Button | Data Deleted successfully. | Doctor must click on Delete Data Button. | Doctor click on the delete data, system will delete data from the database. |

Table 2.11: Functional Requirement Delete Values

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_12** |  |  |  |
| **Name:** | **Prediction** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Data Operator can do prediction. | Data Set | Prediction done successfully. | Data Operator must enter dataset and click on enter button and prediction button. | Data set is given to system for prediction, prediction results will be shown by the system according to the module. |

Table 2.12: Functional Requirement Prediction

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID:** | **FR\_13** |  |  |  |
| **Name:** | **Patient Information** |  |  |  |
| **Description** | **Input** | **Output** | **Requirements** | **Basic Work Flow** |
| Data Operator can Add Patient Information. | Name  Age  Blood Group  City Scan  ECG | Patient Information saved. | Data Operator must click on save button to save patient information. | Data operator click on add patient information and fill all details then touch save button, system will store patient’s information in the data base. |

Table 2.13: Functional Requirement Patient Information