**Assignment No: B**

**Problem Statement:** Testing, Reliability parameters and Test plan

**Testing:**

Following Testing methods & Strategies, we will perform on different-different modules:

Testing methods:

1. Black Box Testing
2. White Box Testing

Testing Strategies:

1. Unit Testing
2. Integration Testing

**Reliability Parameters:**

The system will be designed with reliability as key feature:

* The system is guaranteed of providing the services to user according to his login information.
* This system is guaranteed to be reliable with maximum time.

**Other Parameters:**

**Maintainability:**

The system will be developed using the standard software development conventions to help in easy review and redesigning of the system. The system will be backed up by a full fledge documentation of the product which is available online as well as free to download*.*

**Availability:**

The system is available on demand.

**Supportability:**

The System is able to support Images of type bmp or jpg

Support for only offline Images.

**Test Plan:**

|  |  |
| --- | --- |
| Test ID | 1 |
| Testing Category | To provide a system this will give access to User Registration & Login. |
| Testing Type |  |
| Testing Importance | Mandatory |
| Test Description | This is an actual task intended. |
| Method of validation/verification |  |
| Priority | Highest |
| Difficulty | High |

|  |  |
| --- | --- |
| Test ID | 2 |
| Testing Category | To provide a system which will keep track of multiple user |
| Testing Type |  |
| Testing Importance | Mandatory |
| Testing Description | It is for multi user task. |
| Method of validation/verification |  |
| Priority | Highest |
| Difficulty | High |

|  |  |
| --- | --- |
| Test ID | 3 |
| Testing Category  (Technical) | Face Image Feature Extraction |
| Testing Type |  |
| Testing Importance | Mandatory |
| Testing Description | The server maintain Image database. Server get train by extracting features of the stored images using Texture(**Texture Color Co-occurrence**) and Shape based(**Geometric Moment**  ) algorithm. |
| Method of validation/verification |  |
| Priority | Highest |
| Difficulty | High |

|  |  |
| --- | --- |
| Test ID | 4 |
| Testing Category  (Technical) | Query Image |
| Testing Type |  |
| Testing Importance | Mandatory |
| Testing Description | The user of the system can give a query image. This image will be a stored image from the mobile phone or a live image. Based on the feature of the query image the system provides information regarding the face image in a textual form and list the matching faces. |
| Method of validation/verification |  |
| Priority | Highest |
| Difficulty | High |

|  |  |
| --- | --- |
| Test ID | 5 |
| Testing Category  (Technical) | Face Detection |
| Testing Type |  |
| Testing Importance | Mandatory |
| Testing Description | Faces are detected from a given input image using HAAR Cascade. |
| Method of validation/verification |  |
| Priority | Highest |
| Difficulty | High |