FUNCTIONAL REQUIREMENTS DOCUMENT(FRD)

Application Design and Planning

Version History:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Phase | Version Number | Version Name | Author | Features | Changes |
| I | v1.0 | Surveillance-v1.0 |  | Appendix-A | Backend developed |
| II | v2.0 | Surveillance-v2.0 |  | Appendix-B | Frontend developed |
| III | v3.0 | Surveillance-v3.0 |  | Appendix-C | Integration of backend + frontend |
| IV | v3.1.0 | Surveillance-v3.1 |  | Appendix-D | Deployment (logical) architecture |
| V | v3.2.1 | Surveillance-v3.2.1 |  | Appendix-E | Android/Tab App |
| VI | v3.2.2 | Surveillance-v3.2.2 |  | Appendix-F | iOS App |

Technology Stack: MVC Frameworks

1. Backend:
2. Python- Machine Learning
3. Java- Network security and Firewall and stable ML backend
4. Node JS- Notification system
5. C#- Biometric
6. Frontend:
7. React JS/React Native- (SPA) Single Page application
8. Angular JS- Portal system

Hardware Requirements:

1. External User- Laptop, Desktop, Mobile Phone, Tab
2. System User- Tab
3. Camera Surveillance on office corridors
4. HOLOGRAM hardware projectors on office corridors for guidance

Database:

1. Relational DB: PostgreSQL (Python django), Oracle (JAVA), MSSQL(C#)
2. Non-relational DB: MongoDB (Node JS)

APPENDICES:

APPENDIX—A

Backend developed: Python, JAVA, Node JS, C#

APPENDIX—B

Frontend developed: React JS, Angular JS

APPENDIX—C

Integration of backend + frontend: Dependable

APPENDIX—D

Deployment (for logical) architecture:

1. Testing Plan
2. Deployment
3. Containerization
4. Data Center
5. Data Disaster Recovery
6. Local deployment of the system monitoring
7. Global deployment of the website for visitor registration

APPENDIX—E

Android: (Kotlin/) JAVA on Android Studio

APPENDIX—F

iOS: Swift

Bug History:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Version Number | Test ID | Bug ID | Reporting date | Description | Severity Level | Bug Status | Tested by | Test Procedure | Tested Date |
| v1.0 | 1 | 1 | 03-03-2020 | Assemble a team for project-Surveillance System | Severe | Pending | Ishita K | Plan and Design the project | 02-09-2020 |