This section gives a snapshot of all the scenarios, the quality attribute they refer to and their priority. The difficulty level for each scenario is based on the team’s judgment. It would be used for internal analysis and estimation purposes.

|  |  |  |
| --- | --- | --- |
| **No.** | **Quality Attribute** | **Description** |
| **01** | Availability | Concerned with system failure and its associated consequences. A system failure occurs when the system no longer delivers a service consistent with its specification |
| **02** | Performance | Indication of responsiveness of a system to execute any action within a given time interval. It can be measured in terms of latency or throughput. Latency is the time taken to respond to any event. Throughput is the number of events that take place within a given amount of time |
| **03** | Security | The capability of a system to prevent malicious or accidental actions outside of the designed usage, and to prevent disclosure or loss of information. A secure system aims to protect assets and prevent unauthorized modification of information |
| **04** | Usability | Defines how well the application meets the requirement of the user and consumer by being intuitive, easy to localize and globalize, providing good access for disabled user, and resulting in a good overall user experience |

***Quality attribute are assessed by point of stakeholder (SP) and team development (TP) in order to choose the top two most important quality attribute requirements.***

* SP: It describes the importance of quality attribute that follow in view of stakeholders.
* TP: It describes ability in performing that follow in view of develop team.
* Notes: Point is from 1 to 5. Weight and ability decrease from 5 to 1

Final column is calculated by the formula: Final = (VS\*2 + VT)/3

The top most important quality attribute requirements are defined by weight of *Final* column.

* The priority is high if Final >= 4.5
* The priority is medium if 4<= Final <4.5
* The priority is medium if Final <4

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Quality Attributes | QA\_ID | Short Description | Stakeholder Point | Team Point | Priority |
| Performance | QA\_P01 | The received student record officer update student record while the system is operating normally | 5 | 4 | 4.6 |
| QA\_P02 | The faculty monitor import student record while the system is operating normally | 5 | 4 | 4.6 |
| QA\_P03 | The received student record officer print invoice while the system is operating normally, the system will print invoice and notice print successfully | 5 | 5 | 5 |
| Availability | QA\_A01 | The faculty monitor sends a request to statistic student record to the system while the system is operation normally, | 2 | 2 | 2 |
| Security | QA\_S01 | Unknown human try to change information in the system while the system is operating normally | 3 | 3 | 3 |
| Usability | QA\_U01 | The received student record officer, wanting to print invoice quickly, wishes to use the system efficiently | 3 | 4 | 3.3 |
|  | QA\_R01 | The received student record officer print invoice while the system is operating normally, the system will print invoice and notice print successfully | 4 | 4 | 4 |

## Quality Attribute Ranking Table

|  |  |  |  |
| --- | --- | --- | --- |
| Quality Attribute | Important (base on customer) | Difficult level (to implement) | Priority |
| Security | **Medium** | **Medium** | **Medium** |
| Usability | **Low** | **Medium** | **Low** |
| Performance | **High** | **High** | **High** |
| Availability | **Low** | **Low** | **Low** |
| Reusability | **Medium** | **Medium** | **Medium** |