## **2.4 Requirement Analysis**

It is the way of determine the needs of users for the new or modified system so it can satisfy the overall need.

### **2.4.1 Functional Requirement**

Functional requirement are those requirement which are related to systems technical functionality, hard-software for operating as per the system user needs. It helps the users in performing their task easily up to the business requirement.

Functional Requirement of my project is presented below in tabular form including its dependencies and rational.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S.N** | **Functional Requirements** | **Rational** | **Description** | **Dependencies** |
| Bs01 | Registration | To create an account for reservation system. | It connects a user details to the system. | N/A |
| Bs02 | Login | To allow users get accessed to the system | The system gives access to the user. | Bs01 |
| Bs03 | View User Profile | To allow users to track their user profile. | User should be able to view their personal details | Bs02 |
| Bs04 | Update Profile | To allow user to make changes to their personal details. | User details can change from time to time and needs to be updated. | Bs01  Bs02 |
| Bs05 | Delete Account | To allow users to remove their account either to create a new account or leave the system. | When user wants to create a new account or wants to remove themselves from the system. | Bs01  Bs02  Bs03 |
| Bs06 | Search Flight | To allow users to browse through different flights. | When users need to directly browse certain flights. | Bs01  Bs02 |
| Bs07 | View Flight Detail | To allow users to view the details of flights. | When users need to track the details of the flight that they are viewing. | Bs01  Bs02  Bs06 |
| Bs08 | Reservation Form | To allow users to reserve a certain flight in their account. | Reserving certain tickets to user and book them. | Bs01  Bs02  Bs07 |
| Bs09 | Online Payment | To allow users to pay their transaction fees online. | Payment through banking institutions. | Bs01  Bs02  Bs08 |
| Bs10 | Ticket Cancellation | To allow users to cancel their reserved tickets in case of need. | When users need to cancel their ticket just in case. | Bs01  Bs02  Bs08 |
| Bs11 | E-mail Confirmation | To allow users to know there tickets is confirmed as email confirmation. | When users finish form and confirm email to confirm ticket. | Bs01  Bs02  Bs09 |
| Bs12 | Feedback Form | To allow users to post their opinions on the system. | User opinions can be gathered on the system. | Bs01  Bs02 |
| Bs13 | Add Flight Ticket | To allow the admin to add new flight ticket. | Admins can add tickets to the system to be viewed by users and review them. | Bs01  Bs02  Bs06 |
| Bs14 | Modify Flight Ticket Details | To allow the admin to make changes to flight details | Making changes to flight details | Bs01  Bs02  Bs06 |
| Bs15 | Community Forum | To allow all users to participate in the system community | All users can share their opinions on the system community. | Bs01  Bs02 |
| Bs16 | Logout | To allow the users to get out of the system saving their system modifications. | Get the user out of the system. | Bs01  Bs02 |
|  |  |  |  |  |

### **2.4.2 Non-Functional Requirement**

Non-Functional requirement are those requirement that specifies criteria which can be used for judging the system’s operation in particular conditions. It is also called “quality attributes” of the system. It determines particular conditions rather than some specific behaviors.

Non-Functional Requirement of my project is presented below in tabular form.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **S. n** | **Non Functional Requirement** | **Rational** | **Description** | **Dependencies** |
| Bs23 | Documentation | To provide guidance to the user. | System should have a proper guidelines for all kinds of users. | N/A |
| Bs24 | Maintainability | To provide the feature of fixing bugs and errors. | System should be maintainable in case of bugs, errors and missing features. | N/A |
| Bs25 | Recoverability | To provide a backup to the system and recover them whenever needed. | System should be recoverable in case of need. | N/A |
| Bs26 | Security | To provide safety to user information. | System contains user information that needs to be secured. | Bs01  Bs02 |
| Bs27 | Legal Clearance | To provide a legal space to work. | System should follow all legal rules during development. | N/A |
| Bs28 | Environmental | To provide a system that does not affect the environment. | System should not harm the environmental factors. | N/A |
| Bs29 | Performance | To provide a smooth running system to the user. | System should always perform at an efficient rate. | N/A |
| Bs30 | Capacity | To provide a system that can handle a large amount of data at a time. | System should handle any amount of user data. | N/A |